

**TOSHIBA**

**WIENKRÄ**

—  
EXPERIENCE  
THE FUTURE  
—



TOSHIBA AIR CONDITIONING > **VRF Systems & Controls**



*Better Air Solutions*



QUALITY RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY QUALITY

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# EXPERIENCE THE FUTURE

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> “Toshiba solutions  
wherever you are”

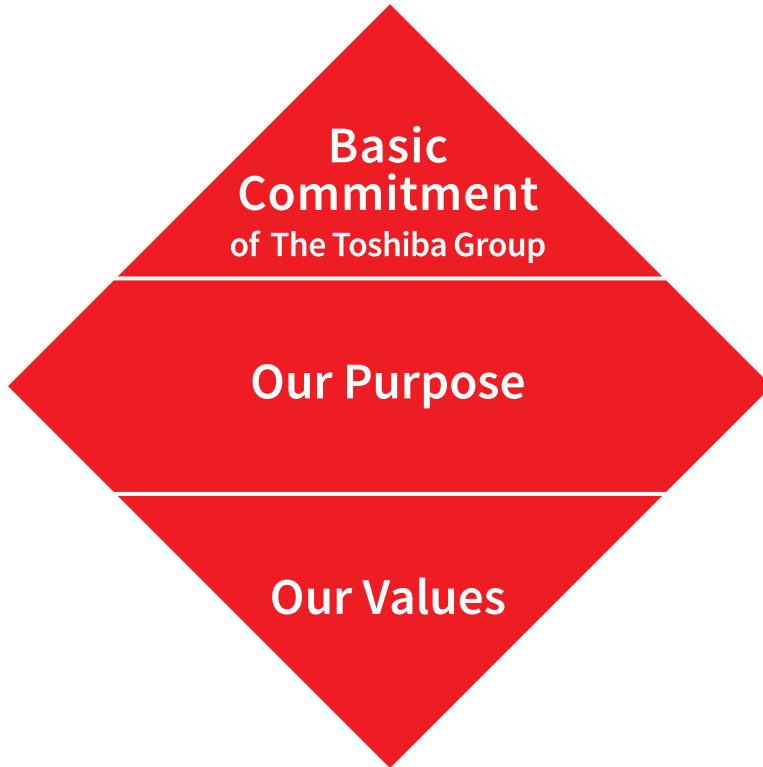
In 1961, Toshiba presented the first split air conditioning unit to the world – a system where the indoor and outdoor units are only connected by copper piping. Today, more than 50 years later, Toshiba still offers a wide range of top-quality products and services utilizing the best technologies.

RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY QUALITY



# > THE ESSENCE OF TOSHIBA

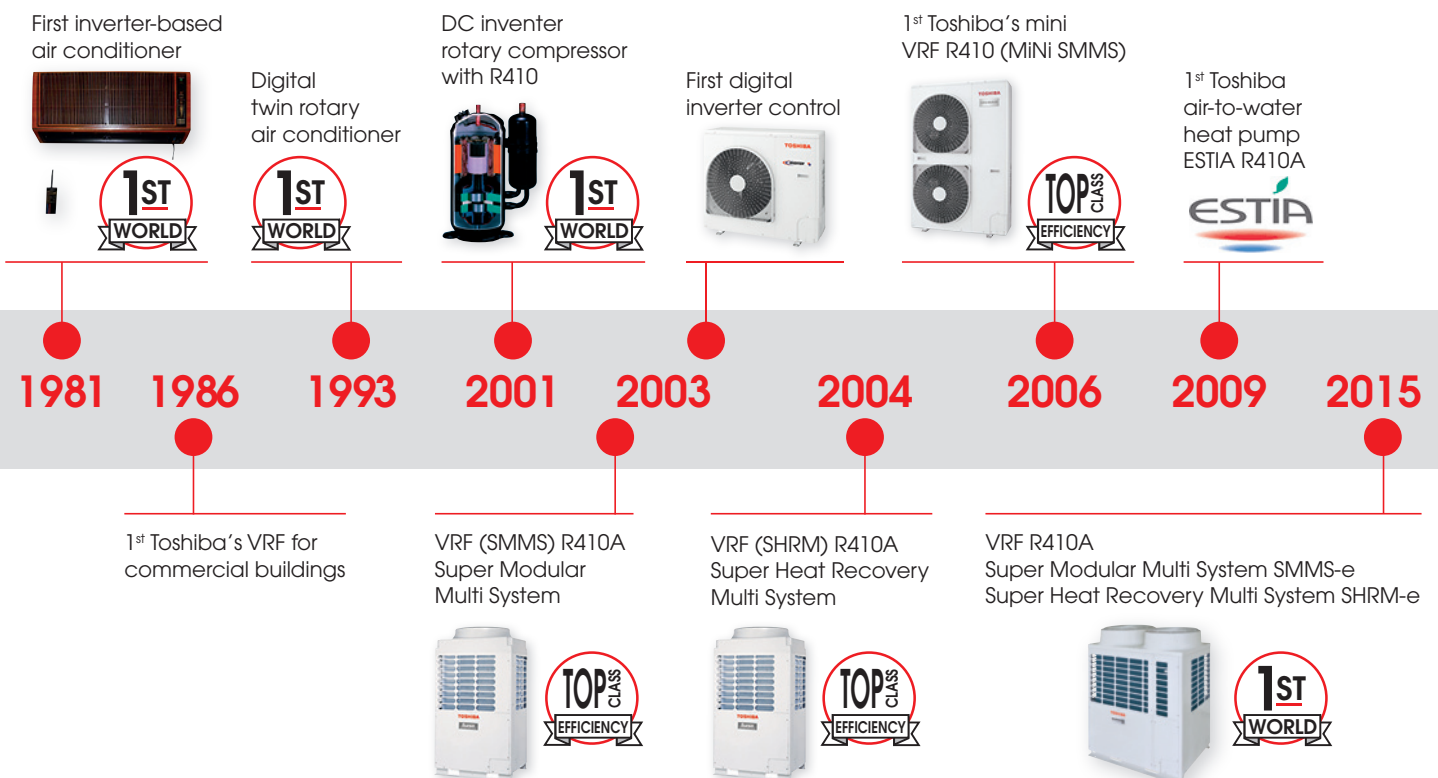
## > Basic Commitment of the Toshiba Group



Committed to **People**,  
Committed to the **Future**

At Toshiba, we commit to raising the quality of life for people around the world, ensuring progress that is in harmony with our planet.

## > ALWAYS ONE STEP AHEAD



## > Our Purpose

We are Toshiba. We have an unwavering drive to make and do things that lead to a better world.

A planet that's safer and cleaner. A society that's both sustainable and dynamic. A life as comfortable as it is exciting. That's the future we believe. We see its possibilities, and work every day to deliver answers that will bring on a brilliant new day.

By combining the power of invention with our expertise and desire for a better world, we imagine things that have never been – and make them a reality.

That is our potential. Working together, we inspire a belief in each other and our customers that no challenge is too great, and there's no promise we can't fulfill.

**We turn on the promise of a new day.**

## > Our Values

### Do the right thing

We act with integrity, honesty and openness, doing what's right - not what's easy.

### Look for a better way

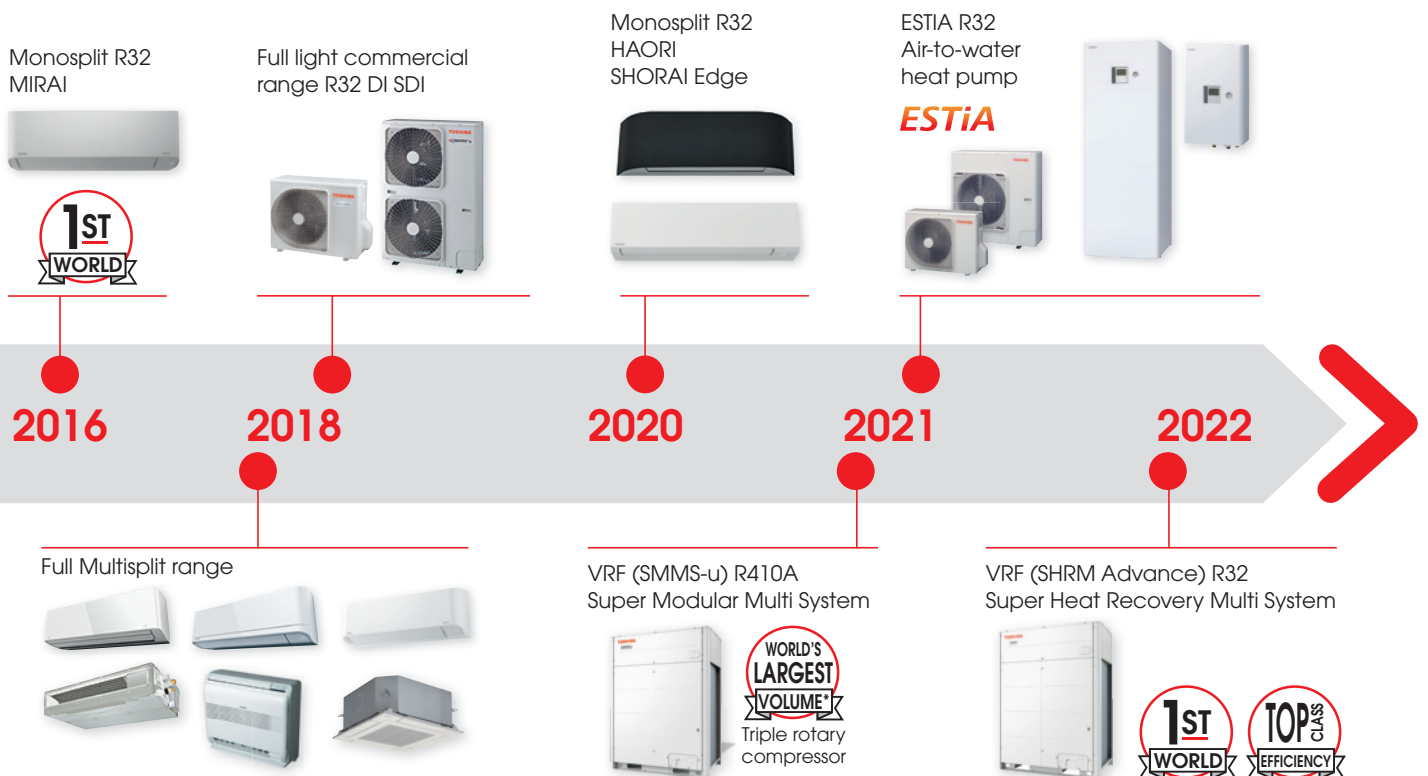
We continually strive to find new and better ways, embracing change as a means of progress.

### Always consider the impact

We think about how what we do will change the world for the better, both today and for generations to come.

### Create together

We collaborate with each other and our customers, so that we can grow together.



\* (as of Dec. 2020)

# TOSHIBA AIR CONDITIONING VISION



*Better Air Solutions*

## CHOOSE THE EXPERT OF INSPIRED TECHNOLOGIES

Toshiba Air Conditioning's philosophy is based on profound respect for our global environment and the desire to improve our customers' quality of life worldwide.

In 1981, Toshiba developed the inverter technology for residential air conditioners which is nowadays employed by most air conditioning leading brands.

Inverter enables the unit to continuously regulate its cooling and heating capacity by altering the speed of the compressor using a variable-frequency drive to control the speed of the motor. This innovation ensures outstanding comfort and efficiency levels.

World's 1<sup>st</sup>  
**1981**



Inverter  
Driven  
Compressor



World's 1<sup>st</sup>  
**1988**



Twin Rotary  
Residential  
Use



World's 1<sup>st</sup>  
**1993**



DC  
Twin Rotary



World's 1<sup>st</sup>  
**1998**



R410A  
Residential  
Use



World's 1<sup>st</sup>  
**2004**



Dual Stage  
Compressor



World's Largest  
Volume\*  
**2020**



Triple Rotary  
Compressor



\* (as of Dec. 2020)

Our commitment to world-class **efficiency**, versatile **scalability** and leading **quality** means we create cutting-edge technologies to find the most forward-thinking solutions possible for your world. Toshiba Air Conditioning is an innovative provider of comprehensive air conditioning solutions with world-class reliability.

## > Top-class energy efficiency

- The world's largest Triple rotary compressor <sup>(1)</sup>
- Twin rotary compressors
- All climates from -30°C (Daiseikai 9) to 54°C (MiNi SMMS-e Middle East range)
- Top class A+++ air to water heating solutions with ESTIA R32
- Environmentally-friendly refrigerants
- Optimal temperature control solutions for increased precision

## > Entirely scalable solutions

Toshiba Air Conditioning develops cutting-edge technologies and advances that benefit people everywhere by offering the ideal combination of comfort and ecologically-superior products for residential, light commercial and large building applications.

## > Superior manufacturing quality

Toshiba Air Conditioning's innovations ensure comprehensive building air conditioning solutions which have been subject to strict evaluation testing to guarantee world-class reliability.

Third party institute certifications for quality, safety and performance, guaranteed (TÜV, Eurovent, WEEE, RoHS, REACH, Intertek, Keymark).

(1) Source: Toshiba Carrier Corporation (as of December 21, 2020)





QUALITY RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY



➤ **“Committed to the Future”**

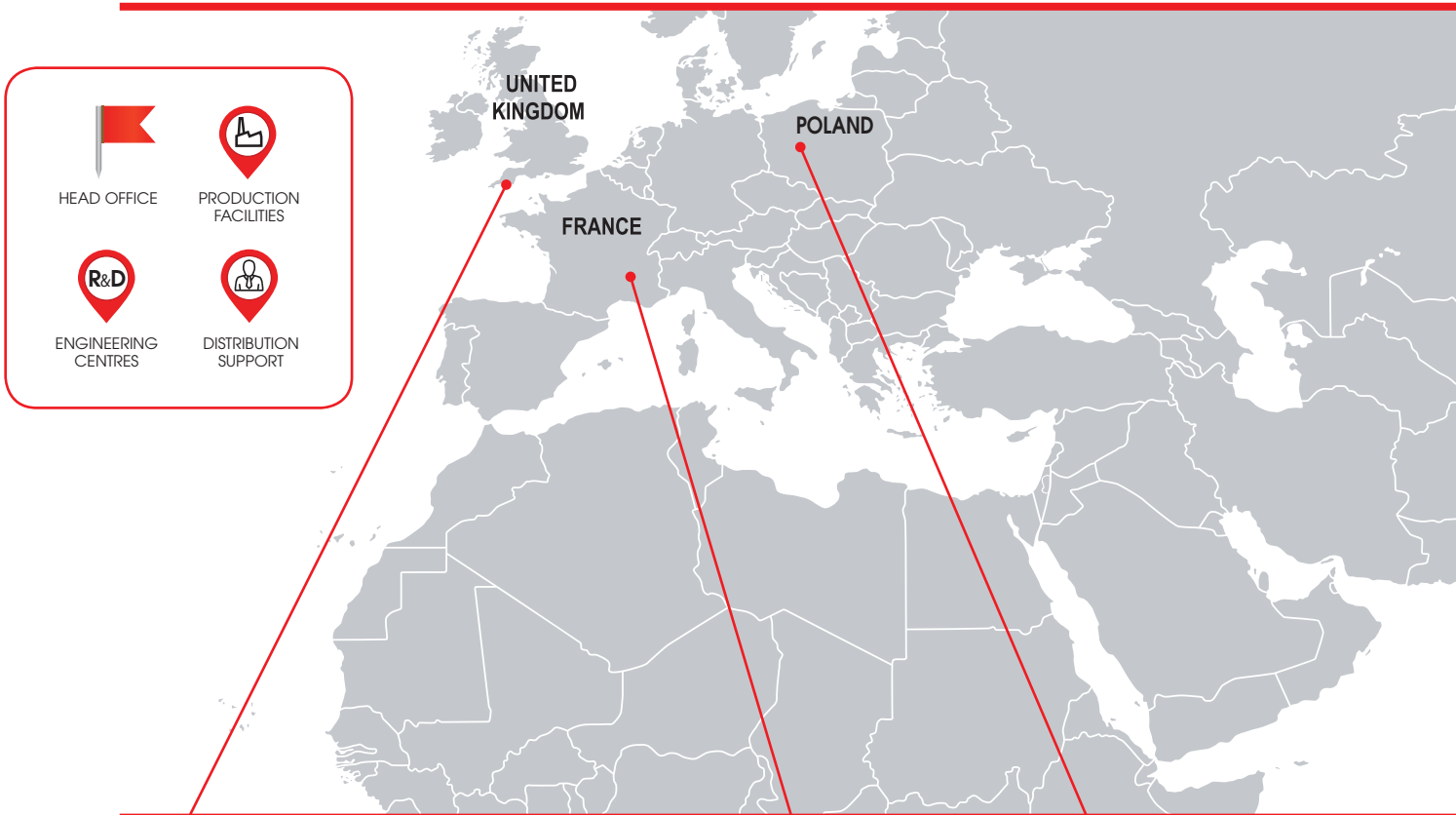
Going further than just products and beyond their basic functions, to create reliable and safe solutions that can interact with each other and with users.

Incorporating Toshiba’s technical building management systems, the world is made simpler, clearer and more effective.

QUALITY RELIABILITY ENVIRONMENT PROFITABILITY SIMPLICITY

# > TAILORED TO MEET CHALLENGES

Toshiba Air Conditioning, with heat pump technology at its core, aims to be an environmentally creative company which contributes to society and the global environment. A commitment to growth on a global scale by offering the highest-quality products and services based on heat application solutions which respond to all of our customers' needs.



## ▶ PLYMOUTH, UNITED KINGDOM



**TCEU - DISTRIBUTION SUPPORT  
and  
TCEU - ENGINEERING CENTRE**

## ▶ MONTLUEL, FRANCE



**TCEU - ENGINEERING CENTRE  
and  
TOSHIBA EMEA**

## ▶ GNIEZNO, POLAND



**TCAE - PRODUCTION FACILITIES**



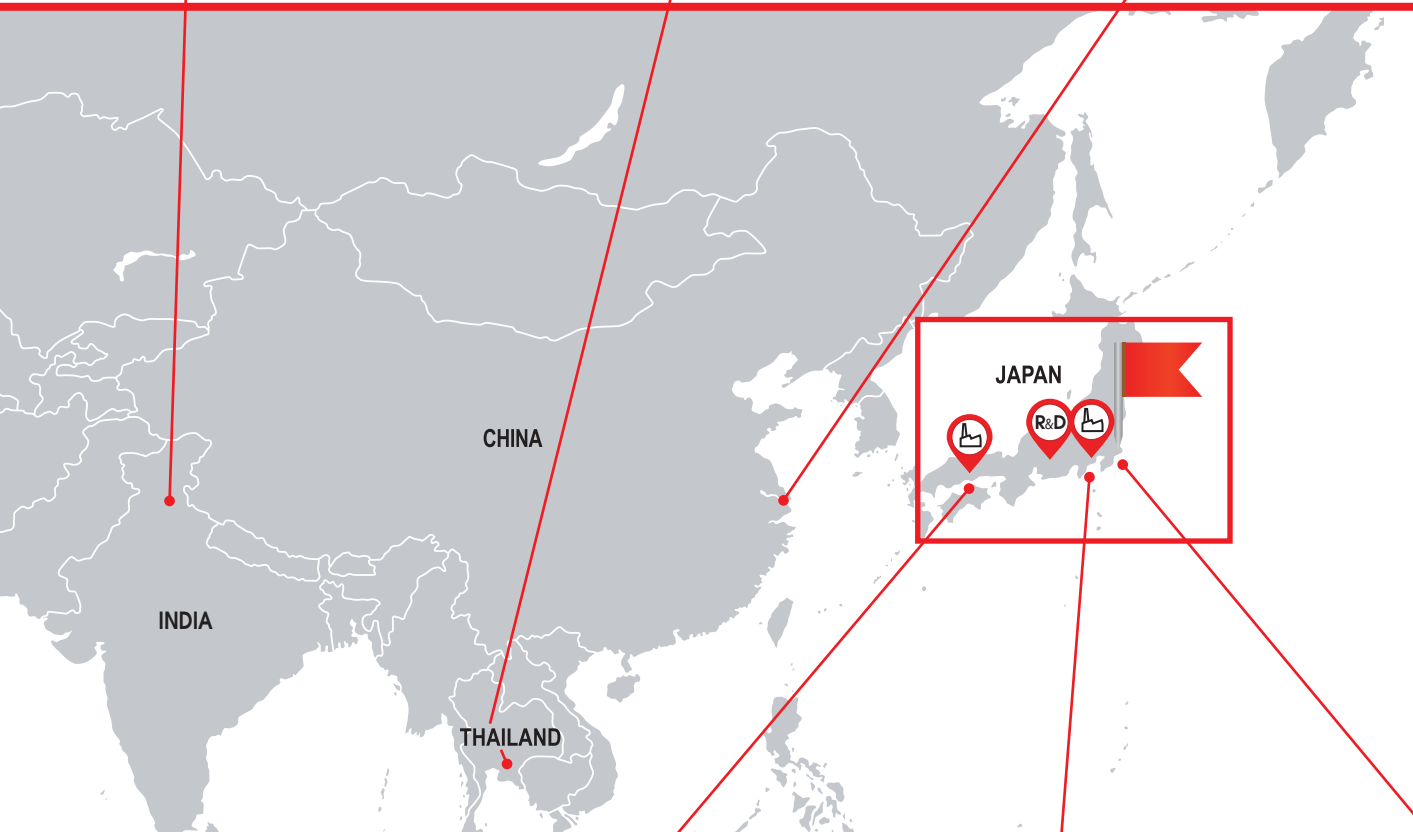
TCAI - PRODUCTION FACILITIES



TCTC - ENGINEERING CENTRE



TCAC - PRODUCTION FACILITIES



TCC - PRODUCTION FACILITIES



TCC - PRODUCTION FACILITIES  
and  
TCC - ENGINEERING CENTRE



TCC - HEAD OFFICE

# > LEADING THE WAY TO EXCELLENCE

Toshiba Air Conditioning's strengths centre on in-house research and development of advanced technologies and core components. They are accompanied by the production of air conditioners under the highest international standards, which incorporate quality control checks at each production stage for a wide variety of residential, commercial and business environments.

## > A global innovation network

Toshiba Air Conditioning has R&D centres in Japan, Europe, Thailand and China. Its global research activities are managed and integrated to ensure all research sites collaborate to provide innovative solutions to customers across the world.

The Toshiba brand proudly holds more than 1200 patents in Japan and abroad, an outstanding number for any company.

Each year since 1994, Toshiba Air Conditioning has received a prestigious award for its significant achievements in air conditioning. This demonstrates Toshiba's innovative spirit, a relentless drive to improve its products and systems.

## > Products designed to perform, engineered to perfection

In 1981 Toshiba Air Conditioning was the first company to incorporate inverter technology into air conditioning systems and has maintained its technological advantage over its competitors ever since. The development of the new and exclusive DC hybrid inverter system has reaffirmed this ability to innovate and maintain technological leadership in a fast-growing market. But for Toshiba Air Conditioning, innovation also means strong commitment to international institutions that carefully evaluate the impact of new technologies on the environment.

Toshiba Air Conditioning combines technological development with consideration for future generations: resulting in a range of extremely energy-efficient air conditioners, reducing greenhouse gas emissions at their source. Its continuous research into the development of inverter technology has provided remarkable results, both with regards to meeting the required comfort levels and continually reducing the system's energy consumption.



Quality production



Outdoor units production



Indoor units production

**> In line with European standards**

To improve its environmental responsibility, Toshiba Air Conditioning offers products that meet the following European standards:

**EN 14511**

Air conditioners, liquid chilling packages and heat pumps with electrically-driven compressors for space heating and cooling. Test methods.

**EN 14825**

Air conditioners, liquid chilling packages and heat pumps, with electrically-driven compressors, for space heating and cooling. Testing and rating with part loads and calculation of seasonal performance.

**EN 16147**

Heat pumps with electrically-driven compressors. Testing, performance rating and requirements for marking domestic hot water units.



All products ensure high operating efficiency and are cost-effective solutions for heating and cooling, guaranteed by their participation in the Eurovent programme. This acts as a guarantee for customers and users that the products will operate in accordance with the design specifications and that the data published is realistic.

Toshiba participates in the Eurovent Certification Performance programme for AC1, AC2 & VRF.

Check ongoing validity of certificate:

[www.eurovent-certificate.com](http://www.eurovent-certificate.com)

For Estia certification, refer to Keymark heat pump certification program:

[www.heatpumpkeymark.com](http://www.heatpumpkeymark.com)

The entire production process is certified by international quality assurance institutes. Toshiba's air conditioners gained ISO 9001 certification for quality control management and quality insurance.



# > ENVIRONMENTAL RESPONSIBILITY

## > Toshiba Carrier Group's Basic Policy for the Environment

Toshiba Carrier Group aims to provide environmentally conscious products into the worldwide society and contribute to the society through business operation considering the reduction environmental burden, as a corporate to develop the system, manufacture, sell and provide services on Air-conditioning systems, hot-water-supply systems, ventilation systems, refrigerators, and compressors.

Moreover, we hold environmental initiatives to be one of our top priority tasks in corporate management, guided by the "Essence of Toshiba." We will strive to create enriched value and ensure harmony with the earth for people around the world now and in the future. Through our environmental management that aims to achieve a decarbonized society, a resource circulating society, and a society in harmony with nature, we will contribute to the realization of a sustainable society and turn on the promise of a new day.

## > Environmental Future Vision 2050

Toshiba Carrier Group has been making efforts to solve the three issues of "Mitigation of Climate Change", "Effective Use of Resources", and "Management of Chemicals" in the "Environment Vision 2050" which formulated in Toshiba group in 2007. With the goal of "contributing to the realization of a sustainable society through environmental management which aims to create enriched value and to ensure harmony with the earth," Environmental Future Vision 2050 which newly formulated in 2020 aims to realize a sustainable society—in other words, a decarbonized society, a resource-circulating society, and a society that is in harmony with nature. We will promote the implementation of initiatives in three areas: "response to climate change," "response to the circular economy," and "consideration of ecosystems" so as to realize the ideal situation in 2050.

Learn more: <https://www.toshiba-carrier.co.jp/global/about/activity/management.htm#vision>

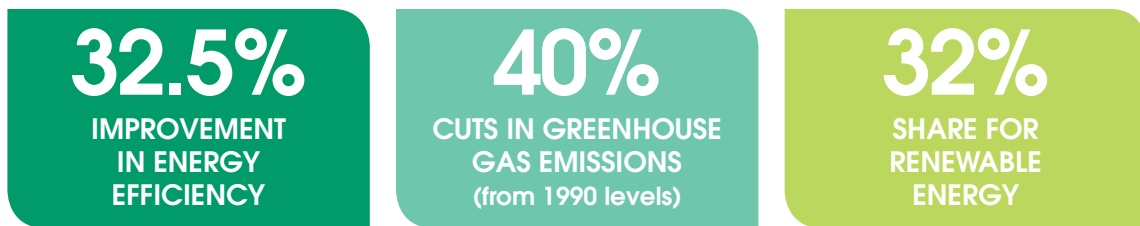


> Toshiba’s commitment to **the future**

We all want to play an active part in preserving our planet.

At Toshiba Air Conditioning, we believe we can make a difference. With a global vision for our evolving world, we are committed to advancing research and developing super-energy-efficient and cleaner technologies that not only use significantly less energy but help maintain air quality using state-of-the-art air purification systems for homes and businesses.

This commitment is in line with the 2030 European climate and energy package targets.



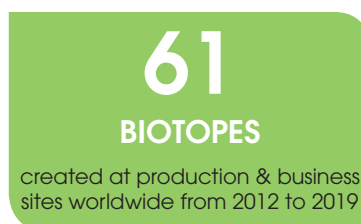
Learn more:

[https://ec.europa.eu/clima/eu-action/climate-strategies-targets/2030-climate-energy-framework\\_en](https://ec.europa.eu/clima/eu-action/climate-strategies-targets/2030-climate-energy-framework_en)

Toshiba also assesses the impacts of its business activities, products and services on the environment and sets targets aiming to reduce environmental impacts and prevent pollution.



In addition to mitigating climate change and reducing pollution, Toshiba Group is also conducting group-wide environmental activities based on the recognition of the importance of maintaining and expanding environments for conserving biodiversity.



Source: Toshiba Group Sustainability Report 2020

Learn more: <https://www.toshiba.co.jp/sustainability/en/report/download.htm>

# EXPERIENCE THE FUTURE



## > TO GUIDE YOU



MAX EFFICIENCY



CAPACITY



OPERATION



D.H.W



SOUND  
LEVEL



AIR FLOW



INDIVIDUAL  
HOUSING



COLLECTIVE  
HOUSING



SHOPS



SHOPPING  
CENTRES



BUSINESSES



ADMINISTRATION



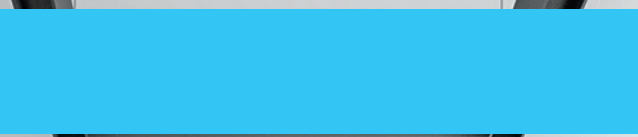
HEALTHCARE



HOTELS



> BUSINESS



EXCELLENCE IN SEASONAL EFFICIENCY

Mini SMMS-e, SMMS-u, SHRM-e & SHRM-Advance



# CREATING BENEFITS AROUND COMFORT

## > Benefits for the consultant



Our VRF offers unlimited possibilities in terms of capacity, connectivity, indoor unit lineup and control solutions, providing the correct solution for your customers needs. Toshiba selection tool will guide you through the selection process with minimal input from your side, ensuring troublefree installation and operation. All systems come with the Eurovent certification as standard.

## > Benefits for the installer



Designed to perform and engineered to perfection, Toshiba VRF excels in anaging the heating, cooling, hot water and fresh air input into offices, shops, restaurants and domestic housing, with unrivalled connection flexibility. You can rely on Toshiba support, to assist you from the project phase to commissioning and troubleshooting.

## > Benefits for the user

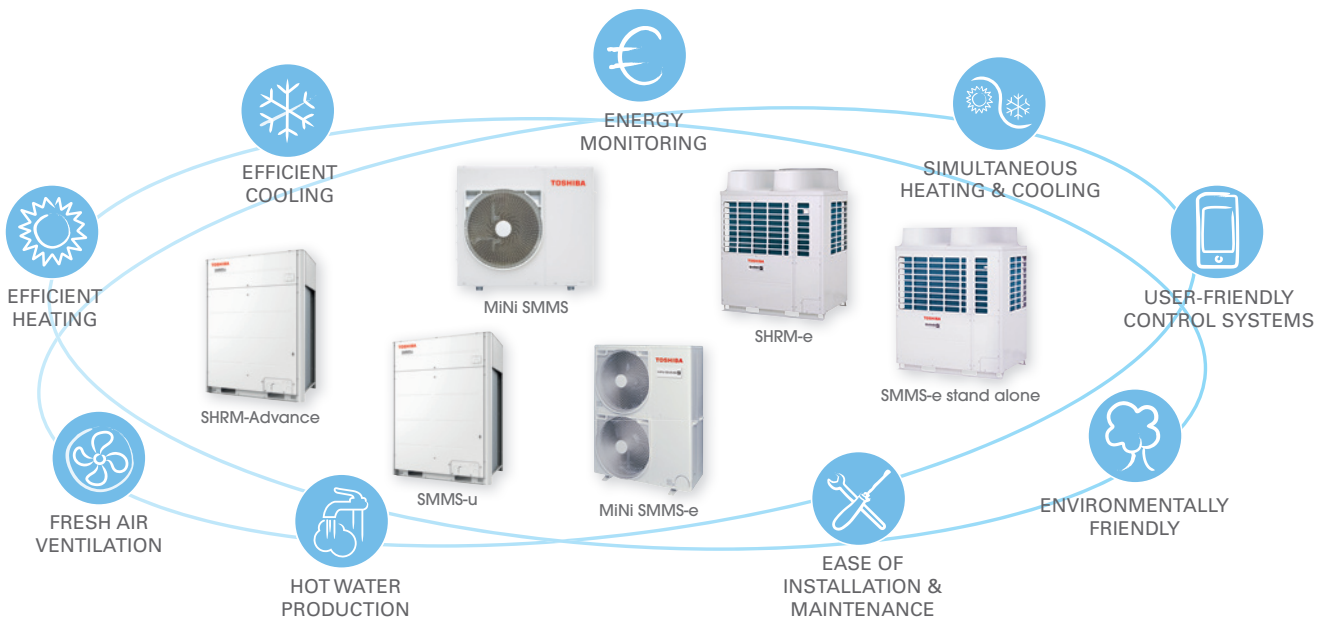


There is nothing like a comfortable place to enjoy the present moment. Full of Toshiba innovations, our VRF guarantee all year round comfort combined with superior energy management, advanced air filtration and full control solutions for maximized product usability.

## > Benefits for the planet



Toshiba has an unwavering drive to make and do things that lead to a better world. After the switch to low GWP refrigerant for its residential and light commercial products, Toshiba is now one of the first to launch a top blow VRF using R32: The SHRM-Advance. Be prepared to a new green dimension in your projects and in your life.



## > SHRM-Advance, the future is now

More environmental friendly and incorporating all of SMMS-u innovations, the new SHRM-Advance is the most advanced solution to provide cooling, heating and hot water for commercial applications. Be surprised by all the possibilities offered by this new solution benefitting from 40 years of inspired innovations!






- 8 to 24HP
- 2-pipe and 3-pipe operations
- Wide indoor unit compatibility
- Ultra high efficiency up to 8,9 SEER
- EN378 compliant

# > HIGH EFFICIENCY AND LOW OPERATION COSTS

## > Innovative compressor technology

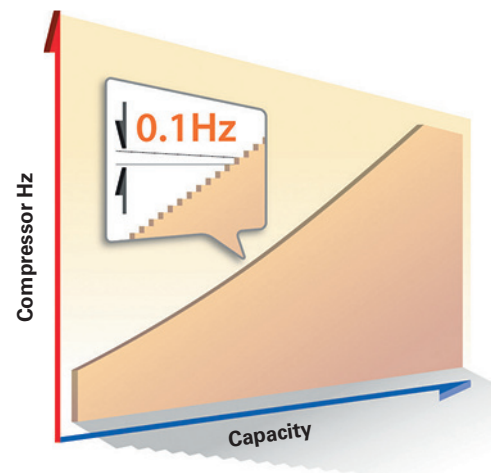
Toshiba rotary compressor technology brings outstanding performances to all SMMS systems with no compromise on system reliability.



-  Large capacity
-  Less refrigerant needed
-  Low noise
-  Wide operating range
-  Low vibration
-  DLC treatment

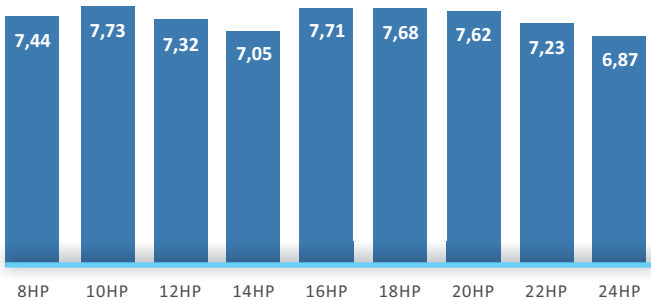
## > Infinite variable control

Inverter control feature has been continually evolved and developed, since its inception by TOSHIBA engineers back in 2004 with the original SMMS system. The control has the ability to adjust the compressor rotational speed in a near seamless 0,1 Hz steps. This control when matched with TOSHIBA's newest and latest Twin Rotary compressors, allows the system to respond precisely to the capacity needs of the end user, whilst minimizing energy losses.

