TOSHIBA





EXPERIENCE THE FUTURE

"Toshiba solutions wherever you are"

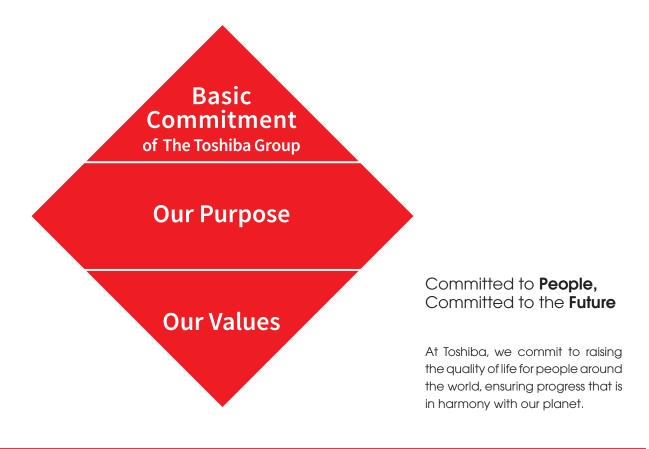
In 1961, Toshiba presented the first split air conditioning unit to the world – a system where the indoor and outdoor units are only connected by copper piping.

Today, more than 50 years later, Toshiba still offers a wide range of top-quality products and services utilizing the best technologies.

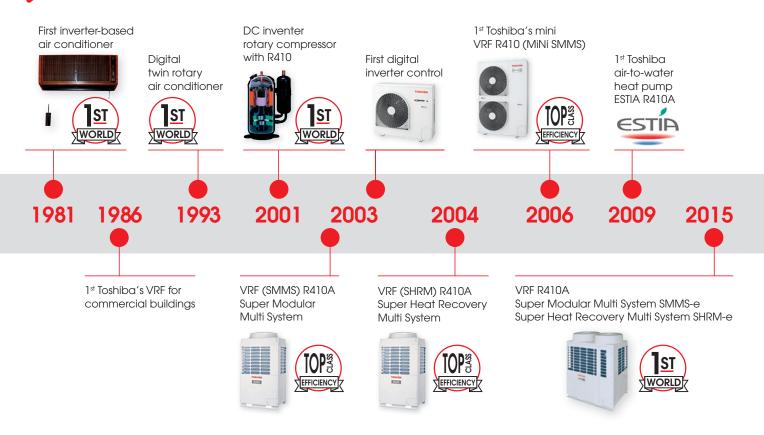


> THE ESSENCE OF TOSHIBA

> Basic Commitment of the Toshiba Group



> 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 thingWe 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

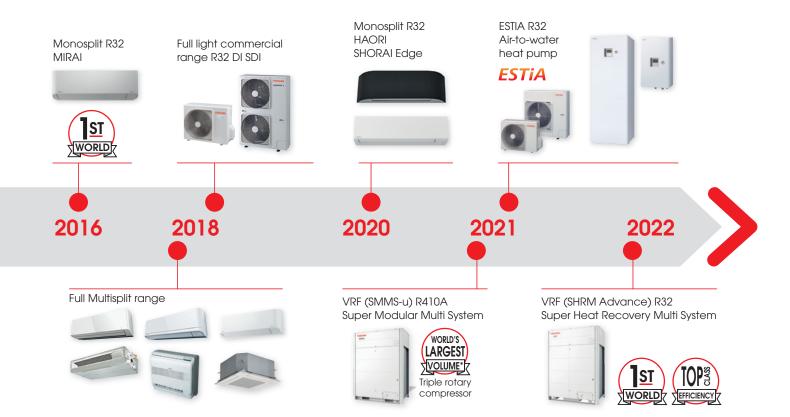
as a means of progress.

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 togetherWe collaborate with each other and our customers, so that we can

grow together.