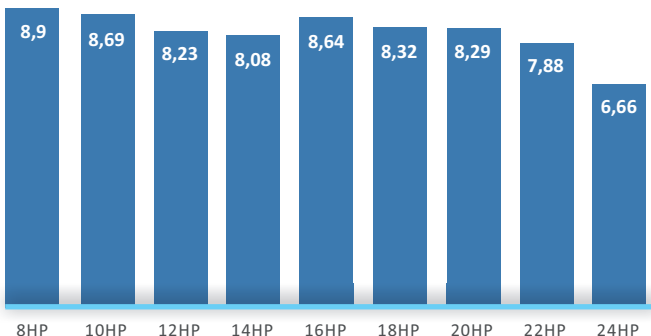


## > Maximum part load and full load efficiencies

**SMMS-u SEER\***



**SHRM-advance SEER\***



Thanks to Toshiba's unique twin rotary compressor, re-designed heat exchanger and "intelligent flow" technology, the Toshiba's VRF achieve a SEER of 9.68 (MiNi SMMS-e), one of the highest seasonal efficiency in the market.

Maximum efficiency is obtained under 50% part load conditions, under which VRF systems operate predominantly.

The expert use and evolution of Toshiba's core technologies have allowed the Toshiba VRF system to achieve the highest part load COP and EER in the industry.

\*4-way cassette combinations

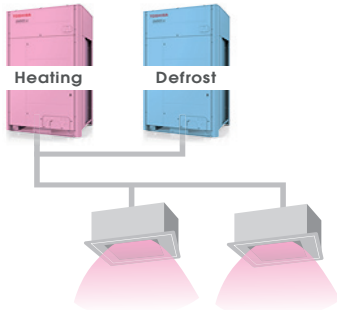
# > MiNi SMMS-e, SMMS-u, SHRM-e & SHRM-Advance



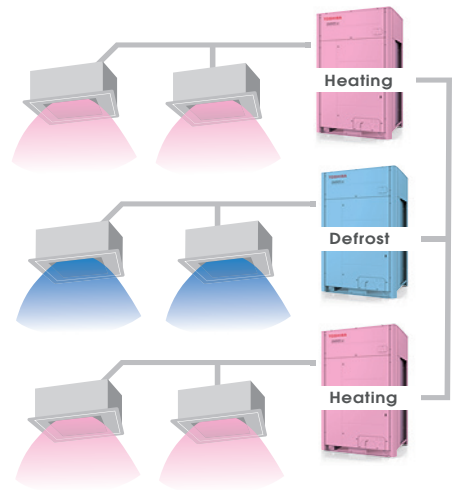
## > SUPERIOR AIR COMFORT

### > Intelligent defrost

Individual defrost: continuous heating up to 5 hours



**Kobetsu**  
No simultaneous defrost in combination configuration. Heating operation never stopped.

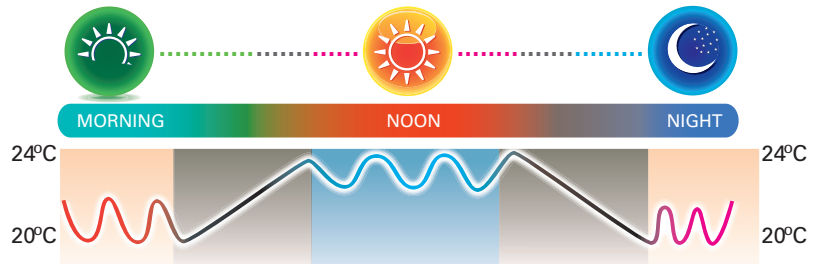


**Renkey**  
No simultaneous defrost with multi system configuration. Heating operation never stopped.

\* Applicable on SMMS-u and SHRM-Advance

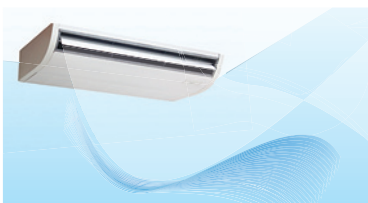
### > Dual set point for more precision

The Dual Set Point increases the system's energy efficiency and reduces overall running costs, with longer periods of time in thermal off mode. Heating and cooling temperatures at which the indoor unit will begin to operate can now be individually selected giving maximum flexibility to the user.

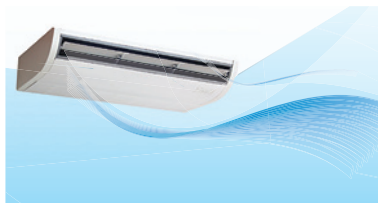


### > Cool comfort with soft cooling mode

The development of the soft cooling mode provides a new level for cool comfort. You will have the freedom to personalize the air flow intensity, angle and direction directly from the remote control and enjoy the indoor environment at the right temperature without being directly exposed to the cold draft.



Standard operating mode



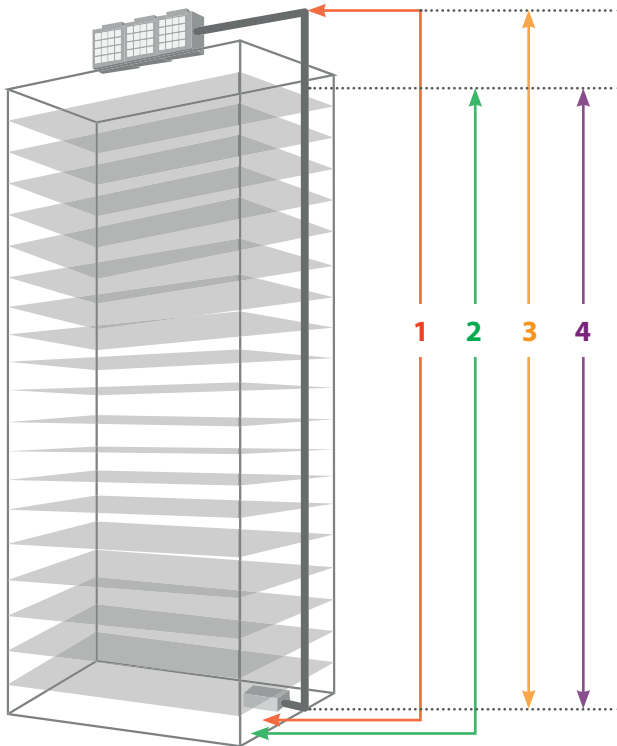
Soft cooling mode



# FLEXIBLE DESIGN AND QUICK INSTALLATION

## Piping design flexibility

Toshiba's piping technology makes them one of the industries leaders in system flexibility and ease of installation and with the e-series VRF system, the level of flexibility has increased further, giving more options to the contractor and installer alike.



For more details, please refer to installation manuals.

### 1 Total piping length

Applied with Toshiba's unique and greatly improved technology, Toshiba's VRF can reach up to 1,200 meters maximum piping length.



**Total piping length  
1,200 m\***

### 2 Farthest equivalent length

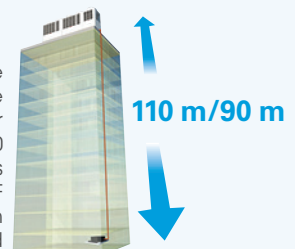
The maximum equivalent distance between the outdoor unit and the farthest indoor unit tops at 250 meters for SMMS-u and 190 meters for SHRM Advance, a best-in-class for the industry.



**Farthest equivalent length  
250 m/190 m**

### 3 Height between outdoor unit and indoor unit

Another industry best-in-class feature is the maximum vertical distance between the outdoor and indoor units, which can extend up to 110 meters for SMMS-u & 90 meters for SHRM Advance. Toshiba's VRF enhanced piping capabilities result in more benefits for system design and installation flexibility, as well as lower installation costs.



**110 m/90 m**

### 4 Height difference FCU-FCU

Maximum vertical distance between indoor units can reach up to 40 meters, which is equal to an entire 11-storey Height difference between outdoor unit and indoor unit 40 m building.

**Height difference between outdoor unit and indoor unit  
40 m**

SMMS-u/SHRM-Advance"

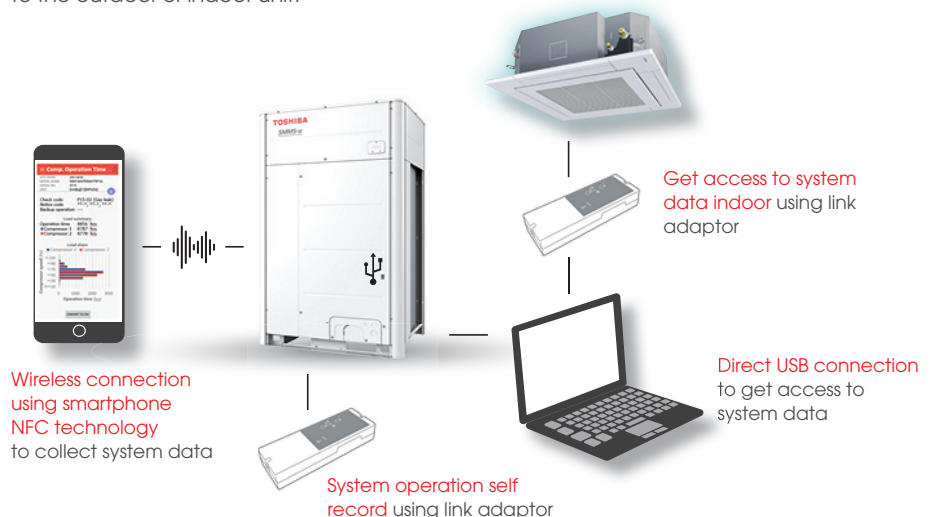
## Toshiba selection tool

Designed for novice and expert users, Toshiba selection software creates simple, yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. Final detailed reports can be produced and sent to customers in PDF format or in more complex files, such as AutoCAD DXF, allowing simple integration into existing software packages.



## Easy commissioning and maintenance

Save time during commissioning and maintenance. Choose between the "Wave Tool Advance" using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.



BUSINESS

# CHOOSE YOUR ADAPTED SYSTEM SOLUTION

## MAPPING BY APPLICATIONS

### OUTDOOR UNITS

#### Residential



#### Light commercial



#### Business



|                                | Residential  | Light commercial  | Business |
|--------------------------------|--|---|----------|
| Reversible cooling or heating  | <p>Individual housing mainly</p> <p>Up to 250 m<sup>2</sup> per system<br/>Max. 10 IDUs per system</p> | <p>Up to 250 m<sup>2</sup> per system and max. 10 IDUs per system</p> <p> 1 phase electrical power supply only</p>  |          |
|                                | <p>Individual housing mainly</p> <p>Up to 400 m<sup>2</sup> per system<br/>Max. 16 IDUs per system</p> |   |          |
| Simultaneous cooling & heating | <p>Collective housing mainly</p> <p> 3-phase electrical power supply only</p>                          | <p>Up to 6,000 m<sup>2</sup> per system<br/>Max. 128 IDUs per system</p>  |          |
|                                | <p>Collective housing mainly</p> <p> 3-phase electrical power supply only</p>                          | <p>SHRM-e : Up to 2,500 m<sup>2</sup> per system Max. 64 IDUs per system Hot water production capability</p> <p>SHRM Advance : Up to 1,200 m<sup>2</sup> per system Max 54 IDUs per system Hot water production capability</p> <p> R32 inside</p> |          |

### INDOOR UNITS

|                  | Residential         | Light commercial                     | Business             | Business                                |               |
|------------------|---------------------|--------------------------------------|----------------------|---|---------------|
| <b>Cassette</b>  |                     | o (4-way standard or compact)        | o (All types)        | o (4-way standard or compact for lobby) | o (All types) |
| <b>Duct</b>      | o (Standard duct)   | o (Standard or high static pressure) | o (Slim or standard) | o (Slim for rooms & standard for lobby) | o             |
| <b>High-wall</b> | o                   | o                                    | o                    | o (For rooms - low sound version)       | o             |
| <b>Ceiling</b>   |                     | o                                    |                      |   | o             |
| <b>Console*</b>  | o (Bi-flow version) |                                      | o                    | o (For lobby)                           | o             |

The data provided on this page is for informational purposes only and not for the purpose of providing legal or other professional advice.  
\* Consoles not compatible with R32 VRF systems"

**CHOOSE YOUR ADAPTED SYSTEM SOLUTION**

**OUTDOOR UNIT MAPPING FOR EUROPE**

|  | <br>Side Blow VRF | <br>Mini SMMSe 1PH | <br>Mini SMMSe 3PH | <br>SMMSe | <br>SMMS-u | <br>SHRMe | <br>SHRM Advance |              |               |
|--|--|---|---|--|---|--|---|--------------|---------------|
|  | R410A  | R410A   | R410A   | R410A  | R410A   | R410A  | R32   |              |               |
|  | MCY-MHP0_4HT-E/TR  | MCY-MHP0_4HS-E/TR   | MCY-MHP0_4HS8-E/TR  | MMY-SAP_6HT8P-E/TR   | IMY-MUP_1HT8P-E/TR  | MMY-MAP_6FT8P-E/TR   | MMY-SUG_1FT8P-E/TR  |              |               |
|  | Heat pump  |   |   | Heat pump  | Heat pump   |  | Heat pump   |              |               |
|  |  |   |   | Single module /Stand alone   | Single module   | Standard combinations  | Single module   | Combinations | Single module |

|     |    |    |    |    |    |   |    |   |    |
|-----|----|----|----|----|----|---|----|---|----|
| 4   | ●▼ | ●▼ | ●▼ |    |    |   |    |   |    |
| 5   | ●▼ | ●▼ | ●▼ |    |    |   |    |   |    |
| 6   |    | ●▼ | ●▼ |    |    |   |    |   |    |
| 8   |    |    | ●▼ | ●▼ | ●▼ |   | ●▼ |   | ●▼ |
| 10  |    |    | ●▼ | ●▼ | ●▼ |   | ●▼ |   | ●▼ |
| 12  |    |    |    |    | ●▼ |   | ●▼ |   | ●▼ |
| 14  |    |    |    |    | ●▼ |   | ●▼ |   | ●▼ |
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| 20  |    |    |    |    | ●▼ |   | ●▼ |   | ●▼ |
| 22  |    |    |    |    | ●▼ |   |    | ● | ●▼ |
| 24  |    |    |    |    | ●▼ |   |    | ● | ●▼ |
| 26  |    |    |    |    |    | ● |    | ● |    |
| 28  |    |    |    |    |    | ● |    | ● |    |
| 30  |    |    |    |    |    | ● |    | ● |    |
| 32  |    |    |    |    |    | ● |    | ● |    |
| 34  |    |    |    |    |    | ● |    | ● |    |
| 36  |    |    |    |    |    | ● |    | ● |    |
| 38  |    |    |    |    |    | ● |    | ● |    |
| 40  |    |    |    |    |    | ● |    | ● |    |
| 42  |    |    |    |    |    | ● |    | ● |    |
| 44  |    |    |    |    |    | ● |    | ● |    |
| 46  |    |    |    |    |    | ● |    | ● |    |
| 48  |    |    |    |    |    | ● |    | ● |    |
| 50  |    |    |    |    |    | ● |    | ● |    |
| 52  |    |    |    |    |    | ● |    | ● |    |
| 54  |    |    |    |    |    | ● |    | ● |    |
| 56  |    |    |    |    |    | ● |    | ● |    |
| 58  |    |    |    |    |    | ● |    | ● |    |
| 60  |    |    |    |    |    | ● |    | ● |    |
| --- |    |    |    |    |    | ● |    | ● |    |
| 120 |    |    |    |    |    | ● |    | ● |    |

|                             |                                     |   |                   |                     |   |   |   |                          |   |
|-----------------------------|-------------------------------------|---|-------------------|---------------------|---|---|---|--------------------------|---|
| Fresh air solution          | Fresh air duct                      |   |                   |                     | ● | ● |   |                          |   |
|                             | Air to Air heat exchanger + DX coil |   | ●                 | ● (4, 5 & 6HP only) |   |   | ● | ●                        |   |
|                             | Standard DX Kit                     | ● | ●                 | ●                   | ● | ● | ● | ●                        |   |
|                             | 0/10v DX kit                        |   |                   |                     | ● | ● |   |                          |   |
| Hot water                   | Hot water module                    |   | ● (8 & 10HP only) |                     | ● | ● | ● | ● (mid temperature only) |   |
| Small capacity indoor units | 0.3HP indoor unit                   |   |                   |                     | ● | ● |   |                          | ● |
|                             | 0.6HP indoor unit                   |   | ●                 | ●                   | ● | ● | ● | ●                        | ● |
| Accessories                 | Leak detection                      | ● | ●                 | ●                   | ● | ● | ● | ●                        | ● |
|                             | Shuff of valve                      |   | ●                 | ●                   | ● |   | ● | ●                        | ● |

●:Heat pump - ▼:Eurovent certified 

MCY-MHP\_HT  
SIDE BLOW



Compact, efficient, adaptable, energy saver, the sideblow VRF is the solution to cool and heat small/medium size buildings.

**Efficiency**

- Toshiba's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.

**Adaptability**

- Extensive indoor model range, with various styles of indoor unit designs, including small capacity 0.6Hp models.
- Possibility to merge different styles of indoor units.

**Comfort**

- One user-friendly controller for all the indoor units helps to simplify the unit control.

SCOP MAX      CAPACITY      OPERATION

4.21      4HP > 5HP      -20°C > +46°C

Outdoor unit height greatly reduced (>1m) for easier integration and installation.



**SIDE BLOW Performances**

| Outdoor unit            | HP        | MCY-MHP0406HT-E    | MCY-MHP0506HT-E1   |
|-------------------------|-----------|--------------------|--------------------|
|                         |           | 4 HP               | 5 HP               |
| <b>Cooling capacity</b> | <b>kW</b> | <b>12.1</b>        | <b>14.0</b>        |
| Power input             | kW C      | 3.73               | 4.33               |
| EER                     | W/W       | 3.24               | 3.23               |
| EthasC/SEER             |           | 320.2% / 8.08      | 307.8% / 7.77      |
| Running current         | A C       | 14.4 / 13.8 / 13.2 | 20.8 / 19.9 / 19   |
| <b>Heating capacity</b> | <b>kW</b> | <b>12.5</b>        | <b>16.0</b>        |
| Power input             | kW H      | 2.83               | 4.00               |
| COP                     | W/W       | 4.42               | 4.00               |
| EthasH/SCOP             |           | 150.2% / 3.83      | 152.2% / 3.88      |
| Running current         | A H       | 13.4 / 12.8 / 12.3 | 19.1 / 18.3 / 17.5 |
| Peak demand current     | A         | 26.5               | 28.0               |

**SIDE BLOW Physical data**

| Outdoor unit                              | HP         | MCY-MHP0406HT-E      | MCY-MHP0506HT-E      |
|---|------------|----------------------|----------------------|
| Air flow                                  | m³/h - l/s | 4020 - 1116          | 4260 - 1183          |
| Sound pressure level                      | dB(A) C/H  | 54/57                | 54/58                |
| Max indoor connectivity                   |            | 8                    | 10                   |
| Dimensions (HxWxD)                        | mm         | 910 x 990 x 390      | 910 x 990 x 390      |
| Weight                                    | kg         | 100                  | 100                  |
| Compressor type                           |            | Twin Rotary          | Twin Rotary          |
| Refrigerant charge R410A                  | kg/TCO2eq  | 3.3/6.9              | 3.3/6.9              |
| Gas line type - diameter                  |            | Flare - 5/8"         | Flare - 5/8"         |
| Liquid line type - diameter               |            | Flare - 3/8"         | Flare - 3/8"         |
| Discharge line connection type - diameter |            |                      |                      |
| Maximum equivalent length separation*     | m          | 60                   | 60                   |
| Maximum actual piping separation*         | m          | 50                   | 50                   |
| Maximum total pipe length*                | m          | 90                   | 90                   |
| Maximum lift (indoor unit above/below)    | m          | 15/15                | 15/15                |
| Operating range - db                      | °C C       | -5/46                | -5/46                |
| Operating range - wb                      | °C H       | -20/15               | -20/15               |
| Power supply                              | V-ph-Hz    | 220 / 230 / 240-1-50 | 220 / 230 / 240-1-50 |

\* when PMV Kit is used: Maximum equivalent length separation (50 m); Maximum actual piping separation (40 m); Maximum total pipe length (75 m)  
C: cooling mode  
H: heating mode



MCY-MHP\_HS  
**Mini SMMS-e 1Ph**



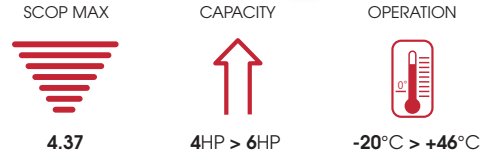
Incorporating all of Toshiba's VRF experience and knowledge into a system that measures no more than 1.2m high, results in a perfect solution for all small to medium building heating and cooling requirements.

**Technology**

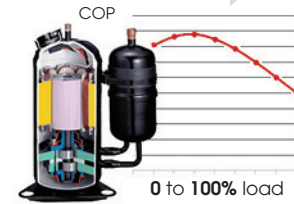
- Toshiba's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.
- Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

**Connectivity**

- With 180m total (125m equivalent) piping length, ensures the Mini SMMS-e system is adaptable for all types of projects.
- Extensive indoor model range, with various styles of indoor unit designs, including small capacity (0.6Hp) and air-to-air heat exchanger models.



Toshiba's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.



**Mini SMMS-e 1Ph Performances**

| Outdoor unit     | HP   | MCY-MHP0404HS-E    | MCY-MHP0504HS-E    | MCY-MHP0604HS-E    |
|------------------|------|--------------------|--------------------|--------------------|
|                  |      | 4 HP               | 5 HP               | 6 HP               |
| Cooling capacity | kW   | 12.1               | 14.0               | 15.5               |
| Power input      | kW C | 2.83               | 3.50               | 4.29               |
| EER              | W/W  | 4.28               | 4.00               | 3.61               |
| EthasC/SEER      |      | 373.8% / 9.42      | 366.2% / 9.23      | 384.2% / 9.68      |
| Running current  | A C  | 13.5 / 13.0 / 12.4 | 16.6 / 15.9 / 15.2 | 20.1 / 19.2 / 18.4 |
| Heating capacity | kW   | 12.5               | 16.0               | 18.0               |
| Power input      | kW H | 2.59               | 3.75               | 4.31               |
| COP              | W/W  | 4.83               | 4.27               | 4.18               |
| EthasH/SCOP      |      | 163.8% / 4.17      | 166.6% / 4.24      | 171.8% / 4.37      |
| Running current  | A H  | 12.5 / 12.0 / 11.5 | 17.8 / 19.3 / 18.5 | 20.2 / 19.3 / 18.5 |

**Mini SMMS-e 1Ph Physical data**

| Outdoor unit                              | HP         | MCY-MHP0404HS-E      | MCY-MHP0504HS-E      | MCY-MHP0604HS-E      |
|---|------------|----------------------|----------------------|----------------------|
| Air flow                                  | m³/h - l/s | 5660 - 1572          | 5820 - 1617          | 6050 - 1681          |
| Sound pressure level                      | dB(A) C/H  | 49/52                | 50/53                | 51/54                |
| Max indoor connectivity                   |            | 8                    | 10                   | 13                   |
| Dimensions (HxWxD)                        | mm         | 1235 x 990 x 390     | 1235 x 990 x 390     | 1235 x 990 x 390     |
| Weight                                    | kg         | 127                  | 127                  | 127                  |
| Compressor type                           |            | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                  | kg/TCO2eq  | 6.4 / 13.4           | 6.4 / 13.4           | 6.4 / 13.4           |
| Gas line type - diameter                  |            | Flare - 5/8"         | Flare - 5/8"         | Flare - 3/4"         |
| Liquid line type - diameter               |            | Flare - 3/8"         | Flare - 3/8"         | Flare - 3/8"         |
| Discharge line connection type - diameter |            |                      |                      |                      |
| Maximum equivalent length separation*     | m          | 125                  | 125                  | 125                  |
| Maximum actual piping separation*         | m          | 100                  | 100                  | 100                  |
| Maximum total pipe length*                | m          | 180                  | 180                  | 180                  |
| Maximum lift (indoor unit above/below)    | m          | 20/30                | 20/30                | 20/30                |
| Operating range - db                      | °C C       | -5/46                | -5/46                | -5/46                |
| Operating range - wb                      | °C H       | -20.0 / 15.0         | -20.0 / 15.0         | -20.0 / 15.0         |
| Power supply                              | V-ph-Hz    | 220 / 230 / 240-1-50 | 220 / 230 / 240-1-50 | 220 / 230 / 240-1-50 |

\* when PMV Kit is used: Maximum equivalent length separation (80 m); Maximum actual piping separation (65 m); Maximum total pipe length (150 m)  
Note: Use engineering Data Book for specific details.  
C: cooling mode - H: heating mode

MCY-MHP\_HS8  
MiNi SMMS-e 3Ph



Incorporating all of Toshiba's VRF experience and knowledge into a system that measures no more than 1.2m high, results in a perfect solution for all small to medium building heating and cooling requirements.

**Technology**

- Toshiba's in-house designed twin rotary inverter controlled compressor operates precisely to match the indoor demand, providing class leading levels of performance and system efficiency.
- Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

**Connectivity**

- With 180m total piping length, ensures the MiNi SMMS-e system is adaptable to all types of projects.
- Extensive indoor model range, with various styles of indoor unit designs, including small capacity (0.6Hp) and air-to-water heat exchanger models.
- 3Ph power supply.

SCOP MAX



4.38

CAPACITY



4HP > 10HP

OPERATION



-20°C > +46°C

With 30Pa available pressure, the MiNi SMMS-e can be installed indoor behind a transfer grid.



**MiNi SMMS-e 3Ph Performances**

| Outdoor unit            | HP |           | MCY-MHP0404HS8-E |                 | MCY-MHP0504HS8-E | MCY-MHP0604HS8-E   | MCY-MHP0806HS8-E   | MCY-MHP1006HS8-E |
|-------------------------|----|-----------|------------------|-----------------|------------------|--------------------|--------------------|------------------|
|                         |    |           | 4 HP             | 5 HP            | 6 HP             | 8 HP               | 10 HP              |                  |
| <b>Cooling capacity</b> |    | <b>kW</b> | <b>12.1</b>      | <b>14.0</b>     | <b>15.5</b>      | <b>22.4</b>        | <b>28</b>          |                  |
| Power input             |    | kW C      | 2.82             | 3.47            | 4.25             | 6.67               | 9.34               |                  |
| EER                     |    | W/W       | 4.29             | 4.03            | 3.65             | 3.36               | 3.00               |                  |
| EthasC/SEER             |    | W/W       | 375.8% / 9.47    | 368.6% / 9.29   | 386.6% / 9.74    | 320.6% / 8.09      | 293.0% / 7.40      |                  |
| Running current         |    | A C       | 4.8 / 4.5 / 4.4  | 5.7 / 5.4 / 5.2 | 7.0 / 6.7 / 6.4  | 11.1 / 10.6 / 10.2 | 15.3 / 14.5 / 14.0 |                  |
| <b>Heating capacity</b> |    | <b>kW</b> | <b>12.5</b>      | <b>16.0</b>     | <b>18.0</b>      | <b>22.4</b>        | <b>28.0</b>        |                  |
| Power input             |    | kW H      | 2.57             | 3.72            | 4.27             | 5.20               | 7.00               |                  |
| COP                     |    | W/W       | 4.86             | 4.30            | 4.22             | 4.31               | 4.00               |                  |
| EthasH/SCOP             |    |           | 164.6% / 4.19    | 167.0% / 4.25   | 172.2% / 4.38    | 177.0% / 4.50      | 173.8% / 4.42      |                  |
| Running current         |    | A H       | 4.4 / 4.2 / 4.0  | 6.1 / 5.8 / 5.6 | 7.0 / 6.6 / 6.4  | 8.7 / 8.2 / 7.9    | 11.4 / 10.9 / 10.5 |                  |

**MiNi SMMS-e 3Ph Physical data**

| Outdoor unit                              | HP |            | MCY-MHP0404HS8-E     | MCY-MHP0504HS8-E     | MCY-MHP0604HS8-E     | MCY-MHP0804HS8-E     | MCY-MHP1004HS8-E     |
|---|----|------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Air Flow                                  |    | m³/h - l/s | 5660 - 1572          | 5820 - 1617          | 6050 - 1681          | 8460-2350            | 8820-2450            |
| Sound pressure level                      |    | dB(A) C/H  | 49 / 52              | 50 / 53              | 51 / 54              | 58 / 59              | 59 / 60              |
| Dimensions (HxWxD)                        |    | mm         | 1235 x 990 x 390     | 1235 x 990 x 390     | 1235 x 990 x 390     | 1740 x 990 x 390     | 1740 x 990 x 390     |
| Weight                                    |    | kg         | 125                  | 125                  | 125                  | 147                  | 147                  |
| Compressor type                           |    |            | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                  |    | kg/TCO2eq  | 6.4 / 13.4           | 6.4 / 13.4           | 6.4 / 13.4           | 4.4 / 9.2            | 4.4 / 9.2            |
| Gas line type - diameter                  |    |            | Flare - 5/8"         | Flare - 5/8"         | Flare - 3/4"         | Flare 3/4            | Flare 3/4            |
| Liquid line type - diameter               |    |            | Flare - 3/8"         | Flare - 3/8"         | Flare - 3/8"         | Flare 3/8(*2)        | Flare 3/8(*2)        |
| Discharge line connection type - diameter |    |            |                      |                      |                      |                      |                      |
| Maximum equivalent length separation*     |    | m          | 125                  | 125                  | 125                  | 180                  | 180                  |
| Maximum actual piping separation*         |    | m          | 100                  | 100                  | 100                  | 150                  | 150                  |
| Maximum total pipe length*                |    | m          | 180                  | 180                  | 180                  | 300                  | 300                  |
| Maximum lift (indoor unit above/below)    |    | m          | 20/30                | 20/30                | 20/30                | 30/50                | 30/50                |
| Operating range - db                      |    | °C C       | -5/46                | -5/46                | -5/46                | -5/46                | -5/46                |
| Operating range - wb                      |    | °C H       | -20.0 / 15.0         | -20.0 / 15.0         | -20.0 / 15.0         | -20.0 / 15.0         | -20.0 / 15.0         |
| Power supply                              |    | V-ph-Hz    | 380 / 400 / 415-3-50 | 380 / 400 / 415-3-50 | 380 / 400 / 415-3-50 | 380 / 400 / 415-3-50 | 380 / 400 / 415-3-50 |

\* when PMV Kit is used: Maximum equivalent length separation (80 m); Maximum actual piping separation (65 m); Maximum total pipe length (150 m)  
 \*2 Need to expand to 1/2" under certain condition.  
 C: cooling mode - H: heating mode

MMY-SAP\_HT8P  
**SMMS-E STAND ALONE**



Keep all benefits of Toshiba SMMS-e with 50% less pre-charge refrigerant: new intelligent and innovative features that maximise end user comfort and system efficiencies.

**Excellence**

- Toshiba’s in-house designed DC twin rotary compressor offers outstanding capacity, efficiency and comfort even under part load conditions.
- Incorporating Toshiba’s latest inverter control for compressor precise regulation, maximum performance and energy savings.
- Outstanding 4-side heat exchanger + sub cooling heat exchanger for optimized efficiency
- Precise refrigerant control to ensure that each indoor unit receives exactly the right amount of refrigerant.

**Expansion**

- A wide choice of indoor unit styles and capacity ranges to match customer needs and room configurations.

**Enhancement**

- With up to 235 m in equivalent length, 90 m from the first branch kit to the farthest indoor unit and 70 m height difference, the system is fully adaptable to all project types.

MAX EFFICIENCY



3.81

CAPACITY



8HP > 10HP

OPERATION



-25°C > +46°C

For maximum peace of mind should a compressor failure occur, backup operation is available.

The ALL inverter control can be adjusted to compensate for a failed compressor.

**SMMS-E STAND ALONE Performances**

| Outdoor unit                                | HP        | MMY- | SAP0806HT8P-E<br>8 HP | SAP1006HT8P-E<br>10 HP |
|---|-----------|------|-----------------------|------------------------|
| <b>Cooling capacity<sup>1</sup></b>         | <b>kW</b> |      | <b>22.4</b>           | <b>28.0</b>            |
| Power input                                 | kW        | C    | 5.54                  | 7.69                   |
| EER   | W/W       |      | 4.04                  | 3.64                   |
| EthasC/SEER                                 |           |      | 249.8% / 6.32         | 244.2% / 6.18          |
| Running current                             | A         | C    | 8.8                   | 12.4                   |
| <b>Heating capacity<sup>1</sup></b>         | <b>kW</b> |      | <b>25.0</b>           | <b>31.5</b>            |
| Power input                                 | kW        | H    | 5.43                  | 7.41                   |
| COP   | W/W       |      | 4.52                  | 4.25                   |
| EthasH/SCOP                                 |           |      | 148.6% / 3.79         | 149.4% / 3.81          |
| Running current                             | A         | H    | 8.77                  | 11.6                   |
| Maximum overcurrent protection <sup>3</sup> | A         |      | 25                    | 25                     |

**SMMS-E STAND ALONE Physical data**

| Outdoor unit  | HP                     | MMY- | SAP0806HT8P-E        | SAP1006HT8P-E        |
|---|------------------------|------|----------------------|----------------------|
| Air Flow  | m <sup>3</sup> /h      |      | 9700                 | 9700                 |
| Air Flow  | l/s                    |      | 2694                 | 2694                 |
| Sound Power Level                                     | dB(A)                  | H    | 74                   | 74                   |
| Sound pressure level                                  | dB(A)                  | H    | 56                   | 58                   |
| Sound Power Level                                     | dB(A)                  | C    | 74                   | 74                   |
| Sound pressure level                                  | dB(A)                  | C    | 55                   | 57                   |
| External Static pressure available                    | Pa                     |      | 60                   | 60                   |
| Dimensions (h x w x d)                                | mm                     |      | 1830 x 990 x 780     | 1830 x 990 x 780     |
| Weight  | kg                     | HP   | 227                  | 227                  |
| Compressor type                                       |                        |      | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                              | kg/TCO <sub>2</sub> eq |      | 5.7 / 11.9           | 5.7 / 11.9           |
| Gas line type - diameter                              |                        |      | Brazed - 3/4"        | Brazed - 7/8"        |
| Liquid line type - diameter                           |                        |      | Flare - 1/2"         | Flare - 1/2"         |
| Farthest piping equivalent length                     | m                      |      | 235                  | 235                  |
| Farthest piping actual length                         | m                      |      | 190                  | 190                  |
| Maximum pipe length <sup>4</sup>                      | m                      |      | 300                  | 300                  |
| Maximum lift (indoor unit above/below) <sup>5,2</sup> | m                      |      | 40 / 70              | 40 / 70              |
| Operating range - db <sup>3,4</sup>                   | °C                     | C    | -10 / 46             | -10 / 46             |
| Operating range - wb <sup>7,5,6</sup>                 | °C                     | H    | -25 / 15.5           | -25 / 15.5           |
| Power supply  | V-ph-Hz                |      | 380 / 415-3-50       | 380 / 415-3-50       |

1) Rated conditions  
Cooling : Indoor 27 degC Dry Bulb /19 degC Wet Bulb , Outdoor 35 degC Dry Bulb. Heating : Indoor 20 degC Dry Bulb, Outdoor 7 degC Dry Bulb / 6 degC WetBulb. Based on equivalent piping length of 7.5m and piping height difference of 0m. 2) Indoor above condition:If the height difference between indoor units exceeds 3 m, set 30 m or less. Indoor below condition: If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 3) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/surroundings and system design when expected to operate below -5°C. 4) Low ambient cooling (-5 deg C or less) is limited to application. 5) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C. 6) Low ambient heating (-20degC or less) for extended periods of time is not allowed.  
C: cooling mode - H: heating mode

MMY-MUP\_1HT8P  
SMMS-u



SMMS-u, the latest generation of Toshiba VRF engineered in Japan, integrates a totally new redesigned chassis, a new compressor and a new heat exchanger to achieve unrivalled efficiency, outstanding comfort level and low environmental footprint.

**Unrivalled**

- Space efficient chassis design to ease product integration with no compromise on efficiency.
- Exclusive Toshiba Triple rotary compressor offering high capacity, outstanding performances with less refrigerant.
- Super efficient heat exchanger covering full product height to maximize energy exchange.
- Intelligent VRF control ensures exact quantity of refrigerant to be delivered to the indoor units to avoid waste of energy.
- KO-BE-TSU and Renkey new defrost solution for constant comfort level.

**Universal**

- Up to 24HP in single module and max 120HP in combination, enter into a new dimension!
- Up to 1,200m piping length max to cover the full building without splitting systems.
- Less constraints with 128 indoor units maximum per system.
- -25 to +52°C operating range to cover all climates over Europe.

**Usability**

- Ease commissioning and maintenance with direct USB connection, Wave Tool advance and Link adaptor.
- Trust into the new TU2C link protocol offering faster and stronger data transfer.

SCOP MAX



4.79

CAPACITY



8HP > 24HP

OPERATION



-25°C > +52°C

The exclusive Toshiba triple rotary compressor brings outstanding performances to the SMMS-u with no compromise on system reliability.



Triple rotary compressor

**SMMS-u Physical data**

| Outdoor unit  |                   | MMY- MUP0801HT8P-E   | MUP1001HT8P-E        | MUP1201HT8P-E        | MUP1401HT8P-E        | MUP1601HT8P-E          | MUP1801HT8P-E          | MUP2001HT8P-E          | MUP2201HT8P-E        | MUP2401HT8P-E        |
|---|-------------------|----------------------|----------------------|----------------------|----------------------|------------------------|------------------------|------------------------|----------------------|----------------------|
| Air Flow  | m <sup>3</sup> /h | 9900                 | 10500                | 11700                | 11880                | 15300                  | 16800                  | 15900                  | 16500                | 16500                |
| Sound Power Level                                   | dB(A) C           | 75                   | 77                   | 79                   | 79                   | 83                     | 84                     | 86                     | 86                   | 86                   |
| Sound pressure level                                | dB(A) C           | 53                   | 55                   | 58                   | 58                   | 60                     | 61                     | 63                     | 63                   | 63                   |
| Sound Power Level                                   | dB(A) H           | 76                   | 77                   | 81                   | 82                   | 86                     | 89                     | 90                     | 90                   | 90                   |
| Sound pressure level                                | dB(A) H           | 56                   | 58                   | 62                   | 62                   | 63                     | 67                     | 67                     | 67                   | 67                   |
| External Static pressure available                  | Pa                | 80                   | 80                   | 80                   | 80                   | 80                     | 80                     | 80                     | 80                   | 80                   |
| Dimensions (h x w x d)                              | mm                | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 1290 x 780      | 1690 x 1290 x 780      | 1690 x 1290 x 780      | 1690 x 1290 x 780    | 1690 x 1290 x 780    |
| Weight  | kg                | 228                  | 228                  | 228                  | 228                  | 312                    | 312                    | 334                    | 356                  | 356                  |
| Compressor type                                     |                   | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Triple Rotary | Hermetic Triple Rotary | Hermetic Triple Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                            | kg                | 6.0                  | 6.0                  | 6.0                  | 6.0                  | 9.0                    | 9.0                    | 9.0                    | 9.0                  | 9.0                  |
|   | TCO2eq            | 12.5                 | 12.5                 | 12.5                 | 12.5                 | 18.8                   | 18.8                   | 18.8                   | 18.8                 | 18.8                 |
| Gas line type - diameter                            |                   | Brazed - 3/4"        | Brazed - 7/8"        | Brazed - 1 1/8"      | Brazed - 1 1/8"      | Brazed - 1 1/8"        | Brazed - 1 1/8"        | Brazed - 1 1/8"        | Brazed - 1 1/8"      | Brazed - 1 3/8"      |
| Liquid line type - diameter                         |                   | Brazed - 1/2"        | Brazed - 1/2"        | Brazed - 1/2"        | Brazed - 5/8"        | Brazed - 5/8"          | Brazed - 5/8"          | Brazed - 5/8"          | Brazed - 3/4"        | Brazed - 3/4"        |
| Farthest piping equivalent length                   | m                 | 250                  | 250                  | 250                  | 250                  | 250                    | 250                    | 250                    | 250                  | 250                  |
| Farthest piping actual length                       | m                 | 210                  | 210                  | 210                  | 210                  | 210                    | 210                    | 210                    | 210                  | 210                  |
| Maximum pipe length <sup>3</sup>                    | m                 | 500                  | 500                  | 500                  | 500                  | 500                    | 500                    | 500                    | 500                  | 500                  |
| Maximum lift (Indoor unit above/below) <sup>4</sup> | m                 | 70/40                | 70/40                | 70/40                | 70/40                | 70/40                  | 70/40                  | 70/40                  | 70/40                | 70/40                |
| Operating range - db <sup>5,6</sup>                 | °C C              | -10/52               | -10/52               | -10/52               | -10/52               | -10/52                 | -10/52                 | -10/52                 | -10/52               | -10/52               |
| Operating range - wb <sup>7,8</sup>                 | °C H              | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5               | -25/15.5               | -25/15.5               | -25/15.5             | -25/15.5             |
| Power supply  | V-ph-Hz           | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50           | 380/415-3-50           | 380/415-3-50           | 380/415-3-50         | 380/415-3-50         |

Models for Turkey : MMY-MUP\_1HT8P-TR

SMMS-u

SMMS-u Performances

| Outdoor unit                                 |      | MMY-MUP0801HT8P-E | MUP1001HT8P-E | MUP1201HT8P-E | MUP1401HT8P-E | MUP1601HT8P-E | MUP1801HT8P-E | MUP2001HT8P-E | MUP2201HT8P-E | MUP2401HT8P-E |
|--|------|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|  |      | 8 HP              | 10 HP         | 12 HP         | 14 HP         | 16 HP         | 18 HP         | 20 HP         | 22 HP         | 24HP          |
| Cooling capacity <sup>1)</sup>               | kW   | 22.40             | 28.00         | 33.50         | 40.00         | 45.00         | 50.40         | 56.00         | 61.50         | 67.00         |
| Power input                                  | kW C | 5.64              | 8.36          | 10.34         | 14.55         | 14.06         | 15.90         | 18.01         | 20.43         | 24.19         |
| EER  | W/W  | 3.97              | 3.35          | 3.24          | 2.75          | 3.20          | 3.17          | 3.11          | 3.01          | 2.77          |
| EthasC/SEER                                  | W/W  | 294.6%/7.44       | 306.2%/7.73   | 289.8%/7.32   | 279.0%/7.05   | 305.4%/7.71   | 304.2%/7.68   | 301.8%/7.62   | 286.2%/7.23   | 271.8%/6.87   |
| Running current                              | A C  | 9.15              | 13.40         | 16.00         | 22.60         | 21.60         | 24.40         | 27.70         | 31.40         | 37.10         |
| Heating capacity rated/max                   | kW   | 22.4/25           | 28/31.5       | 33.5/37.5     | 40/45         | 45/50         | 50.4/56       | 56/63         | 61.5/69       | 67/70         |
| Power input (rated)                          | kW H | 5.28              | 7.20          | 7.77          | 10.00         | 11.94         | 12.54         | 14.93         | 16.18         | 18.98         |
| COP  | W/W  | 4.24              | 3.89          | 4.31          | 4.00          | 3.77          | 4.02          | 3.75          | 3.80          | 3.53          |
| Ethash/SCOP                                  |      | 177.0%/4.5        | 188.2%/4.78   | 187.0%/4.75   | 181.0%/4.6    | 188.6%/4.79   | 187.0%/4.75   | 174.2%/4.43   | 174.6%/4.44   | 163.8%/4.17   |
| Running current                              | A H  | 8.56              | 11.50         | 12.10         | 15.50         | 18.30         | 19.30         | 22.90         | 24.80         | 29.10         |
| Maximum overcurrent protection <sup>2)</sup> | A    | 20.00             | 32.00         | 32.00         | 40            | 40            | 50            | 50.00         | 63            | 80.00         |

1) Rated conditions : Cooling : Indoor 27 degC Dry Bulb /19 degC Wet Bulb , Outdoor 35 degC Dry Bulb. Heating : Indoor 20 degC Dry Bulb, Outdoor 7 degC Dry Bulb / 6 degC WetBulb. Based on equivalent piping length of 7.5m and piping height difference of 0m. 2) If outdoor units are combined, refer to the installation manual. 3) Multiple outdoor systems : 1200m. Total charging refrigerant is 140kg or less. 4) Indoor above/below condition: If the height difference between indoor units exceeds 3 m, set 30 m. Also extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 5) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C. Consider installation location/ surroundings and system design when expected to operate below -5°C. On single outdoor unit only. No height difference between units. 6) Low ambient cooling (-5 deg C or less) is limited to application. 7) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C. 8) Low ambient heating (-20degC or less) for extended periods of time is not allowed. C = cooling mode. H = heating mode

SMMS-u Capacity table - Standard model

| HP  | Capacity              |  | Combination            | Modèle               | EER/SEER  | COP/SCOP  | Max indoor connectivity |
|-----|-----------------------|--|------------------------|----------------------|-----------|-----------|-------------------------|
|     | Cooling/Heating in kW |  |                        |                      |           |           |                         |
| 8   | 22.4/22.4             |  | 8                      | MMY-MUP0801HT8P-E/TR | 3.97/7.44 | 4.24/4.5  | 18                      |
| 10  | 28/28                 |  | 10                     | MMY-MUP1001HT8P-E/TR | 3.35/7.73 | 3.89/4.78 | 22                      |
| 12  | 33.5/33.5             |  | 12                     | MMY-MUP1201HT8P-E/TR | 3.24/7.32 | 4.31/4.75 | 27                      |
| 14  | 40/40                 |  | 14                     | MMY-MUP1401HT8P-E/TR | 2.75/7.05 | 4/4.6     | 31                      |
| 16  | 45/45                 |  | 16                     | MMY-MUP1601HT8P-E/TR | 3.2/7.71  | 3.77/4.79 | 36                      |
| 18  | 50.4/40.5             |  | 18                     | MMY-MUP1801HT8P-E/TR | 3.17/7.68 | 4.02/4.75 | 40                      |
| 20  | 56/56                 |  | 20                     | MMY-MUP2001HT8P-E/TR | 3.11/7.62 | 3.75/4.43 | 45                      |
| 22  | 61.5/61.5             |  | 22                     | MMY-MUP2201HT8P-E/TR | 3.01/7.23 | 3.8/4.44  | 49                      |
| 24  | 67/67                 |  | 24                     | MMY-MUP2401HT8P-E/TR | 2.77/6.87 | 3.53/4.17 | 52                      |
| 26  | 73.5/73.5             |  | 14 + 12                | MMY-UP2611HT8P-E/TR  | 2.95/4.17 | 4.14/4.67 | 58                      |
| 28  | 80/80                 |  | 14 + 14                | MMY-UP2811HT8P-E/TR  | 2.75/7.05 | 4/4.6     | 63                      |
| 30  | 83.9/83.9             |  | 18 + 12                | MMY-UP3011HT8P-E/TR  | 3.2/7.52  | 4.13/4.75 | 64                      |
| 32  | 89.5/89.5             |  | 20 + 12                | MMY-UP3211HT8P-E/TR  | 3.16/7.5  | 3.94/4.55 | 65                      |
| 34  | 96/96                 |  | 20 + 14                | MMY-UP3411HT8P-E/TR  | 2.95/7.35 | 3.85/4.5  | 66                      |
| 36  | 100.5/100.5           |  | 24 + 12                | MMY-UP3611HT8P-E/TR  | 2.91/7.01 | 3.76/4.38 | 67                      |
| 38  | 107/107               |  | 24 + 14                | MMY-UP3811HT8P-E/TR  | 2.76/6.93 | 3.69/4.33 | 68                      |
| 40  | 112/112               |  | 20 + 20                | MMY-UP4011HT8P-E/TR  | 3.11/7.62 | 3.75/4.43 | 69                      |
| 42  | 117.4/117.4           |  | 24 + 18                | MMY-UP4211HT8P-E/TR  | 2.93/7.22 | 3.72/4.43 | 70                      |
| 44  | 123/123               |  | 24 + 20                | MMY-UP4411HT8P-E/TR  | 2.91/7.21 | 3.63/4.3  | 71                      |
| 46  | 128.5/128.5           |  | 24 + 22                | MMY-UP4611HT8P-E/TR  | 2.88/7.04 | 3.65/4.31 | 72                      |
| 48  | 134/134               |  | 24 + 24                | MMY-UP4811HT8P-E/TR  | 2.77/6.87 | 3.53/4.17 | 73                      |
| 50  | 140.5/140.5           |  | 24 + 14 + 12           | MMY-UP5011HT8P-E/TR  | 2.86/7.02 | 3.82/4.44 | 74                      |
| 52  | 147/147               |  | 24 + 14 + 14           | MMY-UP5211HT8P-E/TR  | 2.76/6.96 | 3.77/4.41 | 75                      |
| 54  | 152/152               |  | 20 + 20 + 14           | MMY-UP5411HT8P-E/TR  | 3.01/7.49 | 3.81/4.47 | 76                      |
| 56  | 156.5/156.5           |  | 24 + 20 + 12           | MMY-UP5611HT8P-E/TR  | 2.98/7.23 | 3.75/4.41 | 77                      |
| 58  | 163/163               |  | 24 + 20 + 14           | MMY-UP5811HT8P-E/TR  | 2.87/7.19 | 3.71/4.37 | 78                      |
| 60  | 167.5/167.5           |  | 24 + 24 + 12           | MMY-UP6011HT8P-E/TR  | 2.85/6.95 | 3.66/4.3  | 79                      |
| 62  | 174/174               |  | 24 + 24 + 14           | MMY-UP6211HT8P-E/TR  | 2.76/6.92 | 3.63/4.27 | 80                      |
| 64  | 179/179               |  | 24 + 20 + 20           | MMY-UP6411HT8P-E/TR  | 2.97/7.34 | 3.67/4.34 | 81                      |
| 66  | 184.5/184.5           |  | 24 + 22 + 20           | MMY-UP6611HT8P-E/TR  | 2.95/7.21 | 3.68/4.35 | 82                      |
| 68  | 190/190               |  | 24 + 24 + 20           | MMY-UP6811HT8P-E/TR  | 2.86/7.09 | 3.59/4.26 | 83                      |
| 70  | 195.5/195.5           |  | 24 + 24 + 22           | MMY-UP7011HT8P-E/TR  | 2.84/6.98 | 3.61/4.26 | 84                      |
| 72  | 201/201               |  | 24 + 24 + 24           | MMY-UP7211HT8P-E/TR  | 2.77/6.87 | 3.53/4.17 | 85                      |
| 74  | 207.5/207.5           |  | 24 + 24 + 14 + 12      | MMY-UP7411HT8P-E/TR  | 2.83/6.97 | 3.72/4.36 | 86                      |
| 76  | 214/214               |  | 24 + 24 + 14 + 14      | MMY-UP7611HT8P-E/TR  | 2.76/6.93 | 3.69/4.33 | 87                      |
| 78  | 219/219               |  | 24 + 20 + 20 + 14      | MMY-UP7811HT8P-E/TR  | 2.93/7.3  | 3.72/4.39 | 88                      |
| 80  | 223.5/223.5           |  | 24 + 24 + 20 + 12      | MMY-UP8011HT8P-E/TR  | 2.91/7.14 | 3.68/4.34 | 90                      |
| 82  | 230/230               |  | 24 + 24 + 20 + 14      | MMY-UP8211HT8P-E/TR  | 2.84/7.1  | 3.66/4.32 | 92                      |
| 84  | 234.5/234.5           |  | 24 + 24 + 24 + 12      | MMY-UP8411HT8P-E/TR  | 2.83/6.95 | 3.62/4.26 | 94                      |
| 86  | 241/241               |  | 24 + 24 + 24 + 14      | MMY-UP8611HT8P-E/TR  | 2.77/6.91 | 3.6/4.25  | 96                      |
| 88  | 246/246               |  | 24 + 24 + 20 + 20      | MMY-UP8811HT8P-E/TR  | 2.91/7.21 | 3.63/4.3  | 98                      |
| 90  | 251.5/251.5           |  | 24 + 24 + 22 + 20      | MMY-UP9011HT8P-E/TR  | 2.97/7.12 | 3.64/4.3  | 100                     |
| 92  | 257/257               |  | 24 + 24 + 24 + 20      | MMY-UP9211HT8P-E/TR  | 2.84/7.03 | 3.58/4.24 | 102                     |
| 94  | 262.5/262.5           |  | 24 + 24 + 24 + 22      | MMY-UP9411HT8P-E/TR  | 2.82/6.95 | 3.59/4.24 | 104                     |
| 96  | 268/268               |  | 24 + 24 + 24 + 24      | MMY-UP9611HT8P-E/TR  | 2.77/6.87 | 3.53/4.17 | 106                     |
| 98  | 274.5/274.5           |  | 24 + 24 + 24 + 14 + 12 | MMY-UP9811HT8P-E/TR  | 2.82/6.95 | 3.67/4.31 | 108                     |
| 100 | 281/281               |  | 24 + 24 + 24 + 14 + 14 | MMY-UP10011HT8P-E/TR | 2.76/6.94 | 3.65/4.3  | 110                     |
| 102 | 286/286               |  | 24 + 24 + 20 + 20 + 14 | MMY-UP10211HT8P-E/TR | 2.89/7.2  | 3.68/4.34 | 112                     |
| 104 | 290.5/290.5           |  | 24 + 24 + 24 + 20 + 12 | MMY-UP10411HT8P-E/TR | 2.88/7.08 | 3.65/4.3  | 114                     |
| 106 | 297/297               |  | 24 + 24 + 24 + 20 + 14 | MMY-UP10611HT8P-E/TR | 2.83/7.04 | 3.63/4.29 | 116                     |
| 108 | 301.5/301.5           |  | 24 + 24 + 24 + 24 + 12 | MMY-UP10811HT8P-E/TR | 2.82/6.93 | 3.6/4.24  | 118                     |
| 110 | 308/308               |  | 24 + 24 + 24 + 24 + 14 | MMY-UP11011HT8P-E/TR | 2.77/6.9  | 3.58/4.23 | 120                     |
| 112 | 313/313               |  | 24 + 24 + 24 + 20 + 20 | MMY-UP11211HT8P-E/TR | 2.88/7.13 | 3.61/4.28 | 122                     |
| 114 | 318.5/318.5           |  | 24 + 24 + 24 + 22 + 20 | MMY-UP11411HT8P-E/TR | 2.87/7.07 | 3.62/4.28 | 124                     |
| 116 | 324/324               |  | 24 + 24 + 24 + 24 + 20 | MMY-UP11611HT8P-E/TR | 2.82/7    | 3.57/4.22 | 126                     |
| 118 | 329.5/329.5           |  | 24 + 24 + 24 + 24 + 22 | MMY-UP11811HT8P-E/TR | 2.81/6.93 | 3.58/4.23 | 128                     |
| 120 | 335/335               |  | 24 + 24 + 24 + 24 + 24 | MMY-UP12011HT8P-E/TR | 2.77/6.87 | 3.53/4.17 | 128                     |

Models for Turkey : MMY-MUP\_1HT8P-TR

MMY-SUG\_1FT8P  
**SHRM Advance**



**> NEW**



Using the same chassis as of SMMS-u, SHRM Advance is the latest generation of Toshiba VRF. It pushes the boundaries of VRF system featuring low environmental profile, wide flexibility and top-class efficiency as always.

**Advanced concept**

- Anticipate the future and move your projects to low GWP refrigerant VRF systems.
- Make your life easier with Toshiba's VRF packaged solutions!

One product two possibilities:

- 2-pipe heating or cooling.
- 3-pipe heating & cooling with heat recovery.

**Advanced specification**

- Up to 24HP in a single module, never experienced before with R32 refrigerant!
- Up to 54 indoor units per system for maximum flexibility.
- Up to 12 output flow selectors opening new piping design perspectives.
- Low footprint chassis that gives the possibility to install the outdoor unit either on the roof, on the ground or inside the building (80PA available pressure).

**Advanced features**

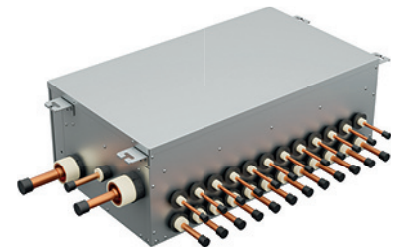
- Super efficient heat exchanger covering full product height to maximize energy exchange.
- Intelligent VRF control ensuring exact quantity of refrigerant to be delivered to the indoor units to avoid waste of energy.
- KO-BE-TSU and Renkey new defrost solution for constant comfort level.

**Advanced service**

- Easy commissioning and maintenance with direct USB connection, Wave Tool advance and Link adaptor.
- Trust the TU2C link protocol that offers faster and stronger data transfers.

|             |                      |                         |
|-------------|----------------------|-------------------------|
| SCOP MAX    | CAPACITY             | OPERATION               |
|             |                      |                         |
| <b>4.67</b> | <b>8HP &gt; 24HP</b> | <b>-25°C &gt; +52°C</b> |

Increased integration flexibility with the new generation of flow selectors 1, 4, 8 or 12 outputs, with embedded shut-off valves.



**SHRM Advance Performances**

**PRELIMINARY DATA**

| Outdoor unit                                | MMY- | SUG0801MT8P-E | SUG1001MT8P-E | SUG1201MT8P-E | SUG1401MT8P-E | SUG1601MT8P-E | SUG1801MT8P-E | SUG2001MT8P-E | SUG2201MT8P-E | SUG2401MT8P-E |
|---|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
|   |      | 8 HP          | 10 HP         | 12 HP         | 14 HP         | 16 HP         | 18 HP         | 20 HP         | 22 HP         | 24HP          |
| <b>Cooling capacity<sup>1</sup></b>         | kW   | <b>22.4</b>   | <b>28.0</b>   | <b>33.5</b>   | <b>40.0</b>   | <b>45.0</b>   | <b>50.4</b>   | <b>56.0</b>   | <b>61.5</b>   | <b>67.0</b>   |
| Power input                                 | kW C | 5.13          | 6.83          | 8.88          | 12.0          | 12.2          | 14.8          | 15.5          | 18.2          | 24.3          |
| EER   | W/W  | 4.37          | 4.10          | 3.77          | 3.32          | 3.70          | 3.41          | 3.62          | 3.38          | 2.76          |
| EthasC/SEER                                 | W/W  | 353.0%/8.90   | 344.6%/8.69   | 326.2%/8.23   | 320.2%/8.08   | 342.6%/8.64   | 329.8%/8.32   | 328.6%/8.29   | 312.2%/7.88   | 263.4%/6.66   |
| Running current                             | A C  | 9.14          | 11.5          | 14.2          | 18.9          | 21.1          | 24.8          | 25.4          | 29.2          | 38.1          |
| <b>Heating capacity rated/max</b>           | kW   | <b>22.4</b>   | <b>28.0</b>   | <b>33.5</b>   | <b>40.0</b>   | <b>45.0</b>   | <b>50.4</b>   | <b>56.0</b>   | <b>61.5</b>   | <b>67.0</b>   |
| Power input (rated)                         | kW H | 4.96          | 6.22          | 7.64          | 10.3          | 11.1          | 14.0          | 14.3          | 16.1          | 19.5          |
| COP   | W/W  | 4.52          | 4.50          | 4.38          | 3.89          | 4.07          | 3.60          | 3.93          | 3.82          | 3.44          |
| EthasH/SCOP                                 |      | 174.6%/4.44   | 183.8%/4.67   | 181.8%/4.62   | 169%/4.30     | 183%/4.65     | 176.6%/4.49   | 168.6%/4.29   | 167.4%/4.26   | 158.6%/4.04   |
| Running current                             | A H  | 8.95          | 10.6          | 12.5          | 16.3          | 19.9          | 23.8          | 23.6          | 26.1          | 30.9          |
| Maximum overcurrent protection <sup>2</sup> | A    | 20            | 32            | 32            | 40            | 40            | 50            | 50            | 63            | 80            |

## SHRM Advance

### SHRM Advance Physical data

| Outdoor unit   | MMY-              | SUG0801MT8P-E        | SUG1001MT8P-E        | SUG1201MT8P-E        | SUG1401MT8P-E        | SUG1601MT8P-E        | SUG1801MT8P-E        | SUG2001MT8P-E        | SUG2201MT8P-E        | SUG2401MT8P-E        |
|--|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Air flow   | m <sup>3</sup> /h | 9900                 | 10500                | 11700                | 11880                | 15300                | 16800                | 15900                | 16500                | 16800                |
| Sound Power Level  | dB(A) H           | 77.0                 | 78.0                 | 82.0                 | 84.0                 | 87.0                 | 89.0                 | 89.0                 | 90.0                 | 90.0                 |
| Sound pressure level   | dB(A) H           | 56.0                 | 58.0                 | 62.0                 | 63.0                 | 64.0                 | 67.0                 | 67.0                 | 67.0                 | 69.0                 |
| Sound Power Level  | dB(A) C           | 74.0                 | 75.0                 | 79.0                 | 79.0                 | 83.0                 | 84.0                 | 85.0                 | 86.0                 | 86.0                 |
| Sound pressure level   | dB(A) C           | 53.0                 | 55.0                 | 58.0                 | 58.0                 | 60.0                 | 61.0                 | 63.0                 | 64.0                 | 64.0                 |
| External Static pressure available                             | Pa                | 80.0                 | 80.0                 | 80.0                 | 80.0                 | 80.0                 | 80.0                 | 80.0                 | 80.0                 | 80.0                 |
| Dimensions (h x w x d)   | mm                | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 990 x 780     | 1690 x 1290 x 780    | 1690 x 1290 x 780    | 1690 x 1290 x 780    | 1690 x 1290 x 780    | 1690 x 1290 x 780    |
| Weight   | kg                | 232                  | 232                  | 232                  | 232                  | 329                  | 329                  | 361                  | 361                  | 361                  |
| Compressor type  |                   | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R32   | kg                | 6.0                  | 6.0                  | 6.0                  | 6.0                  | 9.0                  | 9.0                  | 9.0                  | 9.0                  | 9.0                  |
|  | TCO2eq            | 4.1                  | 4.1                  | 4.1                  | 4.1                  | 6.1                  | 6.1                  | 6.1                  | 6.1                  | 6.1                  |
| Gas line type - diameter for 2-pipe                            | φ                 | 19.1                 | 22.2                 | 22.2                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 |
| Liquid line type - diameter for 2-pipe                         | φ                 | 12.7                 | 12.7                 | 12.7                 | 12.7                 | 15.9                 | 15.9                 | 15.9                 | 15.9                 | 15.9                 |
| Suction line type - Diameter for 3-pipe                        | φ                 | 19.1                 | 22.2                 | 22.2                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 | 28.6                 |
| LP/HP gas line type - Diameter for 3-pipe                      | φ                 | 15.9                 | 19.1                 | 19.1                 | 19.1                 | 22.2                 | 22.2                 | 22.2                 | 22.2                 | 22.2                 |
| Liquid line type - diameter for 3-pipe                         | φ                 | 12.7                 | 12.7                 | 12.7                 | 12.7                 | 15.9                 | 15.9                 | 15.9                 | 15.9                 | 15.9                 |
| Farthest piping equivalent length for 2-pipe                   | m                 | 215                  | 215                  | 215                  | 215                  | 215                  | 215                  | 215                  | 215                  | 215                  |
| Farthest piping actual length for 2-pipe                       | m                 | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  |
| Farthest piping equivalent length for 3-pipe                   | m                 | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  | 190                  |
| Farthest piping actual length for 3-pipe                       | m                 | 165                  | 165                  | 165                  | 165                  | 165                  | 165                  | 165                  | 165                  | 165                  |
| Maximum pipe length <sup>2</sup>                               | m                 | 500                  | 500                  | 500                  | 500                  | 500                  | 500                  | 500                  | 500                  | 500                  |
| Maximum lift for 3-pipe (indoor unit above/below) <sup>3</sup> | m                 | 40/90                | 40/90                | 40/90                | 40/90                | 40/90                | 40/90                | 40/90                | 40/90                | 40/90                |
| Operating range - db <sup>4,5</sup>                            | °C C              | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            | -15 to 50            |
| Operating range - wb <sup>6,7</sup>                            | °C H              | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          | -25 to 15.5          |
| Power supply   | V-ph-Hz           | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         |

1) Rated conditions

Cooling : Indoor 27 degC Dry Bulb /19 degC Wet Bulb . Outdoor 35 degC Dry Bulb. Heating : Indoor 20 degC Dry Bulb. Outdoor 7 degC Dry Bulb / 6 degC WetBulb. Based on equivalent piping length of 7.5m and piping height difference of 0m.

2) The total amount of system refrigerant should be 63.8kg or less.

3) Indoor below condition:

If the height difference between indoor units exceeds 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements.

4) The unit operates down to an outdoor temperature of -10°C, however cooling performance may decline considerably when total operating capacity of indoor units is less than 4HP while ambient temperature is below -5°C.

Consider installation location/surroundings and system design when expected to operate below -5°C. On single outdoor unit only.

No height difference between units.



5) Low ambient cooling (-5 deg C or less) is limited to application.

6) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.

7) Low ambient heating (-20degC or less) for extended periods of time is not allowed


### SHRM Advance FS Boxes

### PRELIMINARY DATA

| Model name     | Specification                 | Picture   | Number of outputs | Max piping length FSBox/IDU | Max nb of IDUs per port | Max capacity per port | Dimensions (h*1*d) | Weight | Power supply | Comment                 |
|----------------|-------------------------------|---|-------------------|-----------------------------|-------------------------|-----------------------|--------------------|--------|--------------|-------------------------|
| RBM-Y1121FUPE  | Single port flow selector box |  | 1                 | 50m                         | 5                       | <4HP                  | 206 x 385 x 282    | 11     | Separate     |                         |
| RBM-Y1801FUPE  |                               |   | 1                 | 50m                         | 10                      | 4HP≤ P <6.4HP         |                    | 11     | Separate     |                         |
| RBM-Y2801FUPE  |                               |   | 1                 | 50m                         | 10                      | 6.4HP≤ P <10HP        |                    | 11     | Separate     |                         |
| RBM-Y1801FU4PE | Multi port flow selector box  |  | 4                 | 50m                         | 10                      | <6.4HP                | 293 x 338 x 468    | 22     | Separate     | Embedded shut off valve |
| RBM-Y1801FU8PE |                               |   | 8                 | 50m                         | 10                      | <6.4HP                | 293 x 578 x 468    | 36     | Separate     |                         |
| RBM-Y1801F12PE |                               |   | 12                | 50m                         | 10                      | <6.4HP                | 293 x 818 x 468    | 50     | Separate     |                         |

### SHRM Advance Shut of valve box

### PRELIMINARY DATA

| Model name     | Specification     | Picture   | Number of outputs | Max capacity per port | Dimensions (h*1*d) | Weight | Power supply | Comment                            |
|----------------|-------------------|---|-------------------|-----------------------|--------------------|--------|--------------|------------------------------------|
| RBM-SV1121HUPE | Shut of valve kit |  | 1                 | <4HP                  | 206 x 385 x 282    | 10     | Separate     | Dedicated for 2 pipes applications |
| RBM-SV1801HUPE |                   |   | 1                 | 4HP≤ P <6.4HP         | 206 x 385 x 282    | 10     | Separate     |                                    |
| RBM-SV6701HUPE |                   |   | 1                 | 6.4HP≤ P <32.4HP      | 216 x 385 x 282    | 12     | Separate     |                                    |


### SHRM Advance Leak detection

### PRELIMINARY DATA

| Model name | Specification | Picture   | Dimensions (h*1*d) | Weight | Power supply          | Comment     |
|------------|---------------|---|--------------------|--------|-----------------------|-------------|
| TCB-LD1UPE | Leak sensor   |  | 86 x 86 x 25       | 80g    | Powered by the remote | For R32 VRF |

### SHRM Advance Other accessories

### PRELIMINARY DATA

| Model name | Specification                                   | Picture   | Dimensions (h*1*d) | Weight | Power supply                               | Comment                         |
|------------|---|---|--------------------|--------|--|---------------------------------|
| TCB-BT1UPE | Battery kit fro flow selector and shuf of valve |  | 51 x 176 x 72      | 0.7kg  | Using Fsbox/Shut of valve box power supply | For FS Boxes and shut of valves |

MMY-MAP\_FT8P  
**SHRM-e**



The SHRM-e, full Inverter heat recovery 3-pipe VRF, is the ultimate simultaneous heating & cooling solution for business applications.

**Excellence**

- Toshiba’s in-house designed DC twin rotary compressor with outstanding capacity under partial load driven to improve efficiency and comfort.
- Incorporating Toshiba’s latest inverter control, enables the precise modulation of the compressor, ensuring maximum performance and energy savings.
- 2 heat exchangers: outstanding 4-side heat exchanger + sub cooling heat exchanger to optimized efficiency.
- Precise refrigerant control ensures each indoor unit receives the right amount of refrigerant.

**Expansion**

- A complete range of indoor unit styles and capacity ranges, meets the demands of the customer and the room configuration.
- 7 outdoor unit model line-up from 8 to 20HP that can be installed in a variety of combinations, of up to a capacity of 54HP.

**Enhancement**

- With up to 1km of total pipe work, an equivalent piping length of 200m, and a maximum height separation of up to 70m, results in a system that is fully adaptable for all types of projects.
- Revolutionary hands-free Wave Tool technology that allows contactless commissioning and diagnoses to be carried out using a smartphone application.

SCOP MAX

**3.71**

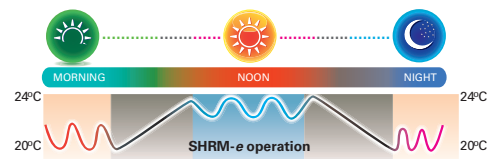
CAPACITY

**8HP > 54HP**

OPERATION

**-25°C > +46°C**

The Dual Set Point increases the system’s energy efficiency and reduces overall running costs, with longer periods of time in thermal off mode. Heating and cooling unit temperatures at which the indoor unit will begin to operate can now be individually selected giving maximum flexibility to the user.