TOSHIBA AIR CONDITIONING VISION

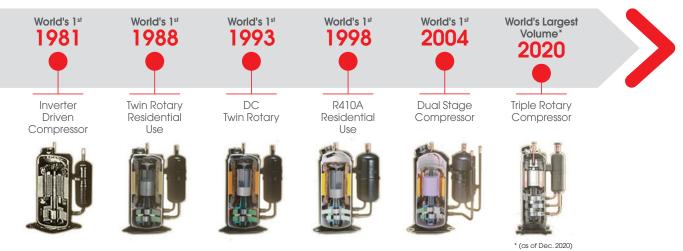


> CHOOSE THE EXPERT OF INSPIRED TECHNOLOGIES

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.





Top-class energy efficiency

- The world's largest Triple rotary compressor (1)
- 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 cuttingedge 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.

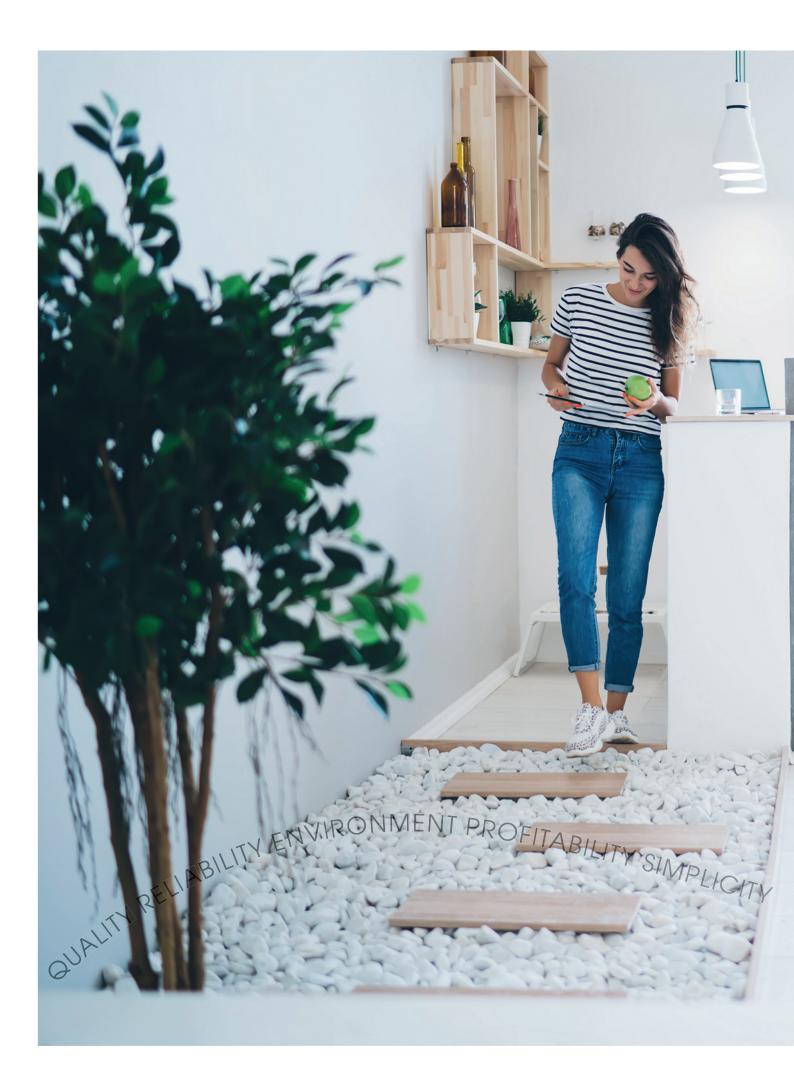
Superior manufacturing quality

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)







> 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.



TOSHIBA EMEA

TCEU - ENGINEERING CENTRE

TOSHIBA



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 Conditionning 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 electricallydriven 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

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

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.





> 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.

32.5%
IMPROVEMENT
IN ENERGY
EFFICIENCY

40%
CUTS IN GREENHOUSE
GAS EMISSIONS
(from 1990 levels)

32% SHARE FOR RENEWABLE ENERGY

Learn more:

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.

17.4%
REDUCTION
in total volume of GHG
emissions from 2017 to 2020

32.5%
REDUCTION
in total volume of waste generated from 2013 to 2020

70%
REDUCTION
in total volume of chemical emissions from 2013 to 2020

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.