**SHRM-e Performances**

| Outdoor unit                                | HP  | MMY- | MAP0806FT8P-E/TR | MAP1006FT8P-E/TR | MAP1206FT8P-E/TR | MAP1406FT8P-E/TR | MAP1606FT8P-E/TR | MAP1806FT8P-E/TR | MAP2006FT8P-E/TR |
|---|-----|------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
|   |     |      | 8 HP             | 10 HP            | 12 HP            | 14 HP            | 16 HP            | 18 HP            | 20 HP            |
| Cooling capacity <sup>1</sup>               | kW  |      | <b>22.4</b>      | <b>28.0</b>      | <b>33.5</b>      | <b>40.0</b>      | <b>45.0</b>      | <b>50.4</b>      | <b>56.0</b>      |
| Power input                                 | kW  | C    | 5.95             | 7.96             | 9.75             | 12.70            | 13.90            | 16.00            | 18.60            |
| EER   | W/W |      | 3.76             | 3.51             | 3.43             | 3.14             | 3.23             | 3.15             | 3.01             |
| EthasC/SEER                                 | W/W |      | 239.8% / 6.07    | 238.2% / 6.03    | 234.6% / 5.94    | 221.4% / 5.61    | 225.8% / 5.72    | 232.6% / 5.89    | 222.6% / 5.64    |
| Running current                             | A   | C    | 9.44             | 12.49            | 15.46            | 19.92            | 21.81            | 25.10            | 29.18            |
| Heating capacity <sup>2</sup>               | kW  |      | <b>22.4</b>      | <b>28.0</b>      | <b>33.5</b>      | <b>40.0</b>      | <b>45.0</b>      | <b>50.4</b>      | <b>56.0</b>      |
| Power input                                 | kW  | H    | 5.40             | 7.05             | 8.70             | 10.50            | 12.20            | 13.70            | 15.90            |
| COP   | W/W |      | 4.14             | 3.97             | 3.85             | 3.80             | 3.68             | 3.67             | 3.52             |
| EthasH/SCOP                                 |     |      | 142.6% / 3.64    | 138.2% / 3.53    | 145.4% / 3.71    | 139.8% / 3.57    | 137% / 3.5       | 140.6% / 3.59    | 140.6% / 3.59    |
| Running current                             | A   | H    | 8.57             | 11.06            | 13.80            | 16.47            | 19.14            | 21.49            | 24.68            |
| Maximum overcurrent protection <sup>3</sup> | A   |      | 25.0             | 32.0             | 40.0             | 50.0             | 50.0             | 50.0             | 63.0             |



## SHRM-e

### SHRM-e Physical data

| Outdoor unit  | HP        | MMY- | MAP0806FT8P-E/TR     | MAP1006FT8P-E/TR     | MAP1206FT8P-E/TR     | MAP1406FT8P-E/TR     | MAP1606FT8P-E/TR     | MAP1806FT8P-E/TR     | MAP2006FT8P-E/TR     |
|---|-----------|------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Air flow  | m³/h      |      | 9 700                | 9 700                | 12 200               | 12 200               | 17 300               | 17 300               | 17 900               |
| Air flow  | l/s       |      | 2 694                | 2 694                | 3 389                | 3 389                | 4 806                | 4 806                | 4 972                |
| Sound Power Level                                   | dB(A)     | H    | 82.0                 | 82.0                 | 82.0                 | 83.0                 | 84                   | 84                   | 84                   |
| Sound pressure level                                | dB(A)     | H    | 61.0                 | 61.0                 | 62.0                 | 64.0                 | 62                   | 62                   | 62                   |
| Sound Power Level                                   | dB(A)     | C    | 80.0                 | 80.0                 | 80.0                 | 81.0                 | 83                   | 83                   | 83                   |
| Sound pressure level                                | dB(A)     | C    | 59.0                 | 59.0                 | 60.0                 | 62.0                 | 61                   | 61                   | 61                   |
| External Static pressure available                  | Pa        |      | 60                   | 50                   | 50                   | 40                   | 40                   | 40                   | 40                   |
| Dimensions (h x w x d)                              | mm        |      | 1830x990x780         | 1830x990x780         | 1830x1210x780        | 1830x1210x780        | 1830x1600x780        | 1830x1600x780        | 1830x1600x780        |
| Weight  | kg        |      | 263                  | 263                  | 316                  | 316                  | 377                  | 377                  | 377                  |
| Compressor type                                     |           |      | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                            | kg/TCO2eq |      | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              |
| Suction line type - diameter                        |           |      | Brazed - 7/8"        | Brazed - 7/8"        | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      |
| Liquid line type - diameter                         |           |      | Flare - 1/2"         | Flare - 1/2"         | Flare - 1/2"         | Flare - 5/8"         | Flare - 3/4"         | Flare - 3/4"         | Flare - 3/4"         |
| Discharge line connection type - diameter           |           |      | Flare - 3/4"         | Flare - 3/4"         | Flare - 3/4"         | Flare - 7/8"         | Flare - 7/8"         | Flare - 7/8"         | Flare - 7/8"         |
| Farthest piping equivalent length <sup>4</sup>      | m         |      | 200                  | 200                  | 200                  | 200                  | 200                  | 200                  | 200                  |
| Farthest piping actual length                       | m         |      | 180                  | 180                  | 180                  | 180                  | 180                  | 180                  | 180                  |
| Maximum pipe length <sup>5</sup>                    | m         |      | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 |
| Maximum lift (indoor unit above/below) <sup>6</sup> | m         |      | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                |
| Operating range - db <sup>7</sup>                   | °C        | C    | -10/46               | -10/46               | -10/46               | -10/46               | -10/46               | -10/46               | -10/46               |
| Operating range - wb <sup>8</sup>                   | °C        | H    | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5             | -25/15.5             |
| Power supply  | V-ph-Hz   |      | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         | 380/415-3-50         |

1) based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°C db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°C db/6°C wb. 3) If outdoor units are combined, refer to the installation manual. 4) Allowable values for length equivalent to furthest pipe are shown following and they vary according to performance rank of outdoor unit. (22.4 to 56.0: 180m, 61.5 to 112:195m, 120:200m.). 5) Less than 34HP: 300m. Total charging refrigerant is 140 kg or less. 6) Indoor above condition: 40m is possible for a system that uses only the flow selector unit (single port long piping type and multi port type), whose all the indoor units are 3HP or higher, and working ambient temperature is 0°C or higher. Indoor below condition: If the height difference between indoor units exceed 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 7) Low ambient cooling (-5degC or less) 1. Not suitable for applications, which require precise room temperature control, due to increased risk of indoor ON/OFF control and potential low air off temperatures. 2. For areas that do demand a precise room temperature control, we would recommend the installation of a secondary system, which has been designed solely for the purpose of low ambient cooling. 8) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.

### SHRM-e Capacity table - Standard model

| Capacity | Combination  | Modèle               | Cooling capacity | Heating capacity | EER  | SEER | COP  | SCOP | Max indoor connectivity |
|----------|--------------|----------------------|------------------|------------------|------|------|------|------|-------------------------|
| 8 HP     | 8            | MMY-MAP0806FT8P-E/TR | 22.4             | 25               | 3.76 | 6.19 | 4.14 | 3.64 | 18                      |
| 10 HP    | 10           | MMY-MAP1006FT8P-E/TR | 28               | 31.5             | 3.51 | 6.13 | 3.97 | 3.54 | 22                      |
| 12 HP    | 12           | MMY-MAP1206FT8P-E/TR | 33.5             | 37.5             | 3.43 | 6.02 | 3.85 | 3.71 | 27                      |
| 14 HP    | 14           | MMY-MAP1406FT8P-E/TR | 40               | 45               | 3.14 | 5.67 | 3.8  | 3.57 | 31                      |
| 16 HP    | 16           | MMY-MAP1606FT8P-E/TR | 45               | 50               | 3.26 | 5.78 | 3.68 | 3.51 | 36                      |
| 18 HP    | 18           | MMY-MAP1806FT8P-E/TR | 50.4             | 56.5             | 3.15 | 5.94 | 3.67 | 3.59 | 40                      |
| 20 HP    | 20           | MMY-MAP2006FT8P-E/TR | 56               | 58               | 3.01 | 5.68 | 6.52 | 3.6  | 41                      |
| 22 HP    | 12 + 10      | MMY-AP2216FT8P-E/TR  | 61.5             | 69               | 3.47 | 6.07 | 3.9  | 3.64 | 49                      |
| 24 HP    | 14 + 10      | MMY-AP2416FT8P-E/TR  | 68               | 76.5             | 3.29 | 5.88 | 3.8  | 3.56 | 51                      |
| 26 HP    | 14 + 12      | MMY-AP2616FT8P-E/TR  | 73.5             | 82.5             | 3.27 | 5.84 | 3.83 | 3.64 | 58                      |
| 28 HP    | 14 + 14      | MMY-AP2816FT8P-E/TR  | 80               | 90               | 3.15 | 5.67 | 3.81 | 3.57 | 63                      |
| 30 HP    | 16 + 14      | MMY-AP3016FT8P-E/TR  | 85               | 95               | 3.2  | 5.72 | 3.74 | 3.54 | 64                      |
| 32 HP    | 18 + 14      | MMY-AP3216FT8P-E/TR  | 90.4             | 101.5            | 3.15 | 5.82 | 3.1  | 3.59 | 64                      |
| 34 HP    | 18 + 16      | MMY-AP3416FT8P-E/TR  | 95.4             | 106.5            | 3.19 | 5.86 | 3.68 | 3.55 | 64                      |
| 36 HP    | 18 + 18      | MMY-AP3616FT8P-E/TR  | 100.8            | 113              | 3.15 | 5.94 | 3.68 | 3.59 | 64                      |
| 38 HP    | 20 + 18      | MMY-AP3816FT8P-E/TR  | 106.4            | 114.5            | 3.08 | 5.81 | 3.59 | 3.6  | 64                      |
| 40 HP    | 20 + 20      | MMY-AP4016FT8P-E/TR  | 112              | 116              | 3.01 | 5.68 | 3.52 | 3.6  | 64                      |
| 42 HP    | 14 + 14 + 14 | MMY-AP4216FT8P-E/TR  | 120              | 135              | 3.15 | 5.67 | 3.81 | 3.57 | 64                      |
| 44 HP    | 16 + 14 + 14 | MMY-AP4416FT8P-E/TR  | 125              | 140              | 3.18 | 5.71 | 3.77 | 3.55 | 64                      |
| 46 HP    | 18 + 14 + 14 | MMY-AP4616FT8P-E/TR  | 130.4            | 146.5            | 3.15 | 5.78 | 3.76 | 3.58 | 64                      |
| 48 HP    | 18 + 16 + 14 | MMY-AP4816FT8P-E/TR  | 135.4            | 151.5            | 3.25 | 5.83 | 3.7  | 3.57 | 64                      |
| 50 HP    | 18 + 18 + 14 | MMY-AP5016FT8P-E/TR  | 140.8            | 158              | 3.21 | 5.88 | 3.7  | 3.59 | 64                      |
| 52 HP    | 18 + 18 + 16 | MMY-AP5216FT8P-E/TR  | 145.8            | 163              | 3.18 | 5.89 | 3.68 | 3.57 | 64                      |
| 54 HP    | 18 + 18 + 18 | MMY-AP5416FT8P-E/TR  | 152.1            | 169.5            | 3.15 | 5.94 | 3.68 | 3.59 | 64                      |

MMY-MAP\_FT8P  
**SHRM-e**



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**Excellence**

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- Incorporating Toshiba's latest inverter control, enables the precise modulation of the compressor, ensuring maximum performance and energy savings.
- 2 heat exchangers: outstanding 4-side heat exchanger + sub cooling heat exchanger to optimized efficiency.
- Precise refrigerant control ensures each indoor unit receives precisely the right amount of refrigerant.

**Expansion**

- 7 outdoor unit model line-up from 8 to 20HP that can be installed in a variety of combinations, of up to a capacity of 42HP.
- A complete range of indoor unit styles and capacity ranges, meets the demands of the customer and the room configuration.

**Enhancement**

- Up to 1km total piping length; 200m in equivalent length and 70m of height difference.
- Revolutionary hands-free Wave Tool technology that allows contactless commissioning and diagnoses to be carried out using a smartphone application.

SCOP MAX



3.71

CAPACITY



8HP > 42HP

OPERATION



-25°C > +46°C

In addition to the existing 3 series and new 4 series single port flow selector, Toshiba is proud to release the all new 4 and 6 port multi box, that enables multiple indoor unit connection, increasing the design flexibility and ease of installation.



**SHRM-e Performances**

| Outdoor unit                                | HP  | MMY- | MAP0806FT8P-UK | MAP1006FT8P-UK | MAP1206FT8P-UK | MAP1406FT8P-UK | MAP1606FT8P-UK | MAP1806FT8P-UK | MAP2006FT8P-UK |
|---|-----|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
|   |     |      | 8 HP           | 10 HP          | 12 HP          | 14 HP          | 16 HP          | 18 HP          | 20 HP          |
| Cooling capacity <sup>1</sup>               | kW  |      | 22.4           | 28.0           | 33.5           | 40.0           | 45.0           | 50.4           | 56.0           |
| Power input                                 | kW  | C    | 5.95           | 7.96           | 9.75           | 12.70          | 13.90          | 16.00          | 18.60          |
| EER   | W/W |      | 3.76           | 3.51           | 3.43           | 3.14           | 3.23           | 3.15           | 3.01           |
| EthasC/SEER                                 | W/W |      | 239.8% / 6.07  | 238.2% / 6.03  | 234.6% / 5.94  | 221.4% / 5.61  | 225.8% / 5.72  | 232.6% / 5.89  | 222.6% / 5.64  |
| Running current                             | A   | C    | 9.44           | 12.49          | 15.46          | 19.92          | 21.81          | 25.10          | 29.18          |
| Heating capacity <sup>2</sup>               | kW  |      | 22.4           | 28.0           | 33.5           | 40.0           | 45.0           | 50.4           | 56.0           |
| Power input                                 | kW  | H    | 5.40           | 7.05           | 8.70           | 10.50          | 12.20          | 13.70          | 15.90          |
| COP   | W/W |      | 4.14           | 3.97           | 3.85           | 3.80           | 3.68           | 3.67           | 3.52           |
| EthasH/SCOP                                 |     |      | 142.6% / 3.64  | 138.2% / 3.53  | 145.4% / 3.71  | 139.8% / 3.57  | 137% / 3.5     | 140.6% / 3.59  | 140.6% / 3.59  |
| Running current                             | A   | H    | 8.57           | 11.06          | 13.80          | 16.47          | 19.14          | 21.49          | 24.68          |
| Maximum overcurrent protection <sup>3</sup> | A   |      | 25.0           | 32.0           | 40.0           | 50.0           | 50.0           | 50.0           | 63.0           |

### SHRM-e Physical data

| Outdoor unit  | HP                | MMY- MAP0806FT8P-UK  | MAP1006FT8P-UK       | MAP1206FT8P-UK       | MAP1406FT8P-UK       | MAP1606FT8P-UK       | MAP1806FT8P-UK       | MAP2006FT8P-UK       |
|---|-------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Air flow  | m <sup>3</sup> /h | 9 700                | 9 700                | 12 200               | 12 200               | 17 300               | 17 300               | 17 900               |
| Air flow  | l/s               | 2 694                | 2 694                | 3 389                | 3 389                | 4 806                | 4 806                | 4 972                |
| Sound Power Level                                   | dB(A)             | H                    | 82.0                 | 82.0                 | 82.0                 | 83.0                 | 84                   | 84                   |
| Sound pressure level                                | dB(A)             | H                    | 61.0                 | 61.0                 | 62.0                 | 64.0                 | 62                   | 62                   |
| Sound Power Level                                   | dB(A)             | C                    | 80.0                 | 80.0                 | 80.0                 | 81.0                 | 83                   | 83                   |
| Sound pressure level                                | dB(A)             | C                    | 59.0                 | 59.0                 | 60.0                 | 62.0                 | 61                   | 61                   |
| External Static pressure available                  | Pa                | 60                   | 50                   | 50                   | 40                   | 40                   | 40                   | 40                   |
| Dimensions (h x w x d)                              | mm                | 1830 x 990 x 780     | 1830 x 990 x 780     | 1830 x 1210 x 780    | 1830 x 1210 x 780    | 1830 x 1600 x 780    | 1830 x 1600 x 780    | 1830 x 1600 x 780    |
| Weight  | kg                | 263                  | 263                  | 316                  | 316                  | 377                  | 377                  | 377                  |
| Compressor type                                     |                   | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary | Hermetic Twin Rotary |
| Refrigerant charge R410A                            | kg/TCO2eq         | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              | 11 / 23              |
| Suction line type - diameter                        |                   | Brazed - 7/8"        | Brazed - 7/8"        | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      | Brazed - 1-1/8"      |
| Liquid line type - diameter                         |                   | Flare - 1/2"         | Flare - 1/2"         | Flare - 1/2"         | Flare - 5/8"         | Flare - 3/4"         | Flare - 3/4"         | Flare - 3/4"         |
| Discharge line connection type - diameter           |                   | Flare - 3/4"         | Flare - 3/4"         | Flare - 3/4"         | Flare - 7/8"         | Flare - 7/8"         | Flare - 7/8"         | Flare - 7/8"         |
| Farthest piping equivalent length <sup>4</sup>      | m                 | 200                  | 200                  | 200                  | 200                  | 200                  | 200                  | 200                  |
| Farthest piping actual length                       | m                 | 180                  | 180                  | 180                  | 180                  | 180                  | 180                  | 180                  |
| Maximum pipe length <sup>5</sup>                    | m                 | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 | 1000                 |
| Maximum lift (Indoor unit above/below) <sup>6</sup> | m                 | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                | 30/70                |
| Operating range - db <sup>7</sup>                   | °C                | C                    | -10 / 46             | -10 / 46             | -10 / 46             | -10 / 46             | -10 / 46             | -10 / 46             |
| Operating range - wb <sup>8</sup>                   | °C                | H                    | -25 / 15.5           | -25 / 15.5           | -25 / 15.5           | -25 / 15.5           | -25 / 15.5           | -25 / 15.5           |
| Power supply  | V-ph-Hz           | 380 / 415-3-50       | 380 / 415-3-50       | 380 / 415-3-50       | 380 / 415-3-50       | 380 / 415-3-50       | 380 / 415-3-50       | 380 / 415-3-50       |

1) based on an indoor air temperature of 27°C db/19°C wb and an outdoor air temperature of 35°C db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°C db/6°C wb. 3) If outdoor units are combined, refer to the installation manual. 4) Allowable values for length equivalent to furthest pipe are shown following and they vary according to performance rank of outdoor unit. (22.4 to 56.0: 180m, 61.5 to 112:195m, 120:200m.). 5) Less than 34HP: 300m. Total charging refrigerant is 140 kg or less. 6) Indoor above condition: 40m is possible for a system that uses only the flow selector unit (single port long piping type and multi port type), whose all the indoor units are 3HP or higher, and working ambient temperature is 0°C or higher. Indoor below condition: If the height difference between indoor units exceed 3 m, set 50 m or less. Also Extension up till 90m is possible. Be sure to refer the Engineering Databook for details of these conditions and requirements. 7) Low ambient cooling (-5degC or less). 1. Not suitable for applications, which require precise room temperature control, due to increased risk of indoor ON/OFF control and potential low air off temperatures. 2. For areas that do demand a precise room temperature control, we would recommend the installation of a secondary system, which has been designed solely for the purpose of low ambient cooling. 8) The unit operates down to an outdoor temperature of -25°C, however considerable performance decrease will be expected below -20°C. Consider installation location/surroundings and system design when expected to operate between -20°C and -25°C.

### SHRM-e Capacity table - Standard model

| Capacity | Combination  | Modèle             | Cooling capacity | Heating capacity | EER  | SEER | COP  | SCOP | Max indoor connectivity |
|----------|--------------|--------------------|------------------|------------------|------|------|------|------|-------------------------|
| 8 HP     | 8            | MMY-MAP0806FT8P-UK | 22.4             | 25               | 3.76 | 6.19 | 4.14 | 3.64 | 18                      |
| 10 HP    | 10           | MMY-MAP1006FT8P-UK | 28               | 31.5             | 3.51 | 6.13 | 3.97 | 3.54 | 22                      |
| 12 HP    | 12           | MMY-MAP1206FT8P-UK | 33.5             | 37.5             | 3.43 | 6.02 | 3.85 | 3.71 | 27                      |
| 14 HP    | 14           | MMY-MAP1406FT8P-UK | 40               | 45               | 3.14 | 5.67 | 3.8  | 3.57 | 31                      |
| 16 HP    | 16           | MMY-MAP1606FT8P-UK | 45               | 50               | 3.26 | 5.78 | 3.68 | 3.51 | 36                      |
| 18 HP    | 18           | MMY-MAP1806FT8P-UK | 50.4             | 56.5             | 3.15 | 5.94 | 3.67 | 3.59 | 40                      |
| 20 HP    | 20           | MMY-MAP2006FT8P-UK | 56               | 58               | 3.01 | 5.68 | 6.52 | 3.6  | 41                      |
| 22 HP    | 12 + 10      | MMY-AP2216FT8P-UK  | 61.5             | 69               | 3.47 | 6.07 | 3.9  | 3.64 | 49                      |
| 24 HP    | 14 + 10      | MMY-AP2416FT8P-UK  | 68               | 76.5             | 3.29 | 5.88 | 3.8  | 3.56 | 51                      |
| 26 HP    | 14 + 12      | MMY-AP2616FT8P-UK  | 73.5             | 82.5             | 3.27 | 5.84 | 3.83 | 3.64 | 58                      |
| 28 HP    | 14 + 14      | MMY-AP2816FT8P-UK  | 80               | 90               | 3.15 | 5.67 | 3.81 | 3.57 | 63                      |
| 30 HP    | 16 + 14      | MMY-AP3016FT8P-UK  | 85               | 95               | 3.2  | 5.72 | 3.74 | 3.54 | 64                      |
| 32 HP    | 18 + 14      | MMY-AP3216FT8P-UK  | 90.4             | 101.5            | 3.15 | 5.82 | 3.1  | 3.59 | 64                      |
| 34 HP    | 18 + 16      | MMY-AP3416FT8P-UK  | 95.4             | 106.5            | 3.19 | 5.86 | 3.68 | 3.55 | 64                      |
| 36 HP    | 18 + 18      | MMY-AP3616FT8P-UK  | 100.8            | 113              | 3.15 | 5.94 | 3.68 | 3.59 | 64                      |
| 38 HP    | 20 + 18      | MMY-AP3816FT8P-UK  | 106.4            | 114.5            | 3.08 | 5.81 | 3.59 | 3.6  | 64                      |
| 40 HP    | 20 + 20      | MMY-AP4016FT8P-UK  | 112              | 116              | 3.01 | 5.68 | 3.52 | 3.6  | 64                      |
| 42 HP    | 14 + 14 + 14 | MMY-AP4216FT8P-UK  | 120              | 135              | 3.15 | 5.67 | 3.81 | 3.57 | 64                      |
| 34 HP    | 18 + 16      | MMY-AP3416FT8P-UK  | 95.4             | 106.5            | 7.95 | 3.19 | 3.68 | 5.14 | 64                      |
| 36 HP    | 18 + 18      | MMY-AP3616FT8P-UK  | 100.8            | 113              | 7.86 | 3.15 | 3.68 | 5.4  | 64                      |
| 38 HP    | 20 + 18      | MMY-AP3816FT8P-UK  | 106.4            | 114.5            | 7.35 | 3.08 | 3.59 | 4.88 | 64                      |
| 40 HP    | 20 + 20      | MMY-AP4016FT8P-UK  | 112              | 116              | 7.1  | 3.01 | 3.52 | 4.78 | 64                      |
| 42 HP    | 14 + 14 + 14 | MMY-AP4216FT8P-UK  | 120              | 135              | 7.3  | 3.15 | 3.81 | 5.61 | 64                      |

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

INDOOR UNITS, HOT WATER & FRESH AIR SOLUTIONS

|                                   |                                   | Basic specifications     |          |          |          |        |        |          |        |        |         |            |          |          |          |            |            |          | SHRM-Advance compatibility |
|-----------------------------------|-----------------------------------|--------------------------|----------|----------|----------|--------|--------|----------|--------|--------|---------|------------|----------|----------|----------|------------|------------|----------|----------------------------|
| Model type                        | Class                             | 003                      | 005      | 007      | 009      | 012    | 015    | 018      | 024    | 027    | 030     | 036        | 048      | 056      | 072      | 096        | 112        | 128      |                            |
|                                   | Cooling/Heating capacity in kW    | 0.9 /1.1                 | 1.7 /1.9 | 2.2 /2.5 | 2.8 /3.2 | 3.6 /4 | 4.5 /5 | 5.6 /6.3 | 7.1 /8 | 8.0 /9 | 9.0 /10 | 11.2 /12.5 | 14.0 /16 | 16.0 /18 | 22.4 /25 | 28.0 /31.5 | 33.5 /20.8 | 40 /25.2 |                            |
|                                   | Cooling/Heating capacity in HP    | 0,3*                     | 0,6      | 0,8      | 1        | 1,25   | 1,7    | 2        | 2,5    | 3      | 3,2     | 4          | 5        | 6        | 8        | 10         | 12         | 14       |                            |
| Compact 4-way discharge cassette  | MMU-UP***1MH-E                    |                          | ●        | ●        | ●        | ●      | ●      | ●        |        |        |         |            |          |          |          |            |            |          | ●                          |
| Smart 4-way discharge cassette    | MMU-UP***H-E                      |                          |          |          | ●        | ●      | ●      | ●        | ●      | ●      | ●       | ●          | ●        | ●        |          |            |            |          | ●                          |
| 4-way discharge cassette          | MMU-UP***1HP-E                    |                          |          |          | ●        | ●      | ●      | ●        | ●      | ●      | ●       | ●          | ●        | ●        |          |            |            |          | ●                          |
| 2-way discharge cassette          | MMU-UP***1WH-E                    |                          |          | ●        | ●        | ●      | ●      | ●        | ●      | ●      | ●       | ●          | ●        | ●        |          |            |            |          | ●                          |
| 1-way discharge cassette          | MMU-UP***1YHP-E                   | ●                        | ●        | ●        | ●        | ●      | ●      | ●        | ●      |        |         |            |          |          |          |            |            |          | ●                          |
| Slim duct                         | MMD-UP***1SPHY-E                  | ●                        | ●        | ●        | ●        | ●      | ●      | ●        | ●      |        |         |            |          |          |          |            |            |          | ●                          |
| Concealed duct                    | MMD-UP***1BHP-E                   |                          | ●        | ●        | ●        | ●      | ●      | ●        | ●      | ●      | ●       | ●          | ●        | ●        |          |            |            |          | ●                          |
| Concealed duct high static        | MMD-UP***1HP-E                    |                          |          |          |          |        |        | ●        | ●      | ●      |         | ●          | ●        | ●        | ●        |            |            |          | ●                          |
| Ceiling suspended                 | MMC-UP***1HP-E                    |                          |          |          |          |        | ●      | ●        | ●      | ●      |         | ●          | ●        | ●        |          |            |            |          | ●                          |
| Floor-standing concealed          | MML-UP***1BH-E                    |                          |          | ●        | ●        | ●      | ●      | ●        | ●      |        |         |            |          |          |          |            |            |          |                            |
| Floor-standing cabinet            | MML-UP***1H-E                     |                          |          | ●        | ●        | ●      | ●      | ●        | ●      |        |         |            |          |          |          |            |            |          |                            |
| Bi-flow console                   | MML-UP***1NH-E                    |                          |          | ●        | ●        | ●      | ●      | ●        |        |        |         |            |          |          |          |            |            |          |                            |
| Floor standing                    | MMF-UP***1H-E                     |                          |          |          |          |        | ●      | ●        | ●      | ●      |         | ●          | ●        | ●        |          |            |            |          |                            |
| High wall (With & without PMV)    | MMK-UP***1HP-E<br>MMK-UP***1HPL-E | ●                        | ●        | ●        | ●        | ●      | ●      | ●        | ●      | ●      | ●       |            |          |          |          |            |            |          | ●                          |
| Mid temperature Hot Water module  | MMW-UP***1LQ-E                    |                          |          |          |          |        |        |          |        | ●      |         |            |          | ●        |          |            |            |          | ●                          |
| High temperature Hot Water module | MMW-AP**1CHQ-E                    |                          |          |          |          |        |        |          |        |        |         |            | ●        |          |          |            |            |          |                            |
| AHU DX kit (TA/TF/0-10v)          | TCB-IFDM*01UP-E<br>RBM-A*01UPVA-E | From 8 to 120HP capacity |          |          |          |        |        |          |        |        |         |            |          |          |          |            |            |          |                            |
| EMEA AHU DX Kit (std version)     | MM-DXC010 + MM-DXV***             |                          |          |          |          |        |        | ●        | ●      | ●      |         | ●          | ●        |          | ●        | ●          |            |          |                            |
| EMEA AHU DX Kit (0/10v version)   | RBC-DXC031 + MM-DXV***            |                          |          |          |          |        |        |          |        |        |         |            |          | ●        | ●        | ●          |            |          |                            |
| Fresh air intake indoor unit      | MMD-UP***1HFP-E                   |                          |          |          |          |        |        |          |        |        |         |            | ●        |          | ●        | ●          | ●          | ●        |                            |

AIR TO AIR HEAT EXCHANGER

|  |  | Basic specifications |     |     |       |     |         |          |      |      |  |
|--|--|----------------------|-----|-----|-------|-----|---------|----------|------|------|--|
| Model type   | Air flow in m³/h                                       | 150                  | 250 | 350 | 500   | 650 | 800     | 1000     | 1500 | 2000 |  |
|  | Cooling/Heating capacity in kW for models with DX coil |                      |     |     | 4.5/5 |     | 6.5/8.6 | 8.2/10.9 |      |      |  |
| Air-to-air heat exchanger                            | VN-M**0HE  | ●                    | ●   | ●   | ●     | ●   | ●       | ●        | ●    | ●    |  |
| A2A heat exchanger + DXcoil or + Dxcoll & Humidifier | MMD-VN***2HEXE<br>MMD-VNK***2HEXE                      |                      |     |     | ●     |     | ●       | ●        |      |      |  |

●:Heat pump  
\* Only compatible with SMMS-u & SHRM Advance

MMU-UP\_MH  
**COMPACT 4-WAY CASSETTE**



The compact 4-way cassette has been especially designed for business office applications, where a compact and efficient solution is required.

**Design**

- Smart flat-panel design with clean lines that will complement any decorative style.
- Fit within the T-bar of grid ceiling: 620mm X 620mm.

**Comfort**

- A user programmable 5-step flow with individual louvre swing control, plus a new "cycle-swing" harmonised louvre setting
- The occupancy motion sensor can be configured to switch the unit into standby mode or completely switched off, when no movement is detected, minimising the energy usage of the system.

**Easy to install**

- Only 256mm height, this compact chassis is perfectly suited to confined spaces.
- Built-in high-lift drain pump.
- Lightweight unit, for easy and quick installation.

CAPACITY



1.7kW > 6.3kW

SOUND PRESSURE LEVEL



29dB(A)

**OUTDOOR UNITS**



Side Blow & MINI SMMS-e



SMMS-u & SHRM Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU31UM-E  
RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

**COMPACT 4-WAY CASSETTE Performances**

| Indoor unit       | MMU- | UP0051MH-E/TR | UP0071MH-E/TR | UP0091MH-E/TR | UP0121MH-E/TR | UP0151MH-E/TR | UP0181MH-E/TR |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity  | kW   | 1,7           | 2,2           | 2,8           | 3,6           | 4,5           | 5,6           |
| Heating capacity  | kW   | 1,9           | 2,5           | 3,2           | 4,0           | 5,0           | 6,3           |
| Power consumption | kW   | 0.016         | 0.023         | 0.025         | 0.027         | 0.030         | 0.052         |
| Running current   | A    | 0.16          | 0.23          | 0.24          | 0.25          | 0.28          | 0.46          |
| Starting current  | A    | 0.28          | 0.41          | 0.43          | 0.44          | 0.50          | 0.80          |

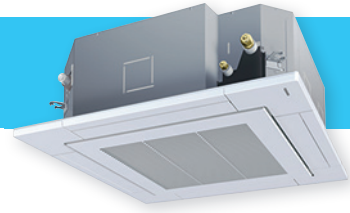
**COMPACT 4-WAY CASSETTE Physical data**

| Indoor unit                        | MMU-    | UP0051MH-E/TR       | UP0071MH-E/TR       | UP0091MH-E/TR       | UP0121MH-E/TR       | UP0151MH-E/TR       | UP0181MH-E/TR       |
|------------------------------------|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| Air Flow (h/m+/m/l+/l)             | m³/h    | 430/415/400/385/365 | 552/500/462/395/378 | 570/520/468/395/378 | 594/550/504/420/402 | 660/600/552/480/468 | 840/740/642/540/522 |
| Air Flow (h/m+/m/l+/l)             | l/s     | 119/115/111/107/101 | 153/139/128/110/105 | 158/144/130/110/105 | 165/153/140/117/112 | 183/167/153/133/130 | 233/206/178/150/145 |
| Sound pressure level (h/m+/m/l+/l) | dB(A)   | 32/31/30/29/29      | 37/34/33/30/29      | 38/35/33/30/29      | 38/36/34/31/30      | 40/37/35/32/31      | 47/43/39/36/34      |
| Sound power level (h/m+/m/l+/l)    | dB(A)   | 47/46/45/44/44      | 52/49/48/45/44      | 53/50/48/45/44      | 53/51/49/46/45      | 55/52/50/47/46      | 62/58/54/51/49      |
| Dimensions (HxWxD)                 | mm      | 256x575x575         | 256x575x575         | 256x575x575         | 256x575x575         | 256x575x575         | 256x575x575         |
| Weight                             | kg      | 15                  | 15                  | 15                  | 15                  | 15                  | 15                  |
| Panel                              |         | RBC-UM21PG(W)-E     |                     |                     |                     |                     |                     |
| Panel dimensions (HxWxD)           | mm      | 12x620x620          | 12x620x620          | 12x620x620          | 12x620x620          | 12x620x620          | 12x620x620          |
| Panel weight                       | kg      | 2.5                 | 2.5                 | 2.5                 | 2.5                 | 2.5                 | 2.5                 |
| Connecting pipe, gas               | in      | 3/8"                | 3/8"                | 3/8"                | 3/8"                | 1/2"                | 1/2"                |
| Connecting pipe, liquid            | in      | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 1/4"                |
| Drain port diameter                | mm      | 20                  | 20                  | 20                  | 20                  | 20                  | 20                  |
| Power supply                       | V-ph-Hz | 220/240-1-50        | 220/240-1-50        | 220/240-1-50        | 220/240-1-50        | 220/240-1-50        | 220/240-1-50        |

# MMU-UP\_H 4-WAY SMART CASSETTE



**> NEW**



The 4-way cassette is designed to provide uniform air distribution and total user comfort making this unit the ideal solution for small commercial applications. Combining all the expertise of Toshiba, the Smart Cassette is the perfect mix between comfort, elegance and efficiency.

**Comfort**

- Unique flap design for optimal air distribution.
- Louvre position individual setting: 3 different swing modes from standard, diagonally, opposite to turn around.
- 5-step fan to precisely control the air flow.
- Low noise level thanks to large air suction opening.

**Reliability**

- Built-in high-lift drain pump.

**Savings**

- Optional motion sensor for automatic operation.
- High efficiency DC fan motor to maximize heat exchange with limited power consumption.