BIOTOPES
created at production & business sites worldwide from 2012 to 2019

Source: Toshiba Group Sustainability Report 2020

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













OPERATION











AIR FLOW





















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. To shiba 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

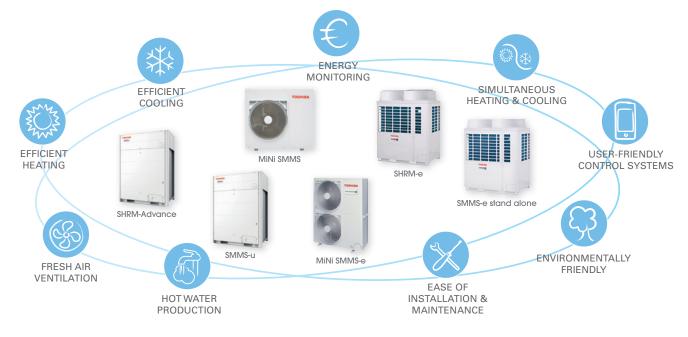


There is nothing like a comfortable place to enjoy the present moment. Full of Toshiba innovations, our VRF guarantee all year round comfort combined with superior energy management, advanced air filtration and full control solutions for maximized product usability.

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

from 40 years of inspired innovations!



> 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



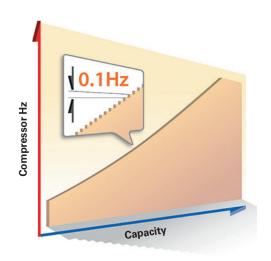


Low noise

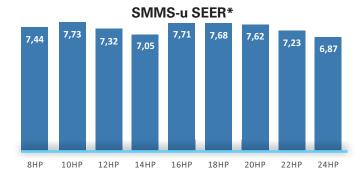


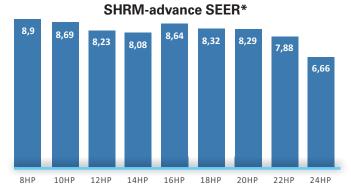
Infinite variable control

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





*4-way cassette combinations



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.



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













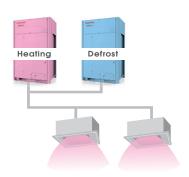
> SUPERIOR AIR COMFORT

> Intelligent

defrost

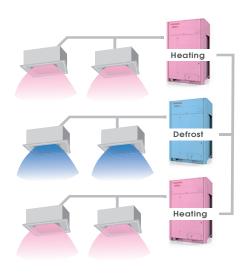
Individual defrost: continuous heating up to 5 hours





Kobetsu

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



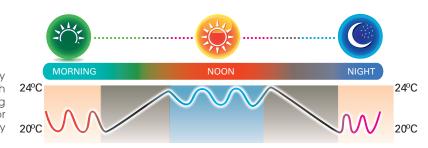
No simultaneous defrost with multi system configuration. Heating operation never stopped.

* 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

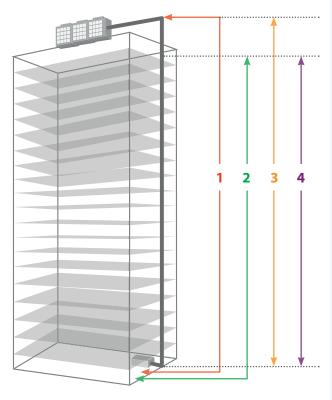




FLEXIBLE DESIGN AND QUICK INSTALLATION

> 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 m²

Farthest equivalent length 250 m/190 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

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



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

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.



Reversible cooling or heating

CHOOSE YOUR ADAPTED SYSTEM SOLUTION

MAPPING BY APPLICATIONS

> OUTDOOR UNITS

Residential

Light commercial

Business













MiNi SMMS Sideblow 1 fan & 2 fans

Individual housing mainly

Up to 250 m² per system Max. 10 IDUs per system Up to 250 m² per system and max. 10 IDUs per system



1 phase electrical power supply only



MiNi SMMS-e 1Ph & 3Ph

Individual housing mainly

Up to 400 m² per system Max. 16 IDUs per system



Stand alone SMMS-e & SMMS-u

Collective housing mainly



3-phase electrical power supply only

Up to 6,000 m² per system Max. 128 IDUs per system



Collective housing mainly



SHRM-e: Up to 2,500 m² per system Max. 64 IDUs per system Hot water production capability