CAPACITY



2.8kW > 18kW

SOUND PRESSURE LEVEL



26dB(A)

**OUTDOOR UNITS**



Side Blow & Mini SMMS-e



SMMS-u & SHRM Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU41U-E



RBC-AMSU51E-ES/EN  
RBC-AMTU31-E  
RBC-ASCU11-E

**4-WAY SMART CASSETTE Performances**

| Indoor unit       | MMU- UP0091H-E/TR | UP0121H-E/TR | UP0151H-E/TR | UP0181H-E/TR | UP0241H-E/TR | UP0271H-E/TR | UP0301H-E/TR | UP0361H-E/TR | UP0481H-E/TR | UP0561H-E/TR |      |
|-------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|------|
| Capacity code     | hp                | 1            | 1.25         | 1.7          | 2            | 2.5          | 3            | 3.2          | 4            | 5            | 6    |
| Cooling           | kW                | 2.8          | 3.6          | 4.5          | 5.6          | 7.1          | 8.0          | 9.0          | 11.2         | 14.0         | 16.0 |
| Heating           | kW                | 3.2          | 4.0          | 5.0          | 6.3          | 8.0          | 9.0          | 10.0         | 12.5         | 16.0         | 18.0 |
| Running current   |                   | 0.18         | 0.18         | 0.2          | 0.26         | 0.38         | 0.48         | 0.6          | 0.94         | 0.96         | 0.97 |
| Power consumption | W                 | 20           | 20           | 18           | 26           | 42           | 54           | 68           | 125          | 135          | 137  |
| Starting current  | A                 | 0.27         | 0.27         | 0.30         | 0.39         | 0.57         | 0.72         | 0.90         | 1.41         | 1.44         | 1.46 |

**4-WAY SMART CASSETTE Physical data**

| Indoor unit          | MMU- UP0091H-E/TR  | UP0121H-E/TR   | UP0151H-E/TR                 | UP0181H-E/TR             | UP0241H-E/TR                | UP0271H-E/TR                 | UP0301H-E/TR                 | UP0361H-E/TR                 | UP0481H-E/TR                 | UP0561H-E/TR                 |                              |
|----------------------|--|--|------------------------------|--------------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Standard air flow    | H/M+/M/<br>L+/L  | m <sup>3</sup> /h<br>846/792/768/<br>738/708                   | 846/792/768/<br>738/708      | 1060/960/920/<br>860/800 | 1260/1160/1100/<br>1040/940 | 1580/1440/1300/<br>1210/1120 | 1770/1590/1380/<br>1320/1250 | 1940/1770/1520/<br>1450/1400 | 2184/1848/1596/<br>1356/1260 | 2262/1998/1740/<br>1470/1368 | 2262/2034/1782/<br>1512/1404 |
| Sound pressure level | H/M/L  | dB(A)<br>30/29/28/<br>27/26                                    | 30/29/28/<br>27/26           | 32/30/30/<br>29/28       | 36/34/33/<br>32/31          | 41/39/37/<br>35/35           | 42/40/37/<br>36/35           | 44/42/39/<br>38/37           | 45/41/38/<br>36/32           | 46/43/39/<br>37/33           | 46/43/40/<br>38/35           |
| Sound power level    | H/M+/M/<br>L+/L  | dB(A)<br>45/44/43/<br>42/42                                    | 45/44/43/<br>42/42           | 46/45/44/<br>43/42       | 50/48/47/<br>46/45          | 55/53/51/<br>49/48           | 56/54/51/<br>50/49           | 58/56/53/<br>52/51           | 60/56/53/<br>50/48           | 61/57/54/<br>52/49           | 61/58/55/<br>53/51           |
| Outer dimension      | Main unit  | H x L x P  | mm                           | 256 x 840 x 840          | 256 x 840 x 840             | 319 x 840 x 840              | 319 x 840 x 840              | 319 x 840 x 840              | 319 x 840 x 840              | 319 x 840 x 840              | 319 x 840 x 840              |
|                      | Ceiling panel  | H x L x P  | mm                           | 30 x 950 x 950           | 30 x 950 x 950              | 30 x 950 x 950               | 30 x 950 x 950               | 30 x 950 x 950               | 30 x 950 x 950               | 30 x 950 x 950               | 30 x 950 x 950               |
| Total weight         | Main unit  | kg   | 18                           | 18                       | 25                          | 25                           | 25                           | 25                           | 25                           | 25                           | 25                           |
|                      | Ceiling panel  | kg   | 5                            | 5                        | 5                           | 5                            | 5                            | 5                            | 5                            | 5                            | 5                            |
| Appearance           | Main unit  | Heat-insulating material attached Zinc hot dipping steel plate |                              |                          |                             |                              |                              |                              |                              |                              |                              |
|                      | Ceiling panel  | Model  | RBC-U41PG(W)-E               |                          |                             |                              |                              |                              |                              |                              |                              |
|                      |  | Panel color  | White (2.5GY9.0/0.5)         |                          |                             |                              |                              |                              |                              |                              |                              |
| Connecting pipe      | Gas pipe   | inch   | 3/8"                         | 3/8"                     | 1/2"                        | 1/2"                         | 5/8"                         | 5/8"                         | 5/8"                         | 5/8"                         | 5/8"                         |
|                      | Liquid pipe  | inch   | 1/4"                         | 1/4"                     | 1/4"                        | 1/4"                         | 3/8"                         | 3/8"                         | 3/8"                         | 3/8"                         | 3/8"                         |
|                      | Drain port (Outside dia.)  | mm   | 25 (Polyvinyl chloride tube) |                          |                             |                              |                              |                              |                              |                              |                              |
| Power supply         | 1 phase 50Hz 230V(220V-240V) - Separate power supply for indoor units is required. |  |                              |                          |                             |                              |                              |                              |                              |                              |                              |

MMU-UP\_HP  
**4-WAY CASSETTE**



**> NEW PANEL DESIGN**

The 4-way cassette is designed to provide uniform air distribution and total user comfort making this unit the ideal solution for small commercial applications.

**Comfort**

- Possibility to set three different swing modes providing individual control to maximise end user comfort.
- Wide air flow in all directions.
- Optimal air diffusion up to 4.6m ceiling height!
- Automatic operation by using optional motion sensor.
- PM2.5 filter available as an option (TCB-PLFC1UP80-PE & TCB-PLFC2UP120-PE).

**Reliability**

- Heat exchanger self-cleaning function.
- Built-in high-lift drain pump.

**Easy to install**

- Compact chassis with only 256mm height (up to size 30).
- Lightweight unit, for easy and quick installation.

CAPACITY



**2.8kW > 18kW**

SOUND PRESSURE LEVEL



**27dB(A)**

**OUTDOOR UNITS**



Side Blow & MINI SMMS-e



SMMS-u & SHRM Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU33UP-E  
RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

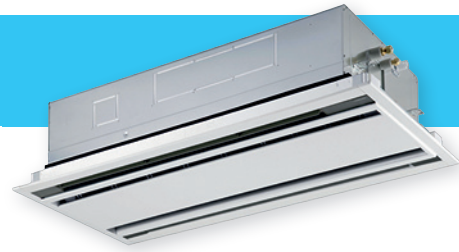
**4-WAY CASSETTE Performances**

| Indoor unit       | MMU- | UP0091HP-E/TR | UP0121HP-E/TR | UP0151HP-E/TR | UP0181HP-E/TR | UP0241HP-E/TR | UP0271HP-E/TR | UP0301HP-E/TR | UP0361HP-E/TR | UP0481HP-E/TR | UP0561HP-E/TR |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity  | kW   | 2,8           | 3,6           | 4,5           | 5,6           | 7,1           | 8,0           | 9,0           | 11,2          | 14,0          | 16,0          |
| Heating capacity  | kW   | 3,2           | 4,0           | 5,0           | 6,3           | 8,0           | 9,0           | 10,0          | 12,5          | 16,0          | 18,0          |
| Power consumption | kW   | 0,021         | 0,021         | 0,023         | 0,026         | 0,036         | 0,036         | 0,043         | 0,088         | 0,112         | 0,112         |
| Running current   | A    | 0,23          | 0,23          | 0,27          | 0,29          | 0,38          | 0,38          | 0,43          | 0,78          | 0,88          | 0,88          |
| Starting current  | A    | 0,30          | 0,30          | 0,33          | 0,36          | 0,42          | 0,42          | 0,59          | 0,87          | 1,23          | 1,26          |

**4-WAY CASSETTE Physical data**

| Indoor unit                  | MMU-       | UP0091HP-E/TR | UP0121HP-E/TR | UP0151HP-E/TR | UP0181HP-E/TR | UP0241HP-E/TR | UP0271HP-E/TR | UP0301HP-E/TR | UP0361HP-E/TR  | UP0481HP-E/TR  | UP0561HP-E/TR  |
|------------------------------|------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| Air Flow (h/m/l)             | m³/h       | 800/730/680   | 800/730/680   | 930/830/790   | 1050/920/800  | 1290/920/800  | 1290/920/800  | 1320/1100/850 | 1970/1430/1070 | 2130/1430/1130 | 2130/1520/1230 |
| Air Flow (h/m/l)             | l/s        | 222/203/189   | 222/203/189   | 258/231/219   | 292/256/222   | 358/256/222   | 358/256/222   | 367/306/236   | 547/397/297    | 592/397/314    | 592/422/342    |
| Sound pressure level (h/m/l) | dB(A)      | 30/29/27      | 30/29/27      | 31/29/27      | 32/29/27      | 35/31/28      | 35/31/28      | 38/33/30      | 43/38/32       | 46/38/33       | 46/40/33       |
| Sound power level (h)        | dB(A)      | 45            | 45            | 46            | 47            | 50            | 50            | 53            | 58             | 61             | 61             |
| Dimensions (HxWxD)           | mm         | 256x840x840   | 256x840x840   | 256x840x840   | 256x840x840   | 256x840x840   | 256x840x840   | 256x840x840   | 319x840x840    | 319x840x840    | 319x840x840    |
| Weight                       | kg         | 18            | 18            | 20            | 20            | 20            | 20            | 20            | 25             | 25             | 25             |
| Panel                        | RBC-U33P-E |               |               |               |               |               |               |               |                |                |                |
| Panel dimensions (HxWxD)     | mm         | 30x950x950    | 30x950x950    | 30x950x950    | 30x950x950    | 30x950x950    | 30x950x950    | 30x950x950    | 30x950x950     | 30x950x950     | 30x950x950     |
| Panel weight                 | kg         | 4             | 4             | 4             | 4             | 4             | 4             | 4             | 4              | 4              | 4              |
| Connecting pipe, gas         |            | 3/8"          | 3/8"          | 1/2"          | 1/2"          | 5/8"          | 5/8"          | 5/8"          | 5/8"           | 5/8"           | 5/8"           |
| Connecting pipe, liquid      |            | 1/4"          | 1/4"          | 1/4"          | 1/4"          | 3/8"          | 3/8"          | 3/8"          | 3/8"           | 3/8"           | 3/8"           |
| Drain port diameter          | mm         | 25            | 25            | 25            | 25            | 25            | 25            | 25            | 25             | 25             | 25             |
| Power supply                 | V-ph-Hz    | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   |

# MMU-UP\_WH 2-WAY CASSETTE



Slim, compact and lightweight, the 2-way cassette has been designed to fit easily and discretely into any room interior.

### Comfort

- Unique air flow control, provides a balanced flow of air in two opposite directions, maximising air flow distribution. This feature when combined with the units fresh air intake ability helps to provide a perfect solution all year round.
- Enhanced indoor air quality with standard long-life filters with a wide bended surface to effectively collect dust particles.

### Design

- The elegant white decoration panel allows the unit to be installed seamlessly into any room.

### Easy to install

- Minimal weight (19kg) for units up to 4.5kw.
- Compact dimensions (height 295mm).
- Built-in drain pump.

CAPACITY



2.2kW > 18kW

SOUND PRESSURE LEVEL



30dB(A)

### OUTDOOR UNITS



Side Blow & Mini SMMS-e



SMMS-u & SHRM-Advance



SMMS-e & SHRM-e

### LOCAL CONTROLS



TCB-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

## 2-WAY CASSETTE Performances

| Indoor unit       | MMU- | UP0071WH-E/TR | UP0091WH-E/TR | UP0121WH-E/TR | UP0151WH-E/TR | UP0181WH-E/TR | UP0241WH-E/TR | UP0271WH-E/TR | UP0301WH-E/TR | UP0361WH-E/TR | UP0481WH-E/TR | UP0561WH-E/TR |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity  | kW   | 2,2           | 2,8           | 3,6           | 4,5           | 5,6           | 7,1           | 8,0           | 9,0           | 11,2          | 14,0          | 16,0          |
| Heating capacity  | kW   | 2,5           | 3,2           | 4,0           | 5,0           | 6,3           | 8,0           | 9,0           | 10,0          | 12,5          | 16,0          | 18,0          |
| Power consumption | kW   | 0,029         | 0,029         | 0,029         | 0,030         | 0,044         | 0,054         | 0,054         | 0,064         | 0,073         | 0,088         | 0,117         |
| Running current   | A    | 0,23          | 0,23          | 0,23          | 0,24          | 0,32          | 0,39          | 0,39          | 0,46          | 0,48          | 0,57          | 0,75          |
| Starting current  | A    | 0,35          | 0,35          | 0,35          | 0,36          | 0,48          | 0,59          | 0,59          | 0,69          | 0,72          | 0,86          | 1,13          |

## 2-WAY CASSETTE Physical data

| Indoor unit                  | MMU-    | UP0071WH-E/TR    | UP0091WH-E/TR | UP0121WH-E/TR | UP0151WH-E/TR | UP0181WH-E/TR | UP0241WH-E/TR | UP0271WH-E/TR    | UP0301WH-E/TR | UP0361WH-E/TR  | UP0481WH-E/TR     | UP0561WH-E/TR  |
|------------------------------|---------|------------------|---------------|---------------|---------------|---------------|---------------|------------------|---------------|----------------|-------------------|----------------|
| Air Flow (h/m/l)             | m³/h    | 558/498/450      | 558/498/450   | 558/498/450   | 600/534/450   | 900/750/618   | 1050/840/738  | 1050/840/738     | 1260/900/780  | 1740/1434/1182 | 1800/1482/1230    | 2040/1578/1320 |
| Air Flow (h/m/l)             | l/s     | 155/138/125      | 155/138/125   | 155/138/125   | 167/148/125   | 250/208/172   | 291/233/205   | 291/233/205      | 350/250/217   | 483/398/328    | 500/412/342       | 567/438/367    |
| Sound pressure level (h/m/l) | dB(A)   | 34/32/30         | 34/32/30      | 34/32/30      | 35/33/30      | 35/33/30      | 38/35/33      | 38/35/33         | 40/37/34      | 42/39/36       | 43/40/37          | 46/42/39       |
| Sound power level (h)        | dB(A)   | 49               | 49            | 49            | 50            | 50            | 53            | 53               | 55            | 57             | 58                | 61             |
| Dimensions (HxWxD)           | mm      | 295x815x570      | 295x815x570   | 295x815x570   | 295x815x570   | 345x1180x570  | 345x1180x570  | 345x1180x570     | 345x1180x570  | 345x1600x570   | 345x1600x570      | 345x1600x570   |
| Weight                       | kg      | 19               | 19            | 19            | 19            | 26            | 26            | 26               | 26            | 36             | 36                | 36             |
| Panel                        |         | RBC-UW283PG(W)-E |               |               |               |               |               | RBC-UW803PG(W)-E |               |                | RBC-UW1403PG(W)-E |                |
| Panel dimensions (HxWxD)     | mm      | 20x1050x680      | 20x1050x680   | 20x1050x680   | 20x1050x680   | 20x1415x680   | 20x1415x680   | 20x1415x680      | 20x1415x680   | 20x1835x680    | 20x1835x680       | 20x1835x680    |
| Panel weight                 | kg      | 10               | 10            | 10            | 10            | 14            | 14            | 14               | 14            | 14             | 14                | 14             |
| Connecting pipe, gas         |         | 3/8"             | 3/8"          | 3/8"          | 1/2"          | 1/2"          | 5/8"          | 5/8"             | 5/8"          | 5/8"           | 5/8"              | 5/8"           |
| Connecting pipe, liquid      |         | 1/4"             | 1/4"          | 1/4"          | 1/4"          | 1/4"          | 3/8"          | 3/8"             | 3/8"          | 3/8"           | 3/8"              | 3/8"           |
| Drain port diameter          | mm      | 25               | 25            | 25            | 25            | 25            | 25            | 25               | 25            | 25             | 25                | 25             |
| Power supply                 | V-ph-Hz | 220/240-1-50     | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50     | 220/240-1-50  | 220/240-1-50   | 220/240-1-50      | 220/240-1-50   |



MMU-UP\_YHP  
**1-WAY CASSETTE**

**> NEW SIZES**



Toshiba's innovative slim-line 1-way cassette is simple to install and suitable for small areas, such as hotels, offices and reception rooms.

**Design**

- New white elegant panel design to match all types of interiors.

**Flexibility**

- 150mm chassis height adapted to low suspended ceilings conditions.
- Capacity from 0.3HP for high efficiency buildings.

**Comfort**

- Low noise level down to 25 dB(A) for quiet operation.
- 5-speed fan operation for perfect air flow management.
- Air purifier available as an option to keep a fresh and clean environment.

CAPACITY



0.9kW > 8kW

SOUND PRESSURE LEVEL



25dB(A)

**OUTDOOR UNITS**



Side Blow & MiNi SMMS-e



SMMS-u & SHRM Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AX33UYP-E  
RBC-AXU31-E



RBC-AMSU51E-ES/EN  
RBC-AMTU31-E  
RBC-ASCU11-E

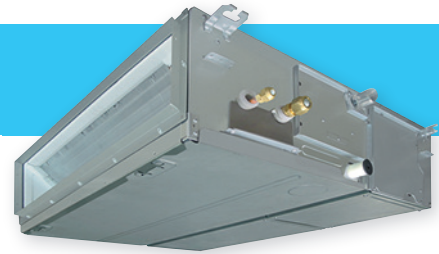
**1-WAY CASSETTE Performances**

| Indoor unit       | MMU- | UP0031YHP-E | UP0051YHP-E | UP0071YHP-E | UP0091YHP-E | UP0121YHP-E | UP0151YHP-E | UP0181YHP-E | UP0241YHP-E | UP0271YHP-E |
|-------------------|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Cooling capacity  | kW   | 0.9         | 1.7         | 2.2         | 2.8         | 3.6         | 4.5         | 5.6         | 7.1         | 8           |
| Heating capacity  | kW   | 1.3         | 1.9         | 2.5         | 3.2         | 4           | 5           | 6.3         | 8           | 9           |
| Power consumption | kW   | 0.015       | 0.015       | 0.017       | 0.018       | 0.018       | 0.025       | 0.027       | 0.042       | 0.05        |
| Running current   | A    | 0.15        | 0.15        | 0.18        | 0.19        | 0.2         | 0.24        | 0.26        | 0.34        | 0.41        |
| Starting current  | A    | 0.19        | 0.19        | 0.22        | 0.23        | 0.24        | 0.28        | 0.3         | 0.38        | 0.45        |

**1-WAY CASSETTE Physical data**

| Indoor unit                  | MMU-              | UP0031YHP-E     | UP0051YHP-E     | UP0071YHP-E     | UP0091YHP-E     | UP0121YHP-E     | UP0151YHP-E      | UP0181YHP-E      | UP0241YHP-E      | UP0271YHP-E      |  |
|------------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|--|
| Air flow (h/l)               | m <sup>3</sup> /h | 480/370/270     | 480/370/270     | 500/390/270     | 520/410/290     | 540/420/290     | 750/630/500      | 800/650/500      | 940/760/600      | 1000/860/720     |  |
| Air flow (h/l)               | l/s               | 133/103/75      | 133/103/75      | 150/133/117     | 150/133/117     | 150/133/117     | 208/175/139      | 222/181/139      | 261/211/167      | 278/239/200      |  |
| Sound pressure level (h/m/l) | dB(A)             | 37/33/25        | 37/33/25        | 38/34/25        | 39/35/26        | 40/36/26        | 39/36/33         | 40/37/33         | 46/42/37         | 47/44/41         |  |
| Dimensions (HxWxD)           | mm                | 150 x 990 x 450 | 150 x 990 x 450 | 150 x 990 x 450 | 150 x 990 x 450 | 150 x 990 x 450 | 150 x 1180 x 450 | 150 x 1180 x 450 | 150 x 1180 x 450 | 150 x 1180 x 450 |  |
| Weight                       | kg                | 14              | 14              | 14              | 14              | 14              | 15               | 15               | 15               | 15               |  |
| Panel                        |                   | RBC-UY32P-E     |                 |                 |                 |                 | RBC-UY42P-E      |                  |                  |                  |  |
| Panel dimensions (HxWxD)     | mm                | 30 x 1220 x 530 | 30 x 1220 x 530 | 30 x 1220 x 530 | 30 x 1220 x 530 | 30 x 1220 x 530 | 30 x 1410 x 530  | 30 x 1410 x 530  | 30 x 1410 x 530  | 30 x 1410 x 530  |  |
| Panel weight                 | kg                | 4               | 4               | 4               | 4               | 4               |                  |                  |                  |                  |  |
| Connecting pipe, gas         | in                | 3/8"            | 3/8"            | 3/8"            | 3/8"            | 3/8"            | 1/2"             | 1/2"             | 5/8"             | 5/8"             |  |
| Connecting pipe, liquid      | in                | 1/4"            | 1/4"            | 1/4"            | 1/4"            | 1/4"            | 1/4"             | 1/4"             | 3/8"             | 3/8"             |  |
| Drain port diameter          | mm                | 25              | 25              | 25              | 25              | 25              | 25               | 25               | 25               | 25               |  |
| Power supply                 | V-ph-Hz           | 220/240-1-50    | 220/240-1-50    | 220/240-1-50    | 220/240-1-50    | 220/240-1-50    | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     |  |

# MMD-UP\_BHP STANDARD DUCT



Whatever the shape of the room, this flexible model ensures a uniform temperature and air distribution for optimal end user comfort.

### Hidden

- Slimline design, with a depth of just 275mm helps to simply the installation, even when space is limited.
- Superior low noise operation. Noise output at low fan equates to just 23 dB(A).

### Customizable

- External static pressure can be raised up to 150 Pa for extensive ducting.
- Possible to connect a fresh air inlet duct to the unit, to maximise air quality and room air quality.
- Flexible design, allows the inlet air configuration to be configured between the standard rear inlet design or, from the underside of the unit.
- Built-in high-lift drain pump.
- Air discharge spigot available as an option (TCB-SF\*\*\*C6BPE).

CAPACITY



1.7kW > 18kW

SOUND PRESSURE LEVEL



23dB(A)

### OUTDOOR UNITS



Side Blow & Mini SMMS-e



SMMS-u & SHRM-Advance



SMMS-e & SHRM-e

### LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

## STANDARD DUCT Performances

| Indoor unit       | MMD- | UP0051BHP-E/TR | UP0071BHP-E/TR | UP0091BHP-E/TR | UP0121BHP-E/TR | UP0151BHP-E/TR | UP0181BHP-E/TR | UP0241BHP-E/TR | UP0271BHP-E/TR | UP0301BHP-E/TR | UP0361BHP-E/TR | UP0481BHP-E/TR | UP0561BHP-E/TR |
|-------------------|------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Cooling capacity  | kW   | 1,7            | 2,2            | 2,8            | 3,6            | 4,5            | 5,6            | 7,1            | 8,0            | 9,0            | 11,2           | 14,0           | 16,0           |
| Heating capacity  | kW   | 1,9            | 2,5            | 3,2            | 4,0            | 5,0            | 6,3            | 8,0            | 9,0            | 10,0           | 12,5           | 16,0           | 18,0           |
| Power consumption | kW   | 0,055          | 0,055          | 0,060          | 0,060          | 0,110          | 0,110          | 0,135          | 0,135          | 0,160          | 0,220          | 0,290          | 0,290          |
| Running current   | A    | 0,35           | 0,35           | 0,38           | 0,38           | 0,70           | 0,70           | 0,80           | 0,80           | 0,95           | 1,29           | 1,70           | 1,70           |
| Starting current  | A    | 0,75           | 0,75           | 0,64           | 0,64           | 1,24           | 1,24           | 1,58           | 1,58           | 1,78           | 2,19           | 2,66           | 2,66           |

## STANDARD DUCT Physical data

| Indoor unit                  | MMD-                | UP0051BHP-E/TR | UP0071BHP-E/TR | UP0091BHP-E/TR | UP0121BHP-E/TR | UP0151BHP-E/TR | UP0181BHP-E/TR | UP0241BHP-E/TR | UP0271BHP-E/TR | UP0301BHP-E/TR | UP0361BHP-E/TR | UP0481BHP-E/TR | UP0561BHP-E/TR |
|------------------------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Air Flow (h/m/l)             | m <sup>3</sup> /h   | 540/450/360    | 540/450/360    | 570/480/390    | 570/480/390    | 920/660/540    | 920/660/540    | 1320/1090/870  | 1320/1090/870  | 1450/1200/960  | 1920/1620/1380 | 2350/1920/1500 | 2350/1920/1500 |
| Air Flow (h/m/l)             | l/s                 | 150/125/100    | 150/125/100    | 158/133/108    | 158/133/108    | 256/183/150    | 256/183/150    | 367/303/242    | 367/303/242    | 403/333/267    | 533/450/383    | 653/533/417    | 653/533/417    |
| Sound pressure level (h/m/l) | dB(A)               | 29/26/23       | 29/26/23       | 30/26/23       | 30/26/23       | 33/29/25       | 33/29/25       | 33/30/27       | 33/30/27       | 36/31/27       | 36/34/31       | 40/36/33       | 40/36/33       |
| Sound power level (h)        | dB(A)               | 51             | 51             | 52             | 52             | 55             | 55             | 58             | 58             | 58             | 63             | 63             | 63             |
| Dimensions (HxWxD)           | mm                  | 275x700x750    | 275x700x750    | 275x700x750    | 275x700x750    | 275x700x750    | 275x700x750    | 275x1000x750   | 275x1000x750   | 275x1000x750   | 275x1400x750   | 275x1400x750   | 275x1400x750   |
| Weight                       | kg                  | 23             | 23             | 23             | 23             | 23             | 23             | 30             | 30             | 30             | 40             | 40             | 40             |
| External static pressure     | Pa                  | 30             | 30             | 30             | 30             | 30             | 30             | 40             | 40             | 40             | 50             | 50             | 50             |
| Max external static pressure | Pa                  | 150            | 150            | 150            | 150            | 150            | 150            | 150            | 150            | 150            | 150            | 150            | 150            |
| Connecting pipe, gas         | in                  | 3/8"           | 3/8"           | 3/8"           | 3/8"           | 1/2"           | 1/2"           | 5/8"           | 5/8"           | 5/8"           | 5/8"           | 5/8"           | 5/8"           |
| Connecting pipe, liquid      | in                  | 1/4"           | 1/4"           | 1/4"           | 1/4"           | 1/4"           | 1/4"           | 3/8"           | 3/8"           | 3/8"           | 3/8"           | 3/8"           | 3/8"           |
| Drain port diameter          | mm                  | 25             | 25             | 25             | 25             | 25             | 25             | 25             | 25             | 25             | 25             | 25             | 25             |
| Power supply                 | V <sub>ph</sub> -Hz | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   |

MMD-UP\_HP  
**HIGH STATIC PRESSURE DUCT**



This is Toshiba's most powerful ducted unit delivering air flows up to 4800m<sup>3</sup>/h with an external static pressure up to 250 Pa.

**Comfort**

- This ultra-flexible, invisible and silent unit creates a pleasant and comfortable environment for a wide range of applications, such as hotels, offices and shops.
- Diffuser design flexibility to select the right layout for the room shape and end user requirements.

**Adaptability**

- Unobtrusive, flexible and compact (298mm depth), it can be installed easily and discretely into any interior, making it the ideal solution for both new and refurbishing projects.
- Static pressure can be set to 7 levels from 50 to 250Pa.

**Healthy**

- Renewal of indoor ambient air with the constant fresh air supply via the field installed fresh air intake connection.
- Long-life filter and air discharge spigot available as an option.
- Built-in high-lift drain pump (sizes 18 to 56).

CAPACITY



5.6kW >31.5kW

SOUND PRESSURE LEVEL



37dB(A)

**OUTDOOR UNITS**



Side Blow & MiNi SMMS-e



SMMS-u & SHRM-Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31  
RBC-ASCU11-E

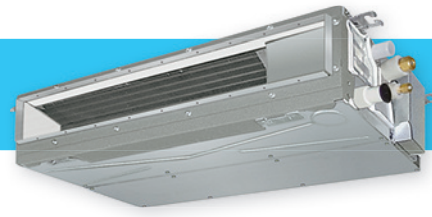
**HIGH STATIC PRESSURE DUCT Performances**

| Indoor unit       | MMD- | UP0181HP-E/TR | UP0241HP-E/TR | UP0271HP-E/TR | UP0361HP-E/TR | UP0481HP-E/TR | UP0561HP-E/TR | UP0721HP-E1/TR1 | UP0961HP-E1/TR1 |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|-----------------|-----------------|
| Cooling capacity  | kW   | 5.6           | 7.1           | 8.0           | 11.2          | 14.0          | 16.0          | 22.4            | 28.0            |
| Heating capacity  | kW   | 6.3           | 8.0           | 9.0           | 12.5          | 16.0          | 18.0          | 25.0            | 31.5            |
| Power consumption | kW   | 0.125         | 0.140         | 0.190         | 0.230         | 0.300         | 0.400         | 0.540           | 0.790           |
| Running current   | A    | 0.82          | 0.92          | 1.16          | 1.39          | 1.81          | 2.48          | 2.83            | 3.77            |
| Starting current  | A    | 1.43          | 1.55          | 1.86          | 2.02          | 2.57          | 3.25          | 4.90            | 6.74            |

**HIGH STATIC PRESSURE DUCT Physical data**

| Indoor unit                  | MMD-              | UP0181HP-E/TR | UP0241HP-E/TR | UP0271HP-E/TR  | UP0361HP-E/TR  | UP0481HP-E/TR  | UP0561HP-E/TR  | UP0721HP-E1/TR1 | UP0961HP-E1/TR1 |
|------------------------------|-------------------|---------------|---------------|----------------|----------------|----------------|----------------|-----------------|-----------------|
| Air Flow (h/m/l)             | m <sup>3</sup> /h | 1100/990/900  | 1200/1050/960 | 1500/1350/1200 | 1920/1560/1340 | 2340/1980/1695 | 2760/2340/1920 | 3800/3200/2500  | 4800/4200/3500  |
| Air Flow (h/m/l)             | l/s               | 306/275/250   | 333/292/267   | 417/375/333    | 533/433/372    | 650/550/471    | 767/650/533    | 1056/889/694    | 1333/1167/972   |
| Sound pressure level (h/m/l) | dB(A)             | 37/33/31      | 38/34/31      | 43/41/38       | 41/37/34       | 44/41/38       | 46/44/41       | 44/40/36        | 46/42/38        |
| Sound power level (h/m/l)    | dB(A)             | 60/54/50      | 60/55/51      | 60/55/51       | 62/57/53       | 65/62/54       | 68/64/56       | 79              | 81              |
| Dimensions (HxWxD)           | mm                | 298x1000x750  | 298x1000x750  | 298x1000x750   | 298x1400x750   | 298x1400x750   | 298x1400x750   | 448x1400x900    | 448x1400x900    |
| Weight                       | kg                | 34            | 34            | 34             | 43             | 43             | 43             | 97              | 97              |
| External static pressure     | Pa                | 100           | 100           | 100            | 100            | 100            | 100            | 150             | 150             |
| Max external static pressure | Pa                | 200           | 200           | 200            | 200            | 200            | 200            | 250             | 250             |
| Connecting pipe, gas         | in                | 1/2"          | 5/8"          | 5/8"           | 5/8"           | 5/8"           | 5/8"           | 7/8"            | 7/8"            |
| Connecting pipe, liquid      | in                | 1/4"          | 3/8"          | 3/8"           | 3/8"           | 3/8"           | 3/8"           | 1/2"            | 1/2"            |
| Drain port diameter          | mm                | 25            | 25            | 25             | 25             | 25             | 25             | 25              | 25              |
| Power supply                 | V-ph-Hz           | 220/240-1-50  | 220/240-1-50  | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50    | 220/240-1-50    |

MMD-UP\_SPHY  
SLIM DUCT



> NEW AIR DIFFUSION ACCESSORY

Whatever installed in a ceiling void or suspended ceiling, Toshiba slim duc offers the best compromise between sound level, air flow and chassis dimensions.

**Flexibility**

- Compact chassis with 210mm height and 450mm depth whatever the capacity, for integration in most projects.
- Capacity from 0.3HP for high efficiency buildings.
- Static pressure up to 50Pa set directly on the duct or by using a wired remote controller.

**Comfort**

- Quiet operation with a noise level down to 25 dB(A) perfect for bedrooms.
- 5-speed fan operation for perfect air flow adaptation.

**Easy installation**

- Built-in drain pump.
- Air suction from rear or bottom.

CAPACITY



0.9kW > 8kW

SOUND PRESSURE LEVEL



25dB(A)

**OUTDOOR UNITS**



Side Blow & Mini SMMS-e



SMMS-u & SHRM-Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU31-E



RBC-AMSU51E-ES/EN  
RBC-AMTU31-E  
RBC-ASCU11-E

**SLIM DUCT Performances**

| Indoor unit      | MMD-              | UP0031SPHY-E | UP0051SPHY-E  | UP0071SPHY-E  | UP0091SPHY-E  | UP0121SPHY-E  | UP0151SPHY-E  | UP0181SPHY-E  | UP0241SPHY-E  | UP0271SPHY-E  |               |
|------------------|-------------------|--------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity | kW                | 0,9          | 1,7           | 2,2           | 2,8           | 3,6           | 4,5           | 5,6           | 7,1           | 8,0           |               |
| Heating capacity | kW                | 1            | 1,9           | 2,5           | 3,2           | 4,0           | 5,0           | 6,3           | 8,0           | 9,0           |               |
| Factory setting  | Power consumption | kW           | 0.018 / 0.018 | 0.020 / 0.020 | 0.026 / 0.026 | 0.029 / 0.029 | 0.031 / 0.031 | 0.035 / 0.035 | 0.044 / 0.044 | 0.067 / 0.067 | 0.072 / 0.072 |
|                  | Running current   | A            | 0.34 / 0.36   | 0.36 / 0.37   | 0.40 / 0.42   | 0.42 / 0.44   | 0.44 / 0.46   | 0.47 / 0.49   | 0.53 / 0.56   | 0.69 / 0.73   | 0.74 / 0.78   |
|                  | Starting current  | A            | 0.60 / 0.63   | 0.62 / 0.65   | 0.69 / 0.73   | 0.73 / 0.77   | 0.77 / 0.81   | 0.82 / 0.86   | 0.92 / 0.97   | 1.21 / 1.27   | 1.30 / 1.36   |
| Standard ESP     | Power consumption | kW           | 0.024 / 0.024 | 0.026 / 0.026 | 0.035 / 0.035 | 0.038 / 0.038 | 0.043 / 0.043 | 0.046 / 0.046 | 0.054 / 0.054 | 0.086 / 0.086 | 0.092 / 0.092 |
|                  | Running current   | A            | 0.37 / 0.39   | 0.40 / 0.41   | 0.46 / 0.48   | 0.48 / 0.50   | 0.52 / 0.54   | 0.54 / 0.57   | 0.60 / 0.63   | 0.83 / 0.87   | 0.88 / 0.93   |
| UP024-027:40Pa   | Starting current  | A            | 0.65 / 0.69   | 0.69 / 0.73   | 0.81 / 0.85   | 0.84 / 0.88   | 0.90 / 0.95   | 0.95 / 0.99   | 1.04 / 1.10   | 1.45 / 1.53   | 1.54 / 1.62   |

**SLIM DUCT Physical data**

| Indoor unit   | MMD-    | UP0031SPHY-E        | UP0051SPHY-E        | UP0071SPHY-E        | UP0091SPHY-E        | UP0121SPHY-E        | UP0151SPHY-E        | UP0181SPHY-E        | UP0241SPHY-E          | UP0271SPHY-E          |
|---|---------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|-----------------------|-----------------------|
| Air Flow (H/M+/M/L+/L)                              | m³/h    | 410/390/370/360/350 | 450/430/410/390/380 | 540/500/460/430/400 | 570/530/500/450/420 | 600/550/520/470/440 | 690/660/640/590/550 | 780/760/730/690/650 | 1080/1010/950/900/860 | 1140/1060/980/940/910 |
| Air Flow (H/M+/M/L+/L)                              | l/s     | 114/108/103/100/97  | 125/119/114/108/106 | 150/139/128/119/111 | 158/147/139/125/117 | 167/153/144/131/122 | 192/183/178/164/153 | 217/211/203/192/181 | 300/281/264/250/239   | 317/294/272/261/253   |
| Sound pressure level*, rear suction (H/M+/M/L+/L)   | dB(A)   | 29/28/27/26/25      | 30/29/28/27/26      | 31/30/29/28/26      | 32/31/29/28/26      | 33/32/30/29/27      | 33/31/30/29/28      | 34/33/32/31/29      | 36/35/33/32/30        | 37/36/34/33/32        |
| Sound pressure level*, bottom suction (H/M+/M/L+/L) | dB(A)   | 37/36/35/34/32      | 39/38/37/35/34      | 41/40/39/38/35      | 42/41/40/38/36      | 44/42/40/39/37      | 42/40/39/38/37      | 44/43/42/41/39      | 47/46/44/43/41        | 48/47/45/44/43        |
| Sound power level* (H/M+/M/L+/L)                    |         | 46/45/44/43/42      | 49/47/46/45/44      | 52/51/49/47/45      | 54/52/50/48/46      | 54/51/50/48/46      | 52/51/50/49/46      | 56/55/54/52/51      | 60/58/56/55/53        | 61/59/58/56/55        |
| Dimensions (HxWxD)                                  | mm      | 210x700x450         |                     |                     |                     | 210x900x450         |                     |                     | 210x1110x450          |                       |
| Weight  | kg      | 16                  |                     |                     |                     | 18                  |                     |                     | 21                    |                       |
| External static pressure                            | Pa      | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 10                  | 10                    | 10                    |
| Max external static pressure                        | Pa      | 50                  | 50                  | 50                  | 50                  | 50                  | 50                  | 50                  | 50                    | 50                    |
| Connecting pipe, gas                                |         | 3/8"                | 3/8"                | 3/8"                | 3/8"                | 3/8"                | 1/2"                | 1/2"                | 5/8"                  | 5/8"                  |
| Connecting pipe, liquid                             |         | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 1/4"                | 3/8"                  | 3/8"                  |
| Drain port diameter                                 | mm      | 25                  | 25                  | 25                  | 25                  | 25                  | 25                  | 25                  | 25                    | 25                    |
| Power supply  | V-ph-Hz | 220/240-1-50        |                     | 220/240-1-50        |                     | 220/240-1-50        |                     | 220/240-1-50        |                       | 220/240-1-50          |

\* Factory setting (10Pa)

**SLIM DUCT**

**3DW DIFFUSOR FOR SLIM DUCT**

**> NEW ACCESSORY**

Enhanced your Slim Duct installation with Toshiba's motorized 3DW diffusor for a nice design and an optimized air diffusion.