SHRM Advance : Up to 1,200 $\rm m^2\,per\,system\,Max\,54\,IDUs$ per system Hot water production capability

R32 inside

> INDOOR UNITS

					\$
Cassette		o (4-way standard or compact)	o (All types)	o (4-way standard or compact for lobby)	o (All types)
Duct	o (Standard duct)	o (Standard or high static pressure)	o (Slim or standard)	o (Slim for rooms & standard for lobby)	0
High-wall	0	0	0	o (For rooms - low sound version)	0
Ceiling		0			0
Console*	o (Bi-flow version)		0	o (For lobby)	0

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

			OUTDOO	R UNIT MAI	PPING FOI	R EUR	OPE			
		Side Blow VRF R410A	Mini SMMSe 1PH R410A	Mini SMMSe 3PH R410A	SMMSe R410A	SIMIN R41	IOA	SHR R41	0A	SHRM Advance
		MCY-MHP0_4HT-E/TR	MCY-MHP0_4HS-E/TR	MCY-MHP0_4HS8-E/TR	MMY-SAP_6HT8P-E/TR	MMY-MUP_		MMY-MAP_		MMY-SUG_1FT8P-E/TR
			Heat pump	I	Heat pump	Heat	pump	Heat	oump	Heat pump
					Single module /Stand alone	Single module	Standard combinations	Single module	Combinations	Single module
	4	• 🔻	• 🔻	• 🔻						
	5	• 🔻	• 🔻	• 🔻						
	6		• 🔻	• 🔻						
	8			• 🔻	• 🔻	• 🔻		• 🔻		• 🔻
	10			• 🔻	• 🔻	• 🔻		• 🔻		• 🔻
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	54 56						•		•	
	58						•			
	60						•			
							•			
	120						•			
	Fresh air duct					•	•			
Fresh air	Air to Air heat exchanger + DX coil		•	● (4,5 & 6HP only)				•	•	
solution	Standard DX Kit	•	•	•		•	•	•	•	
	0/10v DX kit					•	•			
Hot water	Hot water module			(8 & 10HP only)		•	•		•	(mid temperature only)
Small capacity	0.3HP indoor unit					•	•			•
indoor units	0.6HP indoor unit		•	•	•	•	•	•	•	•
Accessories	Leak detection	•	•	•	•	•	•	•	•	•
, (CCG33011G3	Shuft of valve		•	•	•			•	•	•

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

-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
Cooling capacity	kW		12.1	14.0
Power input	kW	С	3.73	4.33
EER	W/W		3.24	3.23
EthasC/SEER			320.2% / 8.08	307.8% / 7.77
Running current	А	С	14.4 / 13.8 / 13.2	20.8 / 19.9 / 19
Heating capacity	kW		12.5	16.0
Power input	kW	Н	2.83	4.00
COP	W/W		4.42	4.00
EthasH/SCOP			150.2% / 3.83	152.2% / 3.88
Running current	А	Н	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		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	°С Н	-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

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
- 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.







CAPACITY



-20°C > +46°C

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	С	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	Α	С	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	Н	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	А	Н	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 - I/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	С	-5/46	-5/46	-5/46
Operating range - wb	°C	Н	-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

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



CAPACITY



4.38

4HP > 10HP

-20°C > +46°C

OPERATION

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 4 HP	MCY-MHP0504HS8-E 5 HP	MCY-MHP0604HS8-E 6 HP	MCY-MHP0806HS8-E 8 HP	MCY-MHP1006HS8-E 10 HP
Cooling capacity	kW		12.1	14.0	15.5	22.4	28
Power input	kW	С	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	А	С	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
Heating capacity	kW		12.5	16.0	18.0	22.4	28.0
Power input	kW	Н	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	Н	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-MHP01004HS8-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				
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	С	-5/46	-5/46	-5/46	-5/46	-5/46
Operating range - wb	°C	Н	-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

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.