**Increased comfort**

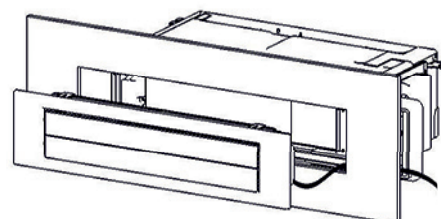
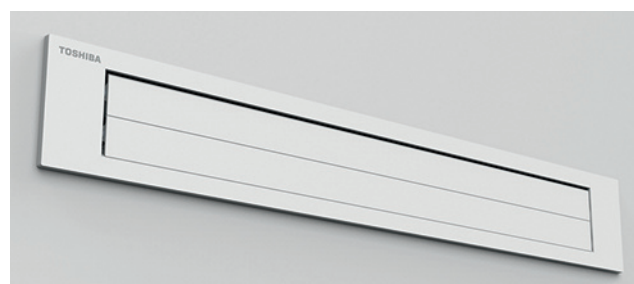
- Motorized horizontal and vertical louvers to perfectly orientate the air flow.
- Optimized air diffusion with swing mode.
- 5Pa pressure drop to not disturb the air flow.

**Elegant**

- A color that perfectly fits any type of interiors.
- A sleek design with 2 louvers for sophisticated interiors.

**Adaptable**

- 3 sizes to cover the full slim duct lineup.
- Maximum 1m duct between the louver and the unit for full adaption to every installation conditions.
- Directly wired to indoor units.



RESIDENTIAL AIR-TO-AIR

**3DW DIFFUSOR Physical data**

| Model name                                      | TCB-TDL0141SDY-E    |                      | TCB-TDL0181SDY-E                              | TCB-TDL0271SDY-E      |
|---|---------------------|----------------------|---|-----------------------|
| Description                                     |                     |                      | Motorized horizontal louver for slim duct     |                       |
| Compatible with slim duct size                  | MMD-UP0xxx1SPHY-E   | 003 to 012           | 015 & 018                                     | 024 & 027             |
| Dimensions (H x L x D)<br>*: from panel surface | mm                  | 180 x 810 x 88 (*99) | 180 x 1010 x 88 (*99)                         | 180 x 1210 x 88 (*99) |
| Distance from duct to louver                    | min                 |                      | 91mm  |                       |
|   | max                 |                      | 1000mm  |                       |
| Pressure lost                                   | Pa                  |                      | 5   |                       |
| Color   | Mansell             |                      | 5PB9/1  |                       |
|   | RAL (approximation) |                      | 250 92 05                                     |                       |
| Remote controller needed to operate             | Horizontal louver   |                      | RBC-ASCU11-E, RBC-AMTU31-E, RBC-AMSU51E/ES/EN |                       |

# MMC-UP\_HP UNDER CEILING



The simple, yet elegant design helps to create a pleasant and relaxing environment, quickly conditioning the room air to the desired temperature.

### Comfort

- Optimum louver control: Air flow angle is automatically set to the most suitable setting according to your cooling or heating needs, and an automatic swing mode enables air flow to reach all areas in the room.
- High air flow distance up to 8m.
- Low noise levels, thanks to high diameter fan and DC motor.

### Adaptability

- This design, represents the best possible solution, where there is a lack of space or absence of a ceiling void.
- The simplicity of the design and the installations of the unit, make it suited for a wide range of applications, but particularly refurbishment projects.

### Reliability

- Self-cleaning function, enables the air flow to remain constant as well as fresh and reduces the frequency of service visits.
- Drain pump available as an option.

CAPACITY



4.5kW > 18kW

SOUND PRESSURE LEVEL



28dB(A)

### OUTDOOR UNITS



Side Blow  
& Mini SMMS-e



SMMS-u  
& SHRM Advance



SMMS-e  
& SHRM-e

### LOCAL CONTROLS



RBC-AXU31C-E  
RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

## UNDER CEILING Performances

| Indoor unit       | MMC- | UP0151HP-E | UP0181HP-E | UP0241HP-E | UP0271HP-E | UP0361HP-E | UP0481HP-E | UP0561HP-E |
|-------------------|------|------------|------------|------------|------------|------------|------------|------------|
| Cooling capacity  | kW   | 4,5        | 5,6        | 7,1        | 8,0        | 11,2       | 14,0       | 16,0       |
| Heating capacity  | kW   | 5,0        | 6,3        | 8,0        | 9,0        | 12,5       | 16,0       | 18,0       |
| Power consumption | kW   | 0,033      | 0,034      | 0,067      | 0,067      | 0,083      | 0,083      | 0,111      |
| Running current   | A    | 0,38       | 0,39       | 0,68       | 0,68       | 0,80       | 0,80       | 1,03       |
| Starting current  | A    | 0,54       | 0,55       | 0,97       | 0,97       | 1,16       | 1,16       | 1,49       |

## UNDER CEILING Physical data

| Indoor unit                  | MMC-              | UP0151HP-E   | UP0181HP-E   | UP0241HP-E    | UP0271HP-E    | UP0361HP-E     | UP0481HP-E     | UP0561HP-E     |
|------------------------------|-------------------|--------------|--------------|---------------|---------------|----------------|----------------|----------------|
| Air Flow (h/m/l)             | m <sup>3</sup> /h | 840/690/540  | 960/720/540  | 1440/1020/750 | 1440/1020/750 | 1860/1350/1020 | 1860/1530/1200 | 2040/1650/1260 |
| Air Flow (h/m/l)             | l/s               | 233/192/150  | 267/200/150  | 400/283/208   | 400/283/208   | 517/375/283    | 517/425/333    | 567/458/350    |
| Sound pressure level (h/m/l) | dB(A)             | 36/34/28     | 37/35/28     | 41/36/29      | 41/36/29      | 44/38/32       | 44/41/35       | 46/42/36       |
| Sound power level (h)        | dB(A)             | 51           | 52           | 56            | 56            | 59             | 59             | 61             |
| Dimensions (HxWxD)           | mm                | 235x950x690  | 235x950x690  | 235x1270x690  | 235x1270x690  | 235x1586x690   | 235x1586x690   | 235x1586x690   |
| Weight                       | kg                | 24           | 24           | 30            | 30            | 39             | 39             | 39             |
| Connecting pipe, gas         | in                | 1/2"         | 1/2"         | 5/8"          | 5/8"          | 5/8"           | 5/8"           | 5/8"           |
| Connecting pipe, liquid      | in                | 1/4"         | 1/4"         | 3/8"          | 3/8"          | 3/8"           | 3/8"           | 3/8"           |
| Drain port diameter          | mm                | 20           | 20           | 20            | 20            | 20             | 20             | 20             |
| Power supply                 | V-ph-Hz           | 220/240-1-50 | 220/240-1-50 | 220/240-1-50  | 220/240-1-50  | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   |

MML-AP\_NH  
**BI-FLOW CONSOLE**



Innovative and compact unit to be installed on the floor and in low wall applications, fits perfectly under the window sills or in a low ceiling attic.

**Comfort**

- Unique floor heating function to deliver a powerful flow at floor level for a uniform and comfortable room heating
- Compact and modern design in all three dimensions (60x70x22cm); single size for all range capacities.
- Bi-flow. Two outlets for complete personalized flow: flow intensity and air direction control.

**Healthy**

- Toshiba IAQ filter filtration system, includes extremely powerful components and deodorizing effects.
- Ultra pure filter (818F0050) available as an option to ensure healthy and pleasant atmosphere.

**Control**

- Brightness level control of the display unit to reduce the led light glow.
- Wireless remote control with a pre-set function and a unique hi-power button for immediate and fast air delivery.

CAPACITY



2.2kW > 6.3kW

SOUND PRESSURE LEVEL



26dB(A)

**OUTDOOR UNITS**



Side Blow & MiNi SMMS-e



SMMS-u



SMMS-e & SHRM-e

**LOCAL CONTROLS**



IR control (included)



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

**BI-FLOW CONSOLE Performances**

| Indoor unit       | MML- | UP0071NHP-E/TR | UP0091NHP-E/TR | UP0121NHP-E/TR | UP0151NHP-E/TR | UP0181NHP-E/TR |
|-------------------|------|----------------|----------------|----------------|----------------|----------------|
| Cooling capacity  | kW   | 2,2            | 2,8            | 3,6            | 4,5            | 5,6            |
| Heating capacity  | kW   | 2,5            | 3,2            | 4,0            | 5,0            | 6,3            |
| Power consumption | kW   | 0,021          | 0,021          | 0,025          | 0,034          | 0,052          |
| Running current   | A    | 0,20           | 0,20           | 0,23           | 0,29           | 0,42           |
| Starting current  | A    | 0,26           | 0,26           | 0,30           | 0,38           | 0,55           |

**BI-FLOW CONSOLE Physical data**

| Indoor unit                  | MML-    | UP0071NHP-E/TR | UP0091NHP-E/TR | UP0121NHP-E/TR | UP0151NHP-E/TR | UP0181NHP-E/TR |
|------------------------------|---------|----------------|----------------|----------------|----------------|----------------|
| Air Flow (h/m/l)             | m³/h    | 510/366/282    | 510/366/282    | 552/408/324    | 624/468/384    | 726/528/426    |
| Air Flow (h/m/l)             | l/s     | 142/102/78     | 142/102/78     | 153/113/90     | 173/130/107    | 202/147/118    |
| Sound pressure level (h/m/l) | dB(A)   | 38/32/26       | 38/32/26       | 40/34/29       | 43/37/31       | 47/40/34       |
| Sound power level (h/m/l)    | dB(A)   | 53/47/41       | 53/47/41       | 55/49/44       | 58/52/46       | 62/55/49       |
| Dimensions (HxWxD)           | mm      | 600x700x220    | 600x700x220    | 600x700x220    | 600x700x220    | 600x700x220    |
| Weight                       | kg      | 17             | 17             | 17             | 17             | 17             |
| Connecting pipe, gas         |         | 3/8"           | 3/8"           | 3/8"           | 1/2"           | 1/2"           |
| Connecting pipe, liquid      |         | 1/4"           | 1/4"           | 1/4"           | 1/4"           | 1/4"           |
| Drain port diameter          | mm      | 16             | 16             | 16             | 16             | 16             |
| Power supply                 | V-ph-Hz | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   | 220/240-1-50   |

MML-UP\_H  
CONSOLE



The simple design of this unit represents the perfect choice, for refurbishment projects, where the available space is limited, or where neither the walls nor ceiling are able to house the unit.

**Comfort**

- The units have as standard the ability to flow air in a horizontal direction, however with a simple change during the installation process, the unit can be configured, so that the air flow goes in the upward direction, maximising the flexibility of the design.

**Adaptability**

- With just one single cabinet size, for all capacity models, allows a single model range to be installed within a building, giving the installation a uniform and clean look.
- Minimum space required for installation and servicing.
- Refrigerant and drain piping with four installation possibilities: top, rear, left or right hand of the unit.

CAPACITY



2.2kW > 8kW

SOUND PRESSURE LEVEL



35dB(A)

**OUTDOOR UNITS**



Side Blow & Mini SMMS-e



SMMS-u



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

**CONSOLE Performances**

| Indoor unit       | MML- | UP0071H-E/TR | UP0091H-E/TR | UP0121H-E/TR | UP0151H-E/TR | UP0181H-E/TR | UP0241H-E/TR |
|-------------------|------|--------------|--------------|--------------|--------------|--------------|--------------|
| Cooling capacity  | kW   | 2,2          | 2,8          | 3,6          | 4,5          | 5,6          | 7,1          |
| Heating capacity  | kW   | 2,5          | 3,2          | 4,0          | 5,0          | 6,3          | 8,0          |
| Power consumption | kW   | 0,056        | 0,056        | 0,092        | 0,092        | 0,102        | 0,102        |
| Running current   | A    | 0,26         | 0,26         | 0,43         | 0,43         | 0,47         | 0,47         |
| Starting current  | A    | 0,60         | 0,60         | 0,80         | 0,80         | 1,10         | 1,10         |

**CONSOLE Physical data**

| Indoor unit                  | MML-              | UP0071H-E/TR | UP0091H-E/TR | UP0121H-E/TR | UP0151H-E/TR | UP0181H-E/TR | UP0241H-E/TR |
|------------------------------|-------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Air Flow (h/m/l)             | m <sup>3</sup> /h | 480/420/360  | 480/420/360  | 900/780/650  | 900/780/650  | 1080/930/780 | 1080/930/780 |
| Air Flow (h/m/l)             | l/s               | 133/117/100  | 133/117/100  | 250/217/181  | 250/217/181  | 300/258/217  | 300/258/217  |
| Sound pressure level (h/m/l) | dB(A)             | 39/37/35     | 39/37/35     | 45/41/38     | 45/41/38     | 49/44/39     | 49/44/39     |
| Sound power level (h)        | dB(A)             | 54           | 54           | 60           | 60           | 64           | 64           |
| Dimensions (HxWxD)           | mm                | 630x950x230  | 630x950x230  | 630x950x230  | 630x950x230  | 630x950x230  | 630x950x230  |
| Weight                       | kg                | 37           | 37           | 37           | 37           | 40           | 40           |
| Connecting pipe, gas         |                   | 3/8"         | 3/8"         | 3/8"         | 1/2"         | 1/2"         | 5/8"         |
| Connecting pipe, liquid      |                   | 1/4"         | 1/4"         | 1/4"         | 1/4"         | 1/4"         | 3/8"         |
| Drain port diameter          | mm                | 20           | 20           | 20           | 20           | 20           | 20           |
| Power supply                 | V-ph-Hz           | 220/240-1-50 | 220/240-1-50 | 220/240-1-50 | 220/240-1-50 | 220/240-1-50 | 220/240-1-50 |



MML-UP\_BH  
**CONCEALED CONSOLE**



This unit has been designed to be fitted easily into a compact space behind a decorative panel, allowing the unit to blend into any room interior. This chassis is compact and slim, it is very easy to install and to conceal behind a decorative panel to blend with any room interior.

**Specialized**

- Not only is this unit ideal for office and other commercial buildings, it fits perfectly for specialist applications such as a library or hospital building.

**Easy to hidden**

- Very compact design, which can be installed under a window sill, that is only 600mm in height.
- With its limited depth of only 200mm, the unit can be installed along the wall ensuring maximum space saving.

**Accessibility**

- Removable split front panel with immediate access to the main components.

CAPACITY



2.2kW > 8kW

SOUND PRESSURE LEVEL



32dB(A)

**OUTDOOR UNITS**



Side Blow & Mini SMMS-e



SMMS-u



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

**CONCEALED CONSOLE Performances**

| Indoor unit       | MML- | UP0071BH-E/TR | UP0091BH-E/TR | UP0121BH-E/TR | UP0151BH-E/TR | UP0181BH-E/TR | UP0241BH-E/TR |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity  | kW   | 2,2           | 2,8           | 3,6           | 4,5           | 5,6           | 7,1           |
| Heating capacity  | kW   | 2,5           | 3,2           | 4,0           | 5,0           | 6,3           | 8,0           |
| Power consumption | kW   | 0.056         | 0.056         | 0.056         | 0.090         | 0.090         | 0.095         |
| Running current   | A    | 0.25          | 0.25          | 0.25          | 0.45          | 0.45          | 0.46          |
| Starting current  | A    | 0.60          | 0.60          | 0.60          | 0.80          | 0.80          | 1,00          |

**CONCEALED CONSOLE Physical data**

| Indoor unit                  | MML-              | UP0071BH-E/TR | UP0091BH-E/TR | UP0121BH-E/TR | UP0151BH-E/TR | UP0181BH-E/TR | UP0241BH-E/TR |
|------------------------------|-------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Air Flow (h/m/l)             | m <sup>3</sup> /h | 460/400/300   | 460/400/300   | 460/400/300   | 740/600/490   | 740/600/490   | 950/790/640   |
| Air Flow (h/m/l)             | l/s               | 128/111/83    | 128/111/83    | 128/111/83    | 206/167/136   | 206/167/136   | 264/219/178   |
| Sound pressure level (h/m/l) | dB(A)             | 36/34/32      | 36/34/32      | 36/34/32      | 36/34/32      | 36/34/32      | 42/37/33      |
| Sound power level (h)        | dB(A)             | 54            | 54            | 54            | 54            | 54            | 60            |
| Dimensions (HxWxD)           | mm                | 600x745x220   | 600x745x220   | 600x745x220   | 600x1045x220  | 600x1045x220  | 600x1045x220  |
| Weight                       | kg                | 21            | 21            | 21            | 29            | 29            | 29            |
| Connecting pipe, gas         |                   | 3/8"          | 3/8"          | 3/8"          | 1/2"          | 1/2"          | 5/8"          |
| Connecting pipe, liquid      |                   | 1/4"          | 1/4"          | 1/4"          | 1/4"          | 1/4"          | 3/8"          |
| Drain port diameter          | mm                | 20            | 20            | 20            | 20            | 20            | 20            |
| Power supply                 | V-ph-Hz           | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  | 220/240-1-50  |

# MMF-UP\_H FLOOR STANDING



This system is particularly suitable to air condition large rooms like shops or showrooms or with low ceilings like restaurants or lofts.

### Optimized air flow

- The unit has been designed to have particularly high air flow rates, which correspond into superior air throw values.
- The wide and automatic vertical and horizontal air distribution angles, allow the air flow distribution to reach all areas, even when installed into large rooms.
- High air flows: from 180 l/s to 600 l/s (660 m<sup>3</sup>/h to 2160 m<sup>3</sup>/h).
- Wide air distribution angle: up to 150°.

### Wide range

- Large capacity range: cooling capacities from 4.5 kW to 16 kW and heating capacities from 5 kW to 18 kW.

### Installation everywhere

- The unit can be installed in the corner of the room, in this case the automatic swing angle can be fixed to deliver the air only where it is needed.
- Very small footprint: 0.128 m<sup>2</sup> up to 8 kW and 0.243 m<sup>2</sup> up to 16 kW.



CAPACITY



4.5kW > 18kW

SOUND PRESSURE LEVEL



37dB(A)

### OUTDOOR UNITS



Side Blow  
& Mini SMMS-e



SMMS-u



SMMS-e  
& SHRM-e

### LOCAL CONTROLS



RBC-AXU31-E



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU1U1-E

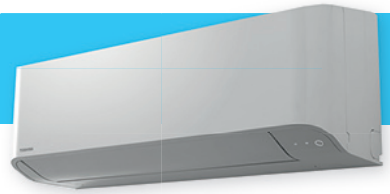
## FLOOR STANDING Performances

| Indoor unit       | MMF- | UP0151H-E     | UP0181H-E     | UP0241H-E     | UP0271H-E     | UP0361H-E     | UP0481H-E     | UP0561H-E     |
|-------------------|------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Cooling capacity  | kW   | 4.5           | 5.6           | 7.1           | 8.0           | 11.2          | 14.0          | 16.0          |
| Heating capacity  | kW   | 5.0           | 6.3           | 8.0           | 9.0           | 12.5          | 16.0          | 18.0          |
| Power consumption | kW   | 0.053 / 0.053 | 0.053 / 0.053 | 0.087 / 0.087 | 0.087 / 0.087 | 0.133 / 0.133 | 0.158 / 0.158 | 0.158 / 0.158 |
| Running current   | A    | 0.37 / 0.38   | 0.37 / 0.38   | 0.55 / 0.58   | 0.55 / 0.58   | 0.82 / 0.86   | 0.97 / 1.02   | 0.97 / 1.02   |
| Starting current  | A    | 0.48 / 0.50   | 0.48 / 0.50   | 0.71 / 0.75   | 0.71 / 0.75   | 1.06 / 1.11   | 1.27 / 1.33   | 1.27 / 1.33   |

## FLOOR STANDING Physical data

| Indoor unit                | MMF-              | UP0151H-E                      | UP0181H-E                      | UP0241H-E                      | UP0271H-E                      | UP0361H-E                      | UP0481H-E                      | UP0561H-E                      |
|----------------------------|-------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Air flow (h/l)             | m <sup>3</sup> /h | 820/700/600                    | 820/700/600                    | 930/770/640                    | 930/770/640                    | 1660/1420/1170                 | 1760/1480/1350                 | 1760/1480/1350                 |
| Air flow (h/l)             | l/s               | 228/194/167                    | 228/194/167                    | 258/214/178                    | 258/214/178                    | 461/394/325                    | 489/411/375                    | 489/411/375                    |
| Sound pressure level (h/l) | dB(A)             | 46/42/38                       | 46/42/38                       | 50/45/41                       | 50/45/41                       | 51/46/41                       | 53/48/45                       | 53/48/45                       |
| Dimensions (HxWxD)         | mm                | 1750 x 600 x 210               | 1750 x 600 x 210               | 1750 x 600 x 210               | 1750 x 600 x 210               | 1750 x 600 x 390               | 1750 x 600 x 390               | 1750 x 600 x 390               |
| Weight                     | kg                | 46                             | 46                             | 47                             | 47                             | 61                             | 61                             | 61                             |
| Connecting pipe, gas       | in                | 1/2" φ12.7                     | 1/2" φ12.7                     | 1/2" φ15.9                     | 1/2" φ15.9                     | 1/2" φ15.9                     | 1/2" φ15.9                     | 1/2" φ15.9                     |
| Connecting pipe, liquid    | in                | 1/4" φ6.4                      | 1/4" φ6.4                      | 3/8" φ9.5                      | 3/8" φ9.5                      | 3/8" φ9.5                      | 3/8" φ9.5                      | 3/8" φ9.5                      |
| Drain port diameter        | mm                | 20                             | 20                             | 20                             | 20                             | 20                             | 20                             | 20                             |
| Power supply               | V-ph-Hz           | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 | 220-240-1-50 /<br>208-230-1-60 |

MMK-UP\_HP(L)  
**HIGH-WALL (STD & WITHOUT PMV)**



Particularly compact, this high-wall is perfect for limited spaces, such as offices or small shops.

**Compact and design**

- The unit is compact and lightweight, it is perfect for installation above the doors or in narrow corridors.
- New appearance, simple, elegant with nice led display.

**Healthy**

- Special fin coating for Healthy & Fresh air.
- Ultra pure filter (818F0050) available as an option to ensure healthy and pleasant atmosphere.

**Easy to use**

- Remote controller for easy access to the preferred setting.
- Filters for dust collection can be easily removed by lifting the front panel and can be cleaned easily washing them under running water.

CAPACITY



1.7kW > 11.2kW

SOUND PRESSURE LEVEL



25dB(A)

**OUTDOOR UNITS**



Side Blow & MiNi SMMS-e



SMMS-u & SHRM Advance



SMMS-e & SHRM-e

**LOCAL CONTROLS**



IR control (included)



RBC-AMSU51E-ES(EN)  
RBC-AMTU31-E  
RBC-ASCU11-E

**HIGH-WALL Performances**

| Indoor unit       | With PMV     | MMK- UP0031HP-E/TR  | UP0051HP-E/TR  | UP0071HP-E/TR  | UP0091HP-E/TR  | UP0121HP-E/TR  | UP0151HP-E/TR  | UP0181HP-E/TR  | UP0241HP-E/TR  | UP0271HP-E/TR | UP0301HP-E/TR | UP0361HP-E/TR |
|-------------------|--------------|---------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|---------------|
|                   | Without PMV* | MMK- UP0031HPL-E/TR | UP0051HPL-E/TR | UP0071HPL-E/TR | UP0091HPL-E/TR | UP0121HPL-E/TR | UP0151HPL-E/TR | UP0181HPL-E/TR | UP0241HPL-E/TR |               |               |               |
| Cooling capacity  | kW           | 0.9                 | 1.7            | 2.2            | 2.8            | 3.6            | 4.5            | 5.6            | 7.1            | 8.0           | 9             | 10            |
| Heating capacity  | kW           | 1.3                 | 1.9            | 2.5            | 3.2            | 4.0            | 5.0            | 6.3            | 8.0            | 9.0           | 10            | 11.2          |
| Power consumption | kW           | 0.013               | 0.013          | 0.015          | 0.016          | 0.017          | 0.028          | 0.032          | 0.050          | 0.034         | 0.054         | 0.066         |
| Running current   | A            | 0.15                | 0.15           | 0.16           | 0.17           | 0.18           | 0.26           | 0.29           | 0.40           | 0.030         | 0.05          | 0.06          |
| Starting current  | A            | 0.19                | 0.19           | 0.20           | 0.21           | 0.22           | 0.35           | 0.38           | 0.50           | 0.34          | 0.50          | 0.60          |

**HIGH-WALL Physical data**

| Indoor unit                  | With PMV          | MMK- UP0031HP-E/TR  | UP0051HP-E/TR   | UP0071HP-E/TR   | UP0091HP-E/TR   | UP0121HP-E/TR   | UP0151HP-E/TR    | UP0181HP-E/TR    | UP0241HP-E/TR    | UP0271HP-E/TR    | UP0301HP-E/TR    | UP0361HP-E/TR    |
|------------------------------|-------------------|---------------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|
|                              | Without PMV*      | MMK- UP0031HPL-E/TR | UP0051HPL-E/TR  | UP0071HPL-E/TR  | UP0091HPL-E/TR  | UP0121HPL-E/TR  | UP0151HPL-E/TR   | UP0181HPL-E/TR   | UP0241HPL-E/TR   |                  |                  |                  |
| Air Flow (h/m/l)             | m <sup>3</sup> /h | 455/370/270         | 455/370/270     | 480/385/270     | 510/395/270     | 540/410/270     | 840/690/550      | 900/720/550      | 1200/900/600     | 1200/1000/800    | 1450/1300/1100   | 1650/1350/1250   |
| Air Flow (h/m/l)             | l/s               | 126/103/75          | 126/103/75      | 133/107/75      | 141/110/75      | 150/114/75      | 233/192/153      | 250/200/153      | 333/250/167      | 333/277/222      | 403/361/305      | 458/375/347      |
| Sound pressure level (h/m/l) | dB(A)             | 33/29/25            | 33/29/25        | 35/33/30/28/25  | 36/34/31/28/25  | 37/35/32/28/25  | 40/38/36/34/32   | 41/39/37/35/32   | 45/42/39/36/33   | 45/41/39         | 48/44/41         | 50/45/43         |
| Sound power level (h)        | dB(A)             | 48                  | 48              | 50              | 51              | 52              | 55               | 56               | 60               | 60               | 63               | 65               |
| Dimensions (HxWxD)           | mm                | 293 x 798 x 230     | 293 x 798 x 230 | 293 x 798 x 230 | 293 x 798 x 230 | 293 x 798 x 230 | 320 x 1050 x 250 | 320 x 1050 x 250 | 320 x 1050 x 250 | 348 x 1200 x 280 | 348 x 1200 x 280 | 348 x 1200 x 280 |
| Weight                       | kg                | 11                  | 11              | 11              | 11              | 11              | 16               | 16               | 16               | 21               | 21               | 21               |
| Connecting pipe, gas         |                   | 3/8"                | 3/8"            | 3/8"            | 3/8"            | 3/8"            | 1/2"             | 1/2"             | 5/8"             | 5/8"             | 5/8"             | 5/8"             |
| Connecting pipe, liquid      |                   | 1/4"                | 1/4"            | 1/4"            | 1/4"            | 1/4"            | 1/4"             | 1/4"             | 3/8"             | 3/8"             | 3/8"             | 3/8"             |
| Drain port diameter          | mm                | 16                  | 16              | 16              | 16              | 16              | 16               | 16               | 16               | 16               | 16               | 16               |
| Power supply                 | V-ph-Hz           | 220/240-1-50        | 220/240-1-50    | 220/240-1-50    | 220/240-1-50    | 220/240-1-50    | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     | 220/240-1-50     |

\*Optional PMV-Kit needed.  
Size 0.3HP compatible with SMMS-u and SHRM-Advance.

# VN-M\_HE AIR-TO-AIR HEAT EXCHANGER



Toshiba's VN model uses exhaust air to pre-condition the incoming air, thus reducing the cooling or heating load on the system. This allows the overall capacity size of the system to be reduced.

### Energy savings

- Recovers air suction heat and humidity up to 75% and transfers them to the outdoor fresh air.
- The unit has the ability to automatically change operation mode of the air flow between heat exchanger mode (energy recovery) to normal standard ventilation mode (free cooling), based on the outdoor temperatures.
- Free cooling - Provides fresh outdoor cool air to reduce the indoor air temperature, when the outdoor temperature is lower than the indoor air conditioned temperature.

### Multi-application

- 9 models available with air flow ranges from 150 to 2000 m<sup>3</sup>/h.
- Air balance volume rate can be varied to suit the usage environment and location.
- Horizontal or upside down installations.

### Fully integrated

- Air conditioners and heat exchangers are controlled with the same main bus system (TCC-LINK).

AIR FLOW



150m<sup>3</sup>/h > 2000m<sup>3</sup>/h

SOUND PRESSURE LEVEL



20dB(A)

### OUTDOOR UNITS



Side Blow  
& Mini SMMS-e



SMMS-u



SMMS-e  
& SHRM-e

### LOCAL CONTROLS



RBC-AMTU31-E

## AIR-TO-AIR HEAT EXCHANGER Performance and physical data

| Model                                  |                            | VN-M150HE            | VN-M250HE   | VN-M350HE      | VN-M500HE      | VN-M650HE      | VN-M800HE      | VN-M1000HE1    | VN-M1500HE 1   | VN-M2000HE1    |
|--|----------------------------|----------------------|-------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Air volume                             | (EH/H/L) m <sup>3</sup> /h | 150/150/110          | 250/250/155 | 350/350/210    | 500/500/390    | 650/650/520    | 800/800/700    | 1000/1000/700  | 1500/1500/1200 | 2000/2000/1400 |
| Temp. exchange efficiency              | (EH/H/L) %                 | 81.5/81.5/83         | 78/78/81.5  | 74.5/74.5/79.5 | 76.5/76.5/78   | 75/75/76.5     | 76.5/76.5/77.5 | 73.5/73.5/77   | 76.5/76.5/79   | 73.5/73.5/77.5 |
| Enthalpy exchange efficiency (Heating) | (EH/H/L) %                 | 74.5/74.5/76         | 70/70/74    | 65/65/71.5     | 72/72/73.5     | 69.5/69.5/71.5 | 71/71/71.5     | 68.5/68.5/71.5 | 71/71/73.5     | 68.5/68.5/72   |
| Enthalpy exchange efficiency (Cooling) | (EH/H/L) %                 | 69.5/69.5/71         | 65/65/69    | 60.5/60.5/67   | 64.5/64.5/66.5 | 61.5/61.5/64   | 64/64/65.5     | 60.5/60.5/64.5 | 64/64/67       | 60.5/60.5/65.5 |
| Sound pressure level**                 | EH dB(A)                   | 26-28                | 29.5-30     | 34-35          | 32.5-34        | 34-36          | 37-38.5        | 40.5           | 41.5           | 42.5           |
| Sound pressure level**                 | H dB(A)                    | 24-25.5              | 25-27       | 30-32          | 29.5-31        | 33-34          | 35.5-37        | 39.5           | 40             | 41.5           |
| Sound pressure level*                  | L dB(A)                    | 20-22                | 21-22       | 27-29          | 26-29          | 31-32.5        | 33.5-35        | 34.5           | 36             | 36.5           |
| Power consumption**                    | EH (W)                     | 68-78                | 123-138     | 165-182        | 214-238        | 262-290        | 360-383        | 396            | 590            | 792            |
| Power consumption**                    | H (W)                      | 59-67                | 99-111      | 135-145        | 176-192        | 240-258        | 339-353        | 374            | 500            | 748            |
| Power consumption**                    | L (W)                      | 42-47                | 52-59       | 82-88          | 128-142        | 178-191        | 286-300        | 220            | 310            | 440            |
| External static pressure**             | EH Pa                      | 82-102               | 80-98       | 114-125        | 134-150        | 91-107         | 142-158        | 105            | 140            | 105            |
| External static pressure**             | H Pa                       | 52-78                | 34-65       | 56-83          | 69-99          | 58-82          | 102-132        | 80             | 110            | 80             |
| External static pressure**             | L Pa                       | 47-64                | 28-40       | 65-94          | 62-92          | 61-96          | 76-112         | 70             | 80             | 70             |
| Dimensions (HxWxD)                     | mm                         | 290x900x900          | 290x900x900 | 290x900x900    | 350x1140x1140  | 350x1140x1140  | 400x1189x1189  | 400x1189x1189  | 810x1189x1189  | 810x1189x1189  |
| Weight                                 | kg                         | 36                   | 36          | 38             | 53             | 53             | 70             | 58             | 130            | 130            |
| Duct diameter                          | indoor side mm             | 100                  | 150         | 150            | 200            | 200            | 250            | 250            | 250            | 250            |
| Power supply                           | V-ph-Hz                    | 220-240 - 1 - 50     |             |                |                |                |                |                |                |                |
| Operating range                        | Around unit                | -10 / 40°C . RH ≤80% |             |                |                |                |                |                |                |                |
|  | Outdoor Air (OA)           | -15 / 43°C . RH ≤80% |             |                |                |                |                |                |                |                |
|  | Return Air (RA)            | 5 / 40°C . RH ≤80%   |             |                |                |                |                |                |                |                |

\* Sound pressure level is measured 1.5m below the center of the unit.

\*\* Sound pressure level, power consumption and external static pressure values at 220 - 240 V.

MMD-VN(K)  
**AIR-TO-AIR HEAT EXCHANGER WITH DX COIL**



MMD-VN(K) ventilation products are using exhaust air + DX coil to pre-condition the incoming air, thus reducing the cooling or heating load and the overall size of the required air conditioning system.

**Energy savings**

- Recovers incoming heat and humidity up to 75% and transfers them to the outdoor fresh air.
- Up to 10kW coil capacity to reach intake air temperature close to ambient temperature: no extra load on the heating and cooling system
- Unit has the ability to automatically change operation mode of the air flow between heat exchanger mode (energy recovery) to normal standard ventilation mode (free cooling), based on the outdoor temperatures.
- Free cooling - Provides fresh outdoor cool air to reduce the indoor air temperature, when the outdoor temperature is lower than the indoor air conditioned temperature.

**Multi-application**

- 9 models available with air flow ranges from 150 to 2000 m<sup>3</sup>/h.
- Air balance volume rate can be varied to suit the usage environment and location.
- Version with humidifier is available for applications where humidity levels need to be controlled.

**Fully integrated**

- Air conditioners and heat exchangers are controlled with the same main bus system (TCC-LINK).

CAPACITY



4.1kW > 10.9kW

SOUND PRESSURE LEVEL



34dB(A)

AIR FLOW



500m<sup>3</sup>/h > 1000m<sup>3</sup>/h

**OUTDOOR UNITS**



MINi SMMS-e



SMMS-e



SHRM-e

**LOCAL CONTROLS**



RBC-AMTU31-E

**AIR-TO-AIR HEAT EXCHANGER WITH DX COIL / WITH HUMIDIFIER Performance and physical data**

| Model                                  | MMD-             |                   | VN502HEX1E/TR             | VN802HEX1E/TR | VN1002HEX1E/TR | VNK502HEX1E/TR       | VNK802HEX1E/TR | VNK1002HEX1E/TR |
|--|------------------|-------------------|---------------------------|---------------|----------------|----------------------|----------------|-----------------|
| Fresh air conditioning capacity        | CO               | kW                | 4.10 (1.30)               | 6.56 (2.06)   | 8.25 (2.32)    | 4.10 (1.30)          | 6.56 (2.06)    | 8.25 (2.32)     |
| Fresh air conditioning capacity        | HP               | kW                | 5.53 (2.33)               | 8.61 (3.61)   | 10.92 (4.32)   | 5.53 (2.33)          | 8.61 (3.61)    | 10.92 (4.32)    |
| Air volume                             | (EH/H/L)         | m <sup>3</sup> /h | 500/500/440               | 800/800/640   | 950/950/820    | 500/500/440          | 800/800/640    | 950/950/820     |
| Temperature exchange efficiency        | (EH/H/L)         | %                 | 70.5/70.5/71.5            | 70/70/72.5    | 65.5/65.5/67.5 | 70.5/70.5/71.5       | 70/70/72.5     | 65.5/65.5/67.5  |
| Enthalpy exchange efficiency (Heating) | (EH/H/L)         | %                 | 68.5/68.5/69              | 70/70/73      | 66/66/68.5     | 68.5/68.5/69         | 70/70/73       | 66/66/68.5      |
| Enthalpy exchange efficiency (Cooling) | (EH/H/L)         | %                 | 56.5/56.5/57.5            | 56/56/59      | 52/52/54.0     | 56.5/56.5/57.5       | 56/56/59       | 52/52/54.5      |
| Sound pressure level* ***              | (EH/H/L)         | dB(A)             | 37.5/36.5/34.5            | 41/40/38      | 43/42/40       | 36.5/35.5/33.5       | 40/39/38       | 42/41/39        |
| Power consumption***                   | (EH/H/L)         | W                 | 300/280/235               | 505/465/335   | 550/545/485    | 305/285/240          | 530/485/350    | 575/565/520     |
| External static pressure***            | (EH/H/L)         | Pa                | 120/105/115               | 120/100/100   | 135/120/105    | 95/85/95             | 105/85/90      | 110/90/115      |
| Heat exchanger                         |                  |                   | Finned tube - R410A       |               |                | Finned tube - R410A  |                |                 |
| Gas line diameter                      |                  | mm                | 9.5                       | 12.7          | 12.7           | 9.5                  | 12.7           | 12.7            |
| Liquid line diameter                   |                  | mm                | 6.4                       | 6.4           | 6.4            | 6.4                  | 6.4            | 6.4             |
| Drain port diameter                    |                  | mm                | 25                        | 25            | 25             | 25                   | 25             | 25              |
| <b>Humidifier technology</b>           |                  |                   | Permeable film humidifier |               |                |                      |                |                 |
| water pressure                         |                  |                   | 0.02 to 0.49              |               |                |                      |                |                 |
| water flow                             |                  |                   | 3 5 6                     |               |                |                      |                |                 |
| water supply                           |                  |                   | 1/2" 1/2" 1/2"            |               |                |                      |                |                 |
| Dimensions (HxWxD)                     |                  | mm                | 430x1140x1690             | 430x1189x1739 | 430x1189x1739  | 430x1140x1690        | 430x1189x1739  | 430x1189x1739   |
| Weight                                 |                  | kg                | 84                        | 100           | 101            | 91                   | 111            | 112             |
| Duct diameter                          | indoor side      | mm                | 200                       | 250           | 250            | 200                  | 250            | 250             |
| Power supply                           |                  | V-ph-Hz           | 220-240 - 1 - 50          |               |                | 220-240 - 1 - 50     |                |                 |
| Operating range                        | Around unit      |                   | -10 / 40°C . RH ≤80%      |               |                | -10 / 40°C . RH ≤80% |                |                 |
|  | Outdoor Air (OA) |                   | -15 / 43°C . RH ≤80%      |               |                | -15 / 43°C . RH ≤80% |                |                 |
|  | Return Air (RA)  |                   | 5 / 40°C . RH ≤80%        |               |                | 5 / 40°C . RH ≤80%   |                |                 |

\* Sound pressure level is measured 1.5m below the center of the unit. \*\*\* Sound pressure level, power consumption and external static pressure values at 230 V. Cooling and heating capacities are based on the following conditions: Cooling capacities are based on: indoor temperature: 27°CDB/19°CWB, Outdoor temperature: 35°CDB. Heating capacities are based on: indoor temperature: 20°CDB, Outdoor temperature: 7 °CDB/6°CWB. The figures in ( ) indicate the heat reclaimed from the heat recovery ventilator. EH/H/L = extra-high/high/low. C: cooling mode. H: heating mode

MMD-UP\_HFP  
FRESH AIR DUCT



This indoor unit manages and treats the fresh air intake before it will be distributed into the building.

**AHU alternative**

- Ideal solution for all buildings that require fresh air ventilation.
- Air flow up to 3,060m<sup>3</sup>/h.
- Up to 200Pa available pressure, enough to create long pipe work.

**Comfort**

- Constant 20°C fresh air delivery from -10 to +46°C air suction temperature.
- 5-speed fan operation for perfect air flow adaptation.
- Filters available as an option.

**Integration flexibility**

- Make your choice between VRF 1:1 connection or mix with other indoor unit types.

CAPACITY



8.9kW > 40kW

AIR FLOW



1,080m<sup>3</sup>/h > 3,060m<sup>3</sup>/h

SOUND PRESSURE LEVEL



31dB

**OUTDOOR UNITS**



SMMS-e



SMMS-u

**LOCAL CONTROLS**



- RBC-AMSU51E-ES/EN
- RBC-AMTU31-E
- RBC-ASCU11-E

**FRESH AIR INTAKE Performance**

| Indoor unit       | MMD- | UP0481HFP-E/TR | UP0721HFP-E/TR | UP0961HFP-E/TR | UP1121HFP-E/TR | UP1281HFP-E/TR |
|-------------------|------|----------------|----------------|----------------|----------------|----------------|
| Cooling capacity  | kW   | 14,0           | 22,4           | 28,0           | 33,5           | 40,0           |
| Heating capacity  | kW   | 8,9            | 13,9           | 17,4           | 20,8           | 25,2           |
| Power consumption | kW   | 0,110          | 0,160          | 0,200          | 0,250          | 0,330          |
| Running current   | A    | 0,77           | 0,86           | 1,07           | 1,30           | 1,83           |
| Starting current  | A    | 2,01           | 7,80           | 7,80           | 7,80           | 7,80           |

**FRESH AIR INTAKE Physical data**

| Indoor unit                                | MMD-              | UP0481HFP-E/TR       | UP0721HFP-E/TR           | UP0961HFP-E/TR            | UP1121HFP-E/TR           | UP1281HFP-E/TR           |
|--|-------------------|----------------------|--------------------------|---------------------------|--------------------------|--------------------------|
| Air flow (h)                               | m <sup>3</sup> /h | 1080/990/930/840/760 | 1680/1560/1440/1320/1200 | 2100/1950/1800/1620/1470  | 2520/2340/2130/1950/1770 | 3060/2820/2580/2370/2130 |
| Air flow (h)                               | l/s               | 300/275/258/233/211  | 466/433/400/366/333      | 583/542/500/450/408       | 700/650/592/542/492      | 850/783/717/658/592      |
| Sound pressure level                       | dB(A)             | 38/37/35/32/31       | 38/37/36/35/33           | 39/38/36/35/33            | 40/39/37/36/34           | 42/40/38/37/35           |
| Dimensions (HxWxD)                         | mm                | 327x1430x750         | 477x1430x900             | 477x1430x900              | 477x1430x900             | 477x1430x900             |
| Weight                                     | kg                | 44                   | 99                       | 99                        | 99                       | 99                       |
| External static pressure                   | Pa                |                      |                          | 50/75/111/125/150/175/200 |                          |                          |
| External static pressure - factory setting | Pa                | 100                  | 100                      | 100                       | 100                      | 100                      |
| Connecting pipe, gas                       | in                | 5/8"                 | 7/8"                     | 7/8"                      | 1 1/8"                   | 1 1/8"                   |
| Connecting pipe, liquid                    | in                | 3/8"                 | 1/2"                     | 1/2"                      | 1/2"                     | 5/8"                     |
| Drain port diameter                        | mm                | 25                   | 25                       | 25                        | 25                       | 25                       |
| Power supply                               | V-ph-Hz           | 220/240-1-50         | 220/240-1-50             | 220/240-1-50              | 220/240-1-50             | 220/240-1-50             |
| Operation range for SMMS-u                 | Cooling (*2)      | °C                   |                          | +5/+46 (Note 4)           |                          |                          |
|  | Heating (*3)      | °C                   |                          | -10/46                    |                          |                          |
| Operation range for SMMS-e                 | Cooling (*2)      | °C                   |                          | +5/+43                    |                          |                          |
|  | Heating (*3)      | °C                   |                          | -5/43                     |                          |                          |

\* The setting temperature is 13 - 25°C (standard FCU.. 18 - 30 °C).

\* Height difference between Fresh Air Intake Indoor units must be within 5 m.

Note 1: Rated conditions. Cooling : Outdoor air temperature 33°C DB/28°C WB setting 18°C. Heating : Outdoor air temperature 0°C DB/-2.9°C WB setting temperature 25°C.

Note 2: When supply air temperature is "setting temperature + 3°C" or less, Fresh Air Intake unit operates as FAN mode.

Note 3: When supply air temperature is "setting temperature -3°C" or over, Fresh Air Intake unit operates as FAN mode.

Note 4: 46-52°C is also available but temporary operable.

TCB-IFDM  
TA/TF/O-10V DX KIT

> **NEW**



Expand the connexion capabilities between an AHU and the SMMS-u to provide the most advanced fresh air solution.

**New concept**

- One control kit compatible with discharge temperature, suction temperature or capacity control.
- 2PMV kits available: 8 to 12 & 14 to 20HP.

**Advanced technology**

- The latest generation of PMV.
- New boundaries: Up to 120HP equal to 60,000m<sup>3</sup>/h thanks to Twin Connections.
- All SMMS-u benefits (Rotation drive, auto backup and alternative defrost) applicable when using DX kit system.

**Simplified installation**

- Controller available with embedded relays to save time during installation.
- Control box delivered with 7.5m temperature sensor.



CAPACITY



8HP < 120HP

AIR FLOW



Up to 60,000m<sup>3</sup>/h

**OUTDOOR UNITS**



SMMS-u



SMMS-e & SHRM-e

**LOCAL CONTROLS**



RBC-AMSU51E-ES/EN

**DX KIT Physical data**

| DX Controller unit                           |         | TCB-IFDMX01UP-E<br>All simple terminal block  | TCB-IFDMR01UP-E<br>With relay terminal blocks for 6 DO |
|--|---------|---|--|
| Dimensions (HxWxD)                           | mm      | 420 x 330 x 120   | 420 x 330 x 120  |
| Weight                                       | kg      | 4   | 4,1  |
| Operating temperature/humidity               | °C / RH | 5-40 / 10-80  | 5-40 / 10-80   |
| Operating range - Cooling coil "Air on" temp | °C      | 15°CWB±24°CWB   | 15°CWB±24°CWB  |
| Operating range - Heating coil "Air on" temp | °C      | 15°CDB±28°CDB   | 15°CDB±28°CDB  |
| Power supply                                 | V-ph-Hz | 220/240-1-50  | 220/240-1-50   |
| Integrated components                        |         | - TC1 sensor(φ4) x1 ; 7.500 mm<br>- TC2/TCJ sensor(φ6) x2 ; 7.500 mm<br>- TA/TF sensor(Resin) x1 ; 7.500 mm |  |

**DX KIT Physical data**

| DX valve kit          |    | RBM-A101UPVA-E  | RBM-A201UPVA-E |
|-----------------------|----|---|----------------|
| Nominal capacity      |    | 8/10/12HP   | 14/16/18/20HP  |
| Dimensions            | mm |   | 360 x 209 x 80 |
| Weight                | kg | 2,3   | 2,4            |
| Integrated components |    | - Holders and plates for sensors<br>- Heat insulation |                |

**Note :**  
Connection available with SMMS-e (TA, DDC) & SHRM-e (TA).  
8/10HP only.

# RBC-DXC 0/10V DX KIT



Control the capacity of the VRF Toshiba system directly from the air handling unit controller to maintain constant fresh air temperature intake inside the building; the ultimate fresh air solution.

### Third party control

- 0/10v input for capacity and mode control: the AHU drives Toshiba VRF system.
- Output signal for defrost and failures: the AHU knows when Toshiba system is in trouble to avoid any troubles.

### All year round comfort

- Air temperature control using AHU sensor to enlarge air stream temperature control possibilities.
- Operate in both cooling and heating modes.

### Packaged solution

- DX kit composed of two parts: controller and valve kit.
- Delivered with temperature sensors.

**Only compatible with SMMSe 8 and 10HP in 1:1 configuration!**



CAPACITY



16kW > 31.5kW

AIR FLOW



Up to 6000m<sup>3</sup>/h

### OUTDOOR UNITS



SMMS-e

### LOCAL CONTROLS



RBC-AMTU31-E

## 0/10V DX KIT

| LC / VRF DX Coil Controller Unit | RBC- | DXC031 | DXC031 | DXC031 |
|----------------------------------|------|--------|--------|--------|
| VRF DX PMV valve unit            | MM-  | DXV141 | DXV281 | DXV281 |
| Cooling capacity                 | kW   | 16.0   | 22.4   | 28.0   |
| Heating capacity                 | kW   | 18.0   | 25.0   | 31.5   |
| Power code                       | HP   | 6.0    | 8.0    | 10.0   |

## 0/10V DX KIT Physical data

| LC / VRF DX Coil Controller Unit   | RBC-              | DXC031             | DXC031                  | DXC031             |
|--|-------------------|--------------------|-------------------------|--------------------|
| Minimum air flow rate  | m <sup>3</sup> /h | 2310               | 3010                    | 3500               |
| Maximum air flow rate  | m <sup>3</sup> /h | 3960               | 5160                    | 6000               |
| Dimensions (HxWxD)   | mm                | 400x300x165        | 400x300x165             | 400x300x165        |
| Weight   | kg                | 8                  | 8                       | 8                  |
| Cable Max Length (Analogue Input) (Screened cable: 0.5 ~ 1.0 mm <sup>2</sup> )     | m                 | 200                | 200                     | 200                |
| Cable Max Length (Digital Input) (Non screened cable: 1.5 ~ 2.5 mm <sup>2</sup> )  | m                 | 100                | 100                     | 100                |
| Cable Max Length (Digital Output) (Non screened cable: 1.5 ~ 2.5 mm <sup>2</sup> ) | m                 | 500                | 500                     | 500                |
| Cable Max Length (TCC Link) (Screened cable: 1.5 ~ 2.5 mm <sup>2</sup> )           | m                 | 1000               | 1000                    | 1000               |
| Standard Rating  | IP                | 65                 | 65                      | 65                 |
| Operating temperature/humidity   | °C / RH           | 5-40 / 10-90       | 5-40 / 10-90            | 5-40 / 10-90       |
| Operating range - Cooling coil "Air on" temp                                       | °C                | 15°CWB±24°CWB      | 15°CWB±24°CWB           | 15°CWB±24°CWB      |
| Operating range - Heating coil "Air on" temp                                       | °C                | 12°CDB±28°CDB      | 12°CDB±28°CDB           | 12°CDB±28°CDB      |
| System Diversity   | %                 | 75 - 100           | 75 - 100                | 75 - 100           |
| Outdoor Unit   |                   | 8HP SMMS-e Only    | 8HP or 10HP SMMS-e Only | 10HP SMMS-e Only   |
| Power supply   |                   | 220 - 240V AC 50Hz | 220 - 240V AC 50Hz      | 220 - 240V AC 50Hz |



MM-DXC  
**STANDARD DX KIT**



Built an efficient and reliable ventilation system managed by Toshiba remote controller mixing third party AHU, DX coil and Toshiba VRF system.

**Full Toshiba control**

- On/Off fan, temperature control and safety cut managed by Toshiba system.
- Air temperature control achieved using TA sensor positioned in return air stream (set with remote controller).

**High capacity, high air flow**

- Up to 60HP capacity (master/slave DX kits), up to 30000 m<sup>3</sup>/h to be suitable for every type of project.

**Packaged solution**

- DX kit composed of two parts: controller and valve kit.
- Delivered with temperature sensors.



CAPACITY



5kW > 168kW

AIR FLOW



Up to 30000m<sup>3</sup>/h

**OUTDOOR UNITS**



MINI SMMS-e



SMMS-e



SHRM-e

**LOCAL CONTROLS**



BC-AMTU31-E

**STANDARD DX KIT Physical data**

| DX Controller unit                           | MM-     | DXC010                                       | DXC012                            |
|--|---------|--|-----------------------------------|
|  |         | VRF DX COIL CONTROLLER (Individual / Header) | VRF DX COIL CONTROLLER (Follower) |
| Dimensions (HxWxD)                           | mm      | 400x300x150                                  | 400x300x150                       |
| Weight                                       | kg      | 8  | 7.6                               |
| Standard rating                              | IP      | 65   | 65                                |
| Operating temperature/humidity               | °C / RH | 5-40 / 10-90                                 | 5-40 / 10-90                      |
| Operating range - Cooling coil "Air on" temp | °C      | 15°CWB±24°CWB                                | 15°CWB±24°CWB                     |
| Operating range - Heating coil "Air on" temp | °C      | 15°CDB±28°CDB                                | 15°CDB±28°CDB                     |
| Power supply                                 | V-ph-Hz | 220/240-1-50                                 | 220/240-1-50                      |

**STANDARD DX KIT Physical data**

| DX valve kit          | MM- | DXV080   | DXV140                 | DXV280         |
|-----------------------|-----|--|------------------------|----------------|
| Nominal capacity      |     | 5.6kW, 7.1kW, 8.0kW  | 11.2kW, 14.0kW, 16.0kW | 22.4kW, 28.0kW |
|                       |     | 1.7 - 3.2 HP   | 4 - 6HP                | 8 - 10 HP      |
| Dimensions            | mm  | 155x155x185  |                        |                |
| Weight                | kg  | 0.9kg  |                        |                |
| Integrated components |     | TA, TC1, TC & TCJ sensors, PMV, sensor holder 4 & 6 mm, fix plate, strainer and clamp (for TA) |                        |                |

# MMW HOT WATER MODULE



With the mid temperature hot water module, produce hot water in addition of cooling and heating.

### Hot water

- Designed to produce hot water from 25°C up to 50°C outlet water temperature, whilst still maintaining the performance and efficiency levels of the rest of the system.
- Compatible with both space heating and domestic hot water applications, making the unit particularly suited to small shops and residential apartments where both space heating and hot water production is required.

### Adaptability

- Up to 200% diversity indoor units & hot water module
- Operating range from -20°C WB to 19°C WB.
- Compatible with 4 series FS box & SHRM Advance FS box.

### Installation

- Light and compact chassis to simplify the handling and the project integration.

CAPACITY



8kW > 16kW

HOT WATER



Max 50°C

SOUND PRESSURE LEVEL



25dB(A)

### OUTDOOR UNITS



Mini SMMS-e  
8/10HP



SMMS-u  
& SHRM Advance



SMMS-e  
& SHRM-e

### LOCAL CONTROLS



RBC-AMSU51E-ES/EN  
RBC-AMTU31-E  
RBC-ASCU11-E

## HOT WATER MODULE Performance

| Indoor unit       | MMW- | UP0271LQ-E/TR | UP0561LQ-E/TR |
|-------------------|------|---------------|---------------|
| Cooling capacity  | kW   | -             | -             |
| Heating capacity  | kW   | 8             | 16            |
| Power consumption | kW   | 0.014         | 0.014         |
| Running current   | A    | 0.08          | 0.08          |
| Starting current  | A    | -             | -             |

## HOT WATER MODULE Physical data

| Indoor unit            | MMW-    | UP0271LQ-E/TR | UP0561LQ-E/TR |
|------------------------|---------|---------------|---------------|
| Water flow             | m³/h    | 1.374         | 2.748         |
| Water flow             | l/min   | 22.9          | 45.8          |
| Sound pressure level   | dB(A)   | 25            | 27            |
| Dimensions (h x w x d) | mm      | 580x400x250   | 580x400x250   |
| Weight                 | kg      | 17.8          | 20.3          |
| Gas                    | in      | 5/8"          | 5/8"          |
| Liquid                 | in      | 3/8"          | 3/8"          |
| Drain port diameter    | mm      | R1            | R1            |
| Water Inlet            | mm      | R1 - 1/4"     | R1 - 1/4"     |
| Water Outlet           | mm      | R1 - 1/4"     | R1 - 1/4"     |
| Power supply           | V-ph-Hz | 220/240-1-50  | 220/240-1-50  |

MMW-AP\_CHQ  
**HIGH TEMPERATURE HOT WATER MODULE**



In addition to the standard simultaneous heating and cooling function of the SHRM-e system, it is now possible with the new Toshiba high temperature hot water module, to produce hot water up to 82°C, whilst still retaining the comfort operation of the indoor units.

**High temperature**

- Designed to produce hot water from 50°C up to 82°C outlet water temperature, whilst still maintaining the performance and efficiency levels of the rest of the system.
- Particularly suited for hot water sanitary production for residential and business applications.

**All year round hot water**

- All season hot water even when the other indoor units are operate in cooling.
- Operating range from -25°C WD to +40°C DB ambient condition.

CAPACITY



5HP

HOT WATER



82°C

**OUTDOOR UNITS**



SHRM-e

**LOCAL CONTROLS**

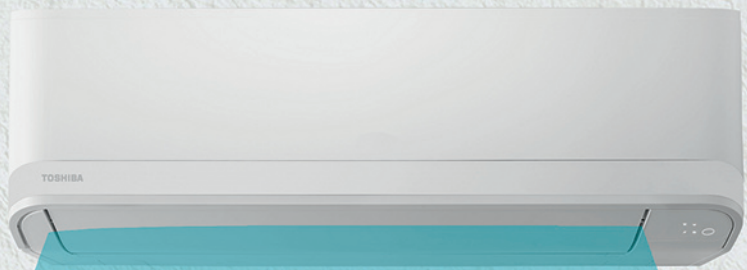


RBC-AMSU51E-ES/EN  
RBC-AMTU31-E  
RBC-ASCU11-E

| <b>HOT WATER MODULE Performance</b> |           | <b>PRELIMINARY DATA</b> |
|-------------------------------------|-----------|-------------------------|
| Indoor unit                         | MMW-      | AP0481CHQ-E             |
| Cooling capacity                    | kW        | -                       |
| <b>Heating capacity</b>             | <b>kW</b> | <b>14</b>               |
| Power consumption                   | kW        | 4.15                    |
| Running current                     | A         | 17.5                    |
| Starting current                    | A         | -                       |

| <b>HOT WATER MODULE Physical data</b> |                   | <b>PRELIMINARY DATA</b> |
|---------------------------------------|-------------------|-------------------------|
| Indoor unit                           | MMW-              | AP0481CHQ-E             |
| Water flow                            | m <sup>3</sup> /h | 2.400                   |
| Water flow                            | l/min             | 40                      |
| Sound pressure level                  | dB(A)             | 44                      |
| Dimensions (hxwx d)                   | mm                | 700x900x320             |
| Weight                                | kg                | 100                     |
| Gas                                   | in                | 5/8                     |
| Liquid                                | in                | 3/8                     |
| Drain port diameter                   | mm                | 15                      |
| Water Inlet                           | mm                | R1 - 1/4"               |
| Water Outlet                          | mm                | R1 - 1/4"               |
| Power supply                          | V-ph-Hz           | 220/240-1-50            |

ON YOUR OWN AS A FAMILY



IN A GROUP ON



### Take control of your comfort !

Toshiba offers various control solutions to meet users' and designers' expectations. From local individual control and settings to computer-based TCC link/TU2C link networks, all indoor units can be programmed and set to suit your operational needs. Remote control systems offer a wide range of features including schedule timers, diagnostic functions, power meters and input/output signals, to name just a few. Toshiba VRF units are compatible with industry standards and can be connected to all the main building management software systems in use. TCC link is Toshiba's dedicated Central Control Network which can be used with VRF and light commercial units either directly or by means of a specially-designed network adapter.



# > CONTROLS

YOUR OWN AS A FAMILY IN A GROUP ON YOUR OWN





Toshiba Home  
**AC CONTROL**

> DO YOU WANT A SMART SOLUTION TO GIVE YOUR FAMILY GREATER COMFORT WHILST EASILY MANAGING YOUR ENERGY SAVINGS?



- **MULTIPLE UNITS, ONE APP**
  - 1 user can control up to 10 AC units
  - 1 AC unit can be controlled by up to 5 users

- **EASY GROUPING**
  - Make control simple by grouping your AC units in up to 3 zones

- **SECURE CONNECTIONS**
  - Password & login
  - Child lock function

- **COMPATIBLE PRODUCTS**
  - DAISEIKAI 9, SHORAI, Console, SEIYA. (Jan'19)

- **DOWNLOAD YOUR APP**
  - Toshiba AC Control App for your Android and iOS smartphone from Google Play or the App Store



Take complete control of your comfort with the Toshiba Home AC Control App. Simple to use on your smartphone or tablet, both at home and on the move. Fully compatible, the adapter can be used with all Toshiba High-walls and Console units.

**Enhance your comfort, at home or away**

Customise your comfort, finding the perfect cooling or heating level for your family at any time, no matter where you are. When at home, simply replace your infrared remote control with the intuitive smart app. This also gives you easy access to your air conditioner on the move, allowing you to adapt your comfort to your lifestyle!



**Smart & efficient**

- Want to go home and immediately enjoy an ideal temperature? Simply use the app to check the status, quickly and easily, adjust your comfort, no matter where you are.
- Match your AC schedule to your family's routine to optimise running time, and enjoy savings on your energy bill.



**Modern app**

- This user-friendly app is available in 5 languages, and boasts a host of intuitive features. With a different colour for each different mode, and the main functions accessible in just one touch.
- Toshiba premium features enable you to enjoy all the benefits of your AC systems at home. Simply swipe up on the main app screen on your smartphone or tablet to access additional Toshiba-specific features.

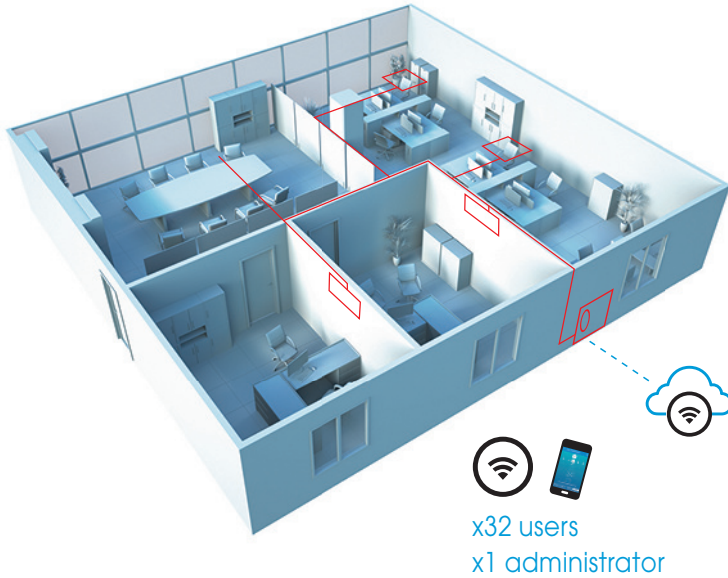
**FLOOR**

- |                |                               |   |
|----------------|-------------------------------|---|
| 8°C            | Holiday frost protection mode | Silent CDU to reduce the outdoor unit noise level |
| Hi POWER       | Boost mode                    | PURE Plasma & ionizer filters                     |
| Fireplace mode |                               | FLOOR Floor function for Consoles                 |

Toshiba  
**AC CONTROL**

> “DO YOU WANT FULL CONTROL OF YOUR AC SYSTEM IN ONE TOUCH, WHEREVER YOU ARE?”

Designed for commercial applications, the Toshiba AC Control App is your one-stop solution for managing up to 32 indoor units via an Android or iOS smartphone, with all main functions accessible in a single touch.



BMS-IWF0320E

**Solutions wherever you are**

Toshiba technology you can trust, fully committed to providing creative building management solutions, designed to enhance your sustainable lifestyle.

**Make it your own**

With different access levels for different users, this app can be used by everyone from facilities managers to standard users to manage all of the unit's functions. For an enhanced level of security, a user name and password is needed to log in.

**Everything you need in one app**

All of the indoor unit's functions can be accessed in an instant, allowing you to enjoy the full advantages of the AC system at work. The entire system is simple to manage, even remotely.

● **QUICK AND EASY**

- Simplified installation with direct connection to the TCC link bus line

● **DESIGNED FOR YOU**

- Up to 32 users for control of a maximum of 32 assigned indoor units
- Administrator mode for control of the entire system via a single app

● **EVERYTHING UNDER CONTROL**

- Optimise the management of your facilities without compromising comfort

● **COMPATIBLE PRODUCTS**

- Mini SMMS-e, SMMS-e, SHRM-e and RAV systems

● **DOWNLOAD YOUR APP**

- Toshiba AC Control App for your Android and iOS smartphone from Google Play or the App Store



Mode (heating, cooling, ventilation, dry, auto)

Temperature set point, ambient temperature information

Fan speed (auto or manual)



On/Off

Louver setting (auto or manual)

**Administrator-specific functions:**

- Group control with on/off function for all devices
- User access restriction management & advanced mode



RAV/VRF  
INDIVIDUAL REMOTE CONTROLLER

> INFRARED REMOTE CONTROLLER

One remote compatible with every LC/VRF indoor units



Included with bi-flow console



Included with LC/VRF highwall

- Easy to use remote controller with direct access to every function
- In addition of standard function, HI power, Quiet and Comfort sleep mode
- 2 steps timer mode



RBC-AX41U(W)-E

- Smart cassette panel corner receiver



RBC-AXU33UP-E

- Standard cassette panel corner receiver



RBC-AX33UYP-E

- 1 way cassette panel corner receiver (compatible with YHP 1-way cassette)



RBC-AXU31UM-E

- Panel corner receiver (compatible with compact 4-Way cassette)



RBC-AXU31-E

- Ceiling panel receiver



RBC-AX31UC-E

- Stand alone receiver (compatible with all indoor units)

> WIRED REMOTE CONTROLLER

One solution for every projects



RBC-ASCU11-E

Back to basics with this new remote offering all the standard functionalities with compact dimensions and large screen.

**Functions:**

On/Off, operation mode, temperature setting, fan speed, louvres fault codes & unit setup.



RBC-AMTU31-E

The standard remote to control an individual indoor unit or a group of 8 indoor units

**Functions:**

On/Off, operation mode, temperature setting, fan speed, louvres, fault codes, unit setup and button restrictions



RBC-AMSU51E-ES/EN

The ultimate in local remote controller with built-in 7-Day timer, large screen and menu

**Functions:**

On/Off, operation mode, dual set point, fan speed, louvres, return back, energy savings, frost protection, auto summer/winter clock, soft cooling, leak detection, fault codes, unit setup and button restrictions

> SPECIFIC REMOTE CONTROLLER

Ventilation control



NRC-01HE

- Dedicated remote controller for Air-to-Air heat exchanger
- Integrated functions: fan speed, freecooling, air balance volume rate, temperature management and timer

> A2W/RAV/VRF  
**CENTRAL CONTROL**

> **UP TO 64 INDOOR UNITS**

**64 central controller**



TCB-SC640U-E

64 central controller is now able to control Estia R32 products.

- Full control of max 64 LC & VRF indoor units + Estia R32 air to water systems
- Individual indoor unit, group (up to 10 groups) or full installation control
- Simple and intuitive interface with user friendly menus
- Large bbacklight display
- Touch-sensitive keys
- Standard features (On/Off, mode, temperature setting, fan speed, louvers) + permit/prohibit functions + Estia R32 functions accessibility
- Embedded digital outputs
- Compatible with TCC link and TU2C Link

**Centralized Touch Screen Controller**



TCB-TSC640-PY

- Centralized control of max 64 indoor units
- 7-inch color touch screen
- User friendly interface (indoor unit and room naming)
- One by one FCU or global system control: On/Off, mode, fan speed, louvers, set point and prohibit mode
- Daily, weekly, monthly and annually timer with Winter/Summer differentiation: up to 32 schedules
- Fault code acces
- Multilangage interface
- Compatible with TCC link

> **UP TO 128 INDOOR UNITS**

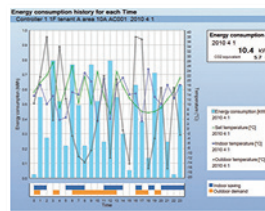
**Smart Manager**



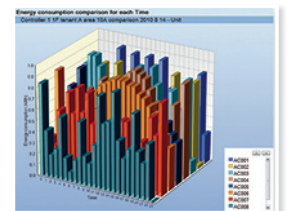
BMS-SM1281ETLE

The Smart Manager has the same hardware control function as the Compliant Manager, but also has the ability of control from a Local Area Network with dedicated interface accessible from every Web Browser. Energy Monitoring and Data Analyser function is included and brings to the user strong tool to analyse power consumption day by day, hour by hour and finally save energy. Compatible with TCC link

This controller is ideal where advanced control, Energy Monitoring, advanced scheduling or acces to individual Air Conditioners is required from networked computer systems



Energy consumption history

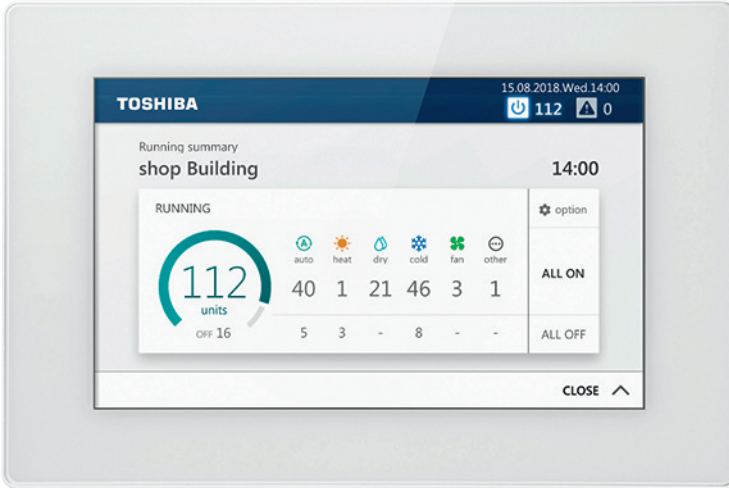


Energy consumption comparison

RAV/VRF  
**CENTRAL CONTROL**

> UP TO 256 INDOOR UNITS

Touch Screen Smart Manager



BMS-CT2560U-E



- Full control of max 256 indoor units
- 7" color touchscreen
- Nice looking menu with intuitive navigation to enhance control experience
- Advanced scheduling of indoor and outdoor units to maximize comfort & save energy
- Energy monitoring with or without power meter thanks to Data Analyser software
- Webserver to keep control in any circumstances
- Embedded input and output to enlarge control or interact with other equipment
- Dedicated fault code menu with Email transfer capability
- Compatible with TCC link & TU2C link



> UP TO 512 INDOOR UNITS

Centralized Touch Screen Controller



BMS-CT5121E

- Full control of max 512 indoor units: on/off, mode, set point, fan speed, louver management and prohibit mode
- 12.1 large screens
- Quick and accurate view of indoor unit status through dedicated logo
- Floor, building, tenant and system overview with possibility to integrate plan
- Built in web server for control through web browser
- Weekly timer with up to 20 steps per day
- Energy monitoring with graph, to view operating hours, set point, inside/outside temperature, and power consumption
- Email alert in case of troubles
- Compatible with TCC link



# VRF LEAK MANAGEMENT

The comprehensive answer to IEC 60335-2-40/EN378 safety requirements for all Toshiba VRF systems

## > MINI SMMS-E, SMMS-E AND SHRM-E

R410A refrigerant

### > Make your choice between 3 possibilities to manage toxicity constraints :

A - Leak detection only.

B- Leak detection  
+ indoor unit isolation.

C- Leak detection  
+ isolation  
+ refrigerant pump down (SMMS-e & SHRM-e).

## > SHRM ADVANCE

R32 refrigerant


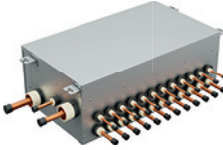


### > With SHRM-Advance, Toshiba has developed different solutions to comply with the European safety regulation related to toxicity and flammability limitations.

A - Pump down and system shutdown. Recommended for office buildings.

B- Individual isolation allowing continuous operation. Recommended for hotel applications.

C- Refrigerant dilution with continuous operation. Adapted to small systems.

| Model       | Picture   | Description                                   | A | B | C |
|-------------|---|---|---|---|---|
| TCB-LDS1    |  | Leak detector with plastic cover              | ✓ | ✓ | ✓ |
| TCB-LDS2    |  | Leak detector with metal cover                | ✓ | ✓ | ✓ |
| TCB-AW1786* |  | Shut off valve                                |   | ✓ | ✓ |
| TCB-LD1     |  | Control box                                   |   | ✓ |   |
| TCB-LD2     |  | Control box                                   |   |   | ✓ |
| TCB-LDSBB1  |  | Flush mounting for leak detector (dry lining) |   |   |   |
| TCB-LDSBB2  |  | Flush mounting for leak detector (concrete)   |   |   |   |

| Model         | Picture  | Description   | A | B | C |
|---------------|--|---|---|---|---|
| TCB-LD1UPE    |  | R32 leak sensor (audible and visual alarm)                                | ✓ | ✓ | ✓ |
| RBM-Y_1FUxP-E |  | Shut-off valve included into FS Box for 3-pipe SHRM Advance operations.   | ✓ | ✓ |   |
| RBM-SV_1HUP-E |  | Shut-off valve for 2 pipe SHRM Advance operations.                        | ✓ | ✓ |   |
| TCB-BT1UPE    |  | Battery kit to secure Shut-off valve operations in case of power failure. | ✓ | ✓ |   |

> Additional  
PCB

> DEDICATED TO OUTDOOR UNITS

Outdoor units advanced functions

> POWER PEAK CUT CONTROL BOARD SENSOR



TCB-PCDM4E

- Limits capacity of the VRF outdoor unit at 85%, 80%, 75% and 60% load or stop it.
- Compatible with all VRF outdoor units.

> CONTROL OPERATION BOARD SENSOR



TCB-PCIN4E

- Error/Individual compressor operation output control board.
- Compatible with all VRF outdoor units.

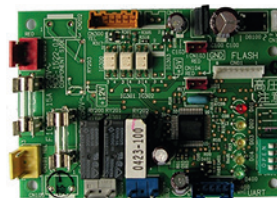
> EXTERNAL MASTER ON/OFF CONTROL SENSOR



TCB-PCMO4E

- External master On/Off control board, night mode and mode priority selection.
- Compatible with all VRF outdoor units.

> APPLICATION CONTROL SENSOR KIT



TCB-PCOS1E2

- Enables night operation control, demand control and operation monitoring.
- Compatible with DI.

> DEDICATED FOR INDOOR UNITS

Indoor units advanced functions

> WINDOWS SWITCH SENSOR



TCB-IFCB5PE

- Ensures the indoor unit not operate when outside window is open or for door entry systems.
- RAS, RAV and VRF indoor units.

> OPTIONAL CONNECTION KIT



TCB-PCUC2E

- Extends control capability of light commercial and VRF indoor units with third party equipment.
- Compatible with RAV and VRF indoor units.

> MULTI-TENANT



TCB-PSMT1E

- For multi tenant application, this PCB maintains low voltage power supply during tenant absence when the main power supply for the FCU is shut down.
- Compatible with VRF indoor units.

> TCC LINK INTERFACE



TCB-PCNT30TLE2

- Allows DI/SDI indoor units & AHU DX kits to be connected to TCC link network.

## > RAV/VRF/ESTIA GATEWAY

### > MODBUS® RTU

#### Reliable and easy to use



TCB-IFMB1280U-E

Directly connect up to 128 Toshiba Air Conditioning indoor units to a Modbus® Building Management System. Maximum 15 Modbus I/F can be connected per Modbus Master Device. Compatible with TCC Link & TU2C Link protocols.

#### Individual gateway



BMS-IFMB0UCW-E (RAV/VRF)  
BMS-IFMB0UEW-E (Estia)

Connect easily one indoor unit or a group of 8 indoor units to a Modbus Building Management Control System.

### > LONWORKS®

#### 12 input network variables



TCB-IFLN642TLE

Directly connect up to 64 Toshiba Air Conditioning indoor units and up to 16 outdoor units to a Lonworks® Building Management Control System. Compatible with RBC-WP1-PE Lonworks Control software.

### > KNX®

#### ETS configuration



TO-AC-KNX-64 (RAV/VRF - TCC Link)  
TO-AC-KNX-16 (RAV/VRF - TCC Link)  
BMS-IFKX0UCW-E (RAV/VRF)  
BMS-IFKX0UEW-E (Estia)

Directly connect up to 64, 16 or only one Toshiba Air Conditioning indoor units to a KNX® Building Management Control System.

### > BACNET® IP

#### Standard gateway



BMS-IFBN1280U-E  
(Estia R32, SMMS-u & SHRM-Advance compatibility)

Directly connect up to 128 Toshiba Air Conditioning indoor units to a BACnet® Building management Control System.

Network adaptor TCB-PCNT30TLE2 required for connection of DI/SDI Indoor Units (1 per Master Indoor Unit)

## > RAV/VRF INTERFACES

### > ANALOGUE INTERFACE

#### Analogue 0/10V control



TCB-IFCB640TLE

The Analogue Relay Interface is a device that can be connected directly to the TCC-Link Central Control network to provide Analogue & Digital Inputs & Outputs for control over Toshiba Air Conditioner products from non-Toshiba control systems.

### > GENERAL PURPOSE RELAY INTERFACE

#### Toshiba equipment control



TCB-IFCG1TLE

The General Purpose Relay Interface is a device that can be connected directly to the TCC-Link Central Control Network and addressed on the TCC-Link Network in order to provide control of non-Toshiba equipment from a Toshiba control system, and control of the Toshiba Air Conditioner from Digital & Analogue Inputs.

### > GSM INTERFACE

#### Control any time anywhere...



TCB-IFGSM1E

The TCB-IFGSM1E Interface is a device that allows control of the Toshiba Air Conditioning Equipment from a remote location using standard GSM (Global system for Mobile communications) Mobile phone SMS text messages.












| Model number      | Reference                                       | TCC-Link | TU2C-Link | Description   | Used with   |
|-------------------|---|----------|-----------|---|---|
| BMS-CT1256U-E     | 7" Touch Screen Controller                      | ●        | ●         | Enables full control of up to 256 indoor units  |   |
| BMS-CT5121E       | 12" Touch Screen Controller                     | ●        |           | Enables full control of up to 512 indoor units with electric billing, ML  |   |
| BMS-IFBN1280U-E   | BacNet Interface                                | ●        | ●         | BACnet Interface for Estia R32, LC & VRF  |   |
| BMS-IFBN640TLE    | BacNet Interface                                | ●        |           | BACnet Interface for LC & VRF   | Enables integration with BACnet   |
| BMS-IFDD03E       | Digital I/O relay interface                     | ●        |           | Digital I/O relay interface   | Touch screen controller, Compliant manager, Web based controller, Smart Manager                       |
| BMS-IFKX0UCW-E    | 1:1 KNX interface                               |          | ●         | Connect RAV/VRF system to a KNX Building Management System  | Remote Control wiring   |
| BMS-IFKX0UEW-E    | 1:1 KNX interface                               |          | ●         | Connect Estia R32 system to a KNX Building Management System  |   |
| BMS-IFLSV4E       | TCS-Net Relay Interface                         | ●        |           | Relay for integration to TCS-Net  | Bacnet gateway, Touch-screens & Web based controller  |
| BMS-IFMB0UCW-E    | 1:1 Modbus interface                            |          | ●         | Connect LC & VRF systems to a Modbus Building Management System.  | Remote Control wiring   |
| BMS-IFMB0UEW-E    | 1:1 Modbus interface                            |          | ●         | Connect Estia R32 system to a Modbus Building Management System.  |   |
| BMS-IFWH5E        | Energy monitoring relay interface               | ●        |           | Energy monitoring relay interface   | Touch screen controller, Compliant manager, Web based controller, Smart Manager                       |
| BMS-IFWF0320E     | Smart Device Control Interface                  | ●        |           | Enables full control of up to 32 indoor units by use of Toshiba AC app (Smart phone & Tablet)   |   |
| BMS-SM1281ETLE    | Smart BMS Manager with data analyzer            | ●        |           | Enables full control of up to 128 indoor units with Energy Monitoring and Advanced Control Options  | network 1:1 model connection interface required for DI/SDI (Excluding high-wall type)                 |
| NRB-1HE           | Remote ON/OFF adapter                           | ●        |           | Allows ON/OFF control   | All Air-to-air heat exchangers  |
| NRC-01HE          | Wired Remote Controller                         | ●        |           | Air-to-air heat exchanger remote controller, including with DX coil and humidifiers models  | Air-to-air heat exchangers and Air-to-air heat exchangers with DX coil                                |
| RBC-AMSU51E-EN/ES | Design remote Controller with schedule timer    | ●        | ●         | Multi-Language LCD display, a built-in 7-Day timer, Energy Saving options and return back function, Dual set points, and Soft cooling.<br>EN = English, Italian, Polish, Greek, Russian, Turkish.<br>ES = English, Spanish, Portuguese, French, Dutch, German |   |
| RBC-AMTU31-E      | Wired Remote Controller                         | ●        | ●         | Main wired remote controller  |   |
| RBC-ASC11U-E      | Wired Remote Controller                         | ●        | ●         | Main wired remote controller  |   |
| RBC-AX33UYP-E     | Infra-red Remote Kit                            | ●        | ●         | Wireless remote controller  | One-way cassettes (YHP series)  |
| RBC-AXU31C-E      | Infra-red Remote Kit                            | ●        | ●         | Wireless remote controller  | All ceiling units and one-way cassettes (SH series)   |
| RBC-AXU31-E       | Infra-red Remote Kit                            | ●        | ●         | Wireless remote controller  | All units   |
| RBC-AXU33UP-E     | Wireless remote unit kit                        | ●        | ●         | Wireless remote controller  | 4 way cassette series 4 & RBC-U33P-E panel  |
| TCB-IFCB-4E2      | Remote location On/Off Control Box              | ●        |           | Enables remote location On/Off control  |   |
| TCB-IFCB5-PE      | Window Switch & Remote on/off                   | ●        |           | Ensure the indoor unit not operate when outside window is open or for Door Entry systems  |   |
| TCB-IFCB640TLE    | Analog interface                                | ●        |           | Control & monitoring up to 64 IU on TCC-link  | Combination with TCB-IFCG1TLE   |
| TCB-IFCG1TLE      | General purpose interface                       | ●        |           | enables control of A/C by the DI/DO and AI/AO   | Combination with TCB-IFCB640TLE   |
| TCB-IFLN642TLE    | LN interface                                    | ●        |           | Allows control of 64 indoor units from a Lonworks based BMS   |   |
| TCB-IFMB1280U-E   | Modbus interface box                            | ●        | ●         | Connect LC & VRF systems to a Modbus Building Management System.  |   |
| TCB-KBCN32VEE     | Connectors                                      | ●        |           | For CN32  |   |
| TCB-KBCN60OPE     | Connectors                                      | ●        |           | For CN60  |   |
| TCB-KBCN61HAE     | Connectors                                      | ●        |           | For CN61  |   |
| TCB-KBCN70OAE     | Connectors                                      | ●        |           | For CN70  |   |
| TCB-KBCN73DEE     | Connectors                                      | ●        |           | For CN73  |   |
| TCB-KBCN80EXE     | Connectors                                      | ●        |           | For CN80  |   |
| TCB-PCDM4E        | Application Control PC Board                    | ●        |           | Power Peak Cut Control  |   |
| TCB-PCIN4E        | Application Control PC Board                    | ●        |           | Error/Individual compressor Operation Output Control Board  |   |
| TCB-PCMO4E        | Application Control PC Board                    | ●        |           | External Master ON/OFF Control Board  |   |
| TCB-PCUC2E        | Optional connection kit                         | ●        |           |   |   |
| TCB-PSMT1E        | Optional connector kit                          | ●        |           | Multi-Tenant Kit for VRF Systems  | SMMS-e, SHRM-e and Mini-SMMS Indoor Units (refer to I/M for more details of connectable Indoor units) |
| TCB-PX100-PE      | Enclosure for the Window Switch / Remote On/Off | ●        |           | For use when the Window Switch / Remote On/Off Accessory cannot fit within the AC unit, eg. High Walls  | For use with TCB-IFCB5-PE   |
| TCB-PX30MUE       | E-Box Extension Enclosure                       | ●        |           | For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB  | 4-Way Cassettes only & TCB-IFCB5-PE   |
| TCB-PX40MUE       | E-Box Extension Enclosure                       | ●        |           | For 1:1 Model connection I/F and Window Switch / Remote On/Off PCB  | 4-Way Compact Cassettes only & TCB-IFCB5-PE   |
| TCB-SC640U-E      | Centralized remote controller                   | ●        | ●         | Up to 64 indoor units   |   |
| TCB-TC41U-E       | Remote temperature sensor                       | ●        | ●         | Remote temperature sensor for cassette & duct   |   |

# > LIGHT COMMERCIAL ACCESSORIES

| Indoor unit type                         |                                 |                                     | Required accessory               |  |
|--|---------------------------------|-------------------------------------|----------------------------------|--|
| Smart 4-way Air Discharge cassette type  | Standard panel                  | RBC-U41PG(W)-E                      | RAV-HM***UT-E                    | For fresh air inlet box  |
|  | Motion Sensor                   | TCB-SIR41U-E                        |                                  | For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm) |
|  | Fresh air and filter chamber    | TCB-GFC1603UE                       |                                  | Use with TCB-GFC1603UE   |
|  | Fresh air inlet box             | TCB-GB1602UE                        |                                  | For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)              |
|  | Auxiliary fresh air flange      | TCB-FF101URE2                       |                                  | height 50 mm   |
|  | Spacer for height adjustment    | TCB-SP1603UE                        |                                  | Air direction change by cutting off air discharge port (3 pcs.)                                |
|  | Air discharge direction kit     | TCB-BC1603UE                        |                                  |  |
| 4-way Air Discharge cassette type        | MTO straight, white color panel | RBC-U33P-E                          | RAV-HM***UTP-E                   | For fresh air inlet box  |
|  | Motion Sensor                   | TCB-SIR33UP-E                       |                                  | For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm) |
|  | Fresh air and filter chamber    | TCB-GFC1602UE                       |                                  | Use with TCB-GFC1602UE   |
|  | Fresh air inlet box             | TCB-GB1602UE                        |                                  | For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)              |
|  | Auxiliary fresh air flange      | TCB-FF101URE2                       |                                  | height 50 mm   |
|  | Spacer for height adjustment    | TCB-SP1602UE                        |                                  | Air direction change by cutting off air discharge port (3 pcs.)                                |
|  | Air discharge direction kit     | TCB-BC1602UE                        |                                  |  |
| Compact 4-way cassette type              | PM2.5 filters                   | TCB-PLFC1UPE-120<br>TCB-PLFC2UPE-80 | RAV-HM***MUT-E                   | Before pre filter  |
|  | Standard panel                  | RBC-UM21PG(W)-E                     |                                  | After pre filter   |
|  | Motion Sensor                   | TCB-SIR41UM-E                       |                                  | Required accessory   |
| Slim duct type                           | Auxiliary fresh air flange      | TCB-FF101URE2                       | RAV-RM***SDT-E                   | For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)              |
|  | Concealed duct type             | Spigot shaped flange                | TCB-SF56C6BE                     | RAV-HM561BTP-E   |
| TCB-SF80C6BE                             |                                 |                                     | RAV-HM801BTP-E                   |  |
| TCB-SF160C6BE                            |                                 |                                     | RAV-HM1**1BTP-E                  |  |
| Drain pump kit                           |                                 | TCB-DP31CE                          | RAV-HM***1CTP-E                  | Lift up to 600 mm  |
| Ceiling-suspended type                   | Elbow Piping Kit                | TCB-KP13CE                          | RAV-HM401CTP & RAV-HM501CTP-E    | Needed when drain pump kit is used   |
|  |                                 | TCB-KP23CE                          | RAV-HM801CTP-E & RAV-HM1**1CTP-E |  |
| Concealed Duct high static pressure type | Long life filter kit            | TCB-LK2801DP-E                      | RAV-RM***DTP-E                   |  |
|  | Drain Pump kit                  | TCB-DP40DPE                         |                                  |  |

| Code         | Description                       | Capacities               |
|--------------|-----------------------------------|--------------------------|
| RBC-TWP30E2  | Twin-branch kit for DI & SDI      | 1.5 HP + 1.5 HP          |
| RBC-TWP50E2  | Twin-branch kit for DI & SDI      | 2 HP + 2 HP              |
| RBC-TWP101E  | Twin-branch kit for BigDI         | 3 HP + 3 HP              |
|              |                                   | 4 HP + 4 HP              |
| RBC-TRP100E  | Triple-branch kit for DI & Big DI | 5 HP + 5 HP              |
|              |                                   | 2 HP + 2 HP + 2 HP       |
| RBC-DTWP101E | Double-twin branch kit for Big DI | 3 HP + 3 HP + 3 HP       |
|              |                                   | 2 HP + 2 HP + 2 HP + 2HP |
|              |                                   | 3 HP + 3 HP + 3 HP + 3HP |

# > BUSINESS REFRIGERANT ACCESSORIES

| Compatible Mini SMMS, Mini SMMS-e & SMMS-e | Model Name    | Compatible SHRM-e | Comaptible SHRM Advance | Specification                          | Picture   | Total capacity codes           |
|--|---------------|-------------------|-------------------------|--|---|--------------------------------|
| RBM-BY55E                                  |               | RBM-BY55FE        |                         | Branching joint                        |   | under 6.4hp                    |
| RBM-BY105E                                 |               | RBM-BY105FE       |                         |  |   | from 6.4 to 14.2hp             |
| RBM-BY205E                                 |               | RBM-BY205FE       |                         |  |   | from 14.2 to 25.2hp            |
| RBM-BY305E                                 | RBM-BY305FE   |                   |                         |  |   | from 25.2 to 61.2hp            |
| RBM-BY405E                                 |               |                   |                         |  | 61.2hp or more  |                                |
| RBM-HY1043E                                |               | RBM-HY1043FE      |                         | Headers branching four-way             |   | < 14.2 HP                      |
| RBM-HY2043E                                |               | RBM-HY2043FE      |                         |  |   | < 14.2 - 25.2 HP               |
| RBM-HY1083E                                |               | RBM-HY1083FE      |                         | Headers branching eight-way            |   | < 14.2 HP                      |
| RBM-HY2083E                                |               | RBM-HY2083FE      |                         |  |   | < 14.2 - 25.2 HP               |
| RBM-BT14E                                  | RBM-BT14FE    |                   |                         | Joints for connection of outdoor units |  | < 26 HP system capacity        |
| RBM-BT24E                                  | RBM-BT24FE    |                   |                         |  |   | >26 <46 HP system capacity     |
| RBM-BT34E                                  |               |                   |                         |  |   | >44 HP system capacity         |
|  | RBM-Y1123FE   |                   |                         | Flow selector unit                     |  | < 4.0 HP indoor units          |
|  | RBM-Y1803FE   |                   |                         |  |   | < 4.0 - 6.4 HP indoor units    |
|  | RBM-Y2803FE   |                   |                         | Flow selector unit long piping         |  | < 6.4 - 10.0 HP indoor units   |
|  | RBM-Y1124FE   | RBM-Y1121FUPE*    |                         |  |   | < 4.0 HP indoor units          |
|  | RBM-Y1804FE   | RBM-Y1801FUPE*    |                         | Multi-port flow selector unit          |  | < 4.0 - 6.4 HP indoor units    |
|  | RBM-Y2804FE   | RBM-Y2801FUPE*    |                         |  |   | < 6.4 - 10.0 HP indoor units   |
|  | RBM-Y1801F4PE | RBM-Y1801FU4PE*   |                         | Shut off valve unit                    |  | < 6.4 HP indoor units x 4 port |
|  | RBM-Y1801F6PE |                   |                         |  |   | < 6.4 HP indoor units x 6 port |
|  |               | RBM-Y1801FU8PE*   |                         |  |   | < 6.4 HP indoor units x 8 port |
|  |               | RBM-Y1801FU12PE*  |                         |  | < 6.4 HP indoor units x 12 port   |                                |
|  |               | RBM-SV1121HUPE    |                         | Shut off valve unit                    |  | < 4.0 HP indoor units          |
|  |               | RBM-SV1801HUPE    |                         |  |   | < 4.0 - 6.4 HP indoor units    |
|  |               | BM-SV6701HUPE     |                         |  |   | < 6.4 - 24 HP indoor units     |

\* Embedded shut off valve



**> VRF ACCESSORIES**

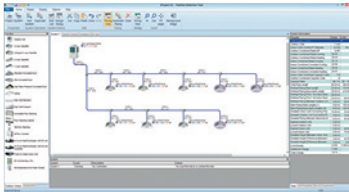
| Indoor unit type                         | Parts name                   | Model name                             | Comply with VRF FCU                              | Notes   | Remarks   |
|--|------------------------------|--|--|---|---|
| 4-way Air Discharge Smart cassette type  | Standard panel               | RBC-U41PG(W)-E                         | MMU-UP***1H-E/TR                                 | Required accessory  |   |
|  | Fresh air and filter chamber | TCB-GFC1603UE                          |  | For fresh air inlet box   |   |
|  | Auxiliary fresh air flange   | TCB-FF101URE2                          | MMU-UP***1H-E/TR                                 | For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm) |   |
|  | Spacer for height adjustment | TCB-SP1603UE                           |  | height 50 mm  |   |
|  | Air discharge direction kit  | TCB-BC1603UE                           |  | Air direction change by cutting off air discharge port (3 pcs.)                   |   |
| 4-way Air Discharge cassette type        | Standard panel               | RBC-U33P-E                             |  | Required accessory  |   |
|  | PM2.5 filters                | TCB-PLFC1UPE-120                       | MMU-UP***1HP-E/TR                                | Before pre filter   |   |
|  |                              | TCB-PLFC2UPE-80                        |  | After pre filter  |   |
| Compact 4-way cassette type              | Decoration panel             | RBC-UM21PG(W)-E                        | MMU-UP***1MH-E/TR                                | Required accessory  |   |
|  | Decoration panel             | RBC-UW283PG(W)-E                       | MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR           |   |   |
| RBC-UW803PG(W)-E                         |                              | MMU-UP0181WH-E/TR to MMU-UP0301WH-E/TR | Required accessory                               |   |   |
| RBC-UW1403PG(W)-E                        |                              | MMU-UP0361WH-E/TR to MMU-UP0561WH-E/TR |  |   |   |
| 2-way cassette type                      | Auxiliary fresh air flange   | TCB-FF151US-E                          | MMU-UP***1WH-E/TR                                | For easy fresh air intake by using the knockout hole of indoor unit               |   |
|  | Filter chamber               | TCB-FC283UW-E                          | MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR           |   |   |
|  |                              | TCB-FC803UW-E                          | MMU-UP0181WH-E/TR to MMU-UP0301WH-E/TR           |   |   |
|  |                              | TCB-FC1403UW-E                         | MMU-UP0361WH-E/TR to MMU-UP0561WH-E/TR           |   |   |
|  | Super Long life filter       | TCB-LF283UW-E                          | MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR           |   | Use with TCB-FC283UW-E                                      |
|  |                              | TCB-LF803UW-E                          | MMU-UP0181WH-E/TR to MMU-UP0301WH-E/TR           | For use with filter chamber   | Use with TCB-FC803UW-E                                      |
| 1-way cassette type                      | Decoration panel             | RBC-UY32P-E                            | MMU-UP0031YHP-E/TR to MMU-UP0121YHP-E/TR         | Required accessory  |   |
|  |                              | RBC-UY42P-E                            | MMU-UP0151YHP-E/TR to MMU-UP0271YHP-E/TR         |   |   |
| Slim duct type                           | 3DW Louvers                  | TCB-TDL0141SDY-E                       | MMD-UP0031SPHY-E/TR to MMD-UP0121SPHY-E/TR       | Horizontal, vertical motorized louver for slim duct                               | RBC-AMSU51E-ES/EN needed                                    |
|  |                              | TCB-TDL0181SDY-E                       | MMD-UP0151SPHY-E/TR to MMD-UP0181SPHY-E/TR       |   |   |
| Concealed duct type                      | Spigot shaped flange         | TCB-SF56C6BE                           | MMD-UP0071BHP-E/TR to MMD-UP0181BHP-E/TR         |   |   |
|  |                              | TCB-SF80C6BE                           | MMD-UP0241BHP-E/TR to MMD-UP0301BHP-E/TR         |   |   |
|  |                              | TCB-SF160C6BE                          | MMD-UP0361BHP-E/TR to MMD-UP0561BHP-E/TR         |   |   |
| Concealed Duct high static pressure type | Long life filter kit         | TCB-LK801D-E                           | MMD-UP0181HP-E/TR to MMD-UP0271HP-E/TR           |   |   |
|  |                              | TCB-LK1401D-E                          | MMD-UP0361HP-E/TR to MMD-UP0561HP-E/TR           |   |   |
|  | Spigot shaped flange         | TCB-LK2801DP-E                         | MMD-UP0721/0961HP-E/TR                           |   |   |
|  |                              | TCB-SF56C6BPE                          | MMD-UP0181HP-E/TR to MMD-UP0271HP-E/TR           |   |   |
|  |                              | TCB-SF80C6BE                           | MMD-UP0361HP-E/TR to MMD-UP0561HP-E/TR           |   |   |
| High Wall                                | PMV Kit                      | TCB-SF160C6BE                          | MMD-UP0721HP-E/TR to MMD-UP0961HP-E/TR           |   |   |
|  |                              | TCB-DP40DPE                            | MMD-UP***1HP-E/TR                                |   |   |
| Ceiling-suspended type                   | Drain pump kit               | RBM-PMV0361U-E                         |  | For FCU capacity 0.3-1.3HP  | Suitable for high wall 1 serie with or without embedded PMV |
|  | Elbow Piping kit             | RBM-PMV0901U-E                         |  | For FCU capacity 1.7-2.5HP  |   |
| Fresh air intake type                    | High-efficiency filter 65    | TCB-DP31CE                             | MMC-UP***1HP-E/TR                                | Lift up to 600 mm   | Use TCB-KP13, 23CE  |
|  |                              | TCB-KP14CPE                            | MMC-UP0151/0181HP-E/TR                           |   |   |
|  | High-efficiency filter 90    | TCB-KP24CPE                            | MMC-UP0241HP-E/TR to MMC-UP0561HP-E/TR           |   |   |
|  |                              | TCB-UFM0481D-E                         | MMD-UP0481HF-E/TR                                | Dust collecting effect: 65% (NBS Colorimetric method)                             | Use with TCB-FC0481DF-E                                     |
|  |                              | TCB-UFM1281D-E                         | MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR           |   | Use with TCB-FC1281DF-E                                     |
|  | Filter chamber               | TCB-UFH0481D-E                         | MMD-UP0481HF-E/TR                                | Dust collecting effect: 90% (NBS Colorimetric method)                             | Use with TCB-FC0481DF-E                                     |
|  |                              | TCB-UFH1281D-E                         | MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR           |   | Use with TCB-FC1281DF-E                                     |
| Drain pump kit                           | TCK-PF1281DF-E               | MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR |  | Use with TCB-FC1281DF-E   |   |
| Air-to-air heat exchanger with DX coil   | Drain pump kit               | TCB-FC0481DF-E                         | MMD-UP0481HF-E/TR                                | For high efficiency filter or long life prefilter                                 |   |
|  |                              | TCB-FC1281DF-E                         | MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR           |   |   |
|  |                              | TCB-DP40DFP-E                          | All models                                       | Lift up to 330 mm   |   |
|  |                              | TCB-DP31HEXE                           | MMD-VN502/802/1002HEXE & MMD-VNK502/802/1002HEXE | Lift up to 330 mm   |   |

# > SOFTWARE

## > SELECTION TOOL

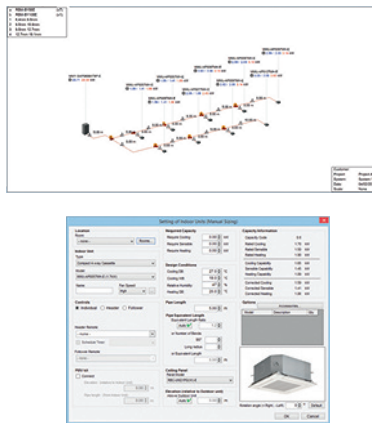


Software main screen

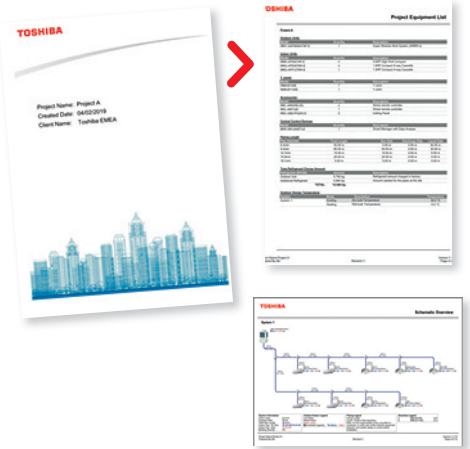


Toshiba Selection software has been fully designed, with a user-friendly interface allowing novice and expert users alike to create simple, yet detailed VRF system schematics. It is highly versatile, allowing the level of detail to be tailored to suit customer requirements. The software also allows the user to specify pricing strategy and create additional interim reports, including any diagrams and schematics required. Final detailed reports can then be produced and sent to customers in PDF format or in more complex files, such as AutoCAD DXF, allowing simple integration into their existing software packages.

Project fully customizable

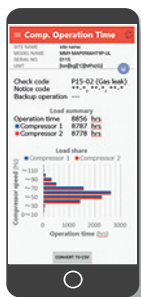
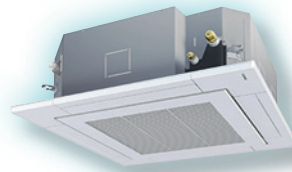


Complete report

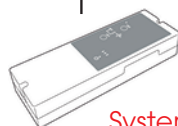


## > SERVICE TOOL

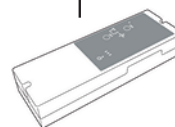
Save time during commissioning and maintenance. Choose between the "Wave Tool Advance" using Smartphone NFC connection or the link adaptor connected to the outdoor or indoor unit.



Wireless connection using smartphone NFC technology to collect system data



System operation self record using link adaptor



Get access to system data indoor using link adaptor



Direct USB connection to get access to system data

\* Please contact Toshiba for IOS® & Android® phone compatibility list.

Wave tool compatible with SMMS- u, SMMS- e, SHRM-Advance and SHRM- e. Service tool compatible with SMMS- u & SHRM-Advance. Please, use Dyna Doctor for MINI SMMS- e, SMMS- e & SHRM- e.

## ➤ INSTALLATION AND USE OF REFRIGERANTS NOT SPECIFIED BY TOSHIBA CARRIER CORPORATION

Toshiba Air Conditioning products are designed and manufactured on the assumption that each product is used with the specific refrigerant specified for that product.

The use of incorrect refrigerant may cause mechanical defects, malfunctions or failures which, in some cases, could result in a serious safety issue. For this reason Toshiba Carrier Corporation requires that only the specified refrigerant for a product should be used.

The type of refrigerant specified for a product is stated in the accompanying owners manual for a product, or on the label attached to the product itself.

Toshiba Carrier Corporation shall not assume any liability for failures, malfunctions or safety issues on any product if incorrect refrigerant is used in that product.

## ➤ TESTING CONDITIONS BASED ON EUROVENT REQUIREMENTS

Cooling mode

Indoor air temperature: 27°CDB / 19°CWB

Outdoor temperature: 35°CDB / 24°CWB

Heating mode

Indoor air temperature: 20°CDB

Outdoor temperature: 7°CDB / 6°CWB

Certified data accessible on Eurovent website

Seasonal data accessible on Toshiba Ecodesign website



## *Better Air Solutions*

Through our commitment to world-class **efficiency**, versatile **scalability** and leading **quality**, Toshiba Air Conditioning advances leading-edge technologies to find the most forward-thinking solutions possible for your world.

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