CAPACITY

OPERATION



3.81

-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	SAP1006HT8P-E
			8 HP	10 HP
Cooling capacity ¹	kW		22.4	28.0
Power input	kW	С	5.54	7.69
EER	W/W		4.04	3.64
EthasC/SEER			249.8% / 6.32	244.2% / 6.18
Running current	А	С	8.8	12.4
Heating capacity ¹	kW		25.0	31.5
Power input	kW	Н	5.43	7.41
COP	W/W		4.52	4.25
EthasH/SCOP			148.6% / 3.79	149.4% / 3.81
Running current	А	Н	8.77	11.6
Maximum overcurrent protection3	А		25	25

SMMS-E STAND ALONE Physical data

Outdoor unit	HP	MMY-	SAP0806HT8P-E	SAP1006HT8P-E
Air Flow	m3/h		9700	9700
Air Flow	I/s		2694	2694
Sound Power Level	dB(A)	Н	74	74
Sound pressure level	dB(A)	Н	56	58
Sound Power Level	dB(A)	С	74	74
Sound pressure level	dB(A)	С	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/TCO2eq		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 ⁴	m		300	300
Maximum lift (indoor unit above/below) ^{5, 2}	m		40 / 70	40 / 70
Operating range - db ^{3,4}	°C	С	-10 / 46	-10 / 46
Operating range - wb ^{7, 5, 6}	°C	Н	-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 and -25°C. (a) 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.





4.79

CAPACITY

OPERATION

8HP > 24HP

-25°C > **+52**°C

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



SIVIIVIS-u	Physical	data
Outdoor unit		MAN

Outdoor unit		MMY-	MUP0801HT8P-E	MUP1001HT8P-E	MUP1201HT8P-E	MUP1401HT8P-E	MUP1601HT8P-E	MUP1801HT8P-E	MUP2001HT8P-E	MUP2201HT8P-E	MUP2401HT8P-E
Air Flow	m³/h		9900	10500	11700	11880	15300	16800	15900	16500	16500
Sound Power Level	dB(A)	С	75	77	79	79	83	84	86	86	86
Sound pressure level	dB(A)	С	53	55	58	58	60	61	63	63	63
Sound Power Level	dB(A)	Н	76	77	81	82	86	89	90	90	90
Sound pressure level	dB(A)	Н	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 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
Dofrigarant abaraa D410A	kg		6.0	6.0	6.0	6.0	9.0	9.0	9.0	9.0	9.0
Refrigerant charge R410A	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 ³	m		500	500	500	500	500	500	500	500	500
Maximum lift (indoor unit above/below) ⁴	m		70/40	70/40	70/40	70/40	70/40	70/40	70/40	70/40	70/40
Operating range - db5,6	°C	С	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52	-10/52
Operating range - wb ^{7,8}	°C	Н	-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 ¹	kW		22.40	28.00	33.50	40.00	45.00	50.40	56.00	61.50	67.00
Power input	kW	С	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	Α	С	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	Н	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	Α	Н	8.56	11.50	12.10	15.50	18.30	19.30	22.90	24.80	29.10
Maximum overcurren protection ²	† 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 conditions in 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 considerable 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 ocoling (5c 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 below end -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

	oupdony labit						
	Capacity					Max indoor	
НР	Cooling/Heating in kW	Combination	Modèle	EER/SEER	COP/SCOP	connectivity	
8		0	MANAY MUDOOO LUTOD E /TD	2.07/7.44	4.04/4.5		
	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	<u>22</u> 27	
12	33.5/33.5	12	MMY-MUP1201HT8P-E/TR	3.24/7.32	4.31/4.75		200
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	- 90
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	₩ W
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	w w
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						
	140.5/140.5	24 + 14 + 12	MMY-UP5011HT8P-E/TR	2.86/7.02	3.82/4.44	/4	¥
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	w = =
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 + 20 + 20	MMY-UP9011HT8P-E/TR	2.9/7.12	3.64/4.3	100	- 14 14 14
92	257/257	24 + 24 + 22 + 20	MMY-UP9211HT8P-E/TR	2.84/7.03	3.58/4.24	100	
94	262.5/262.5	24 + 24 + 24 + 20	MMY-UP9411HT8P-E/TR	2.82/6.95	3.59/4.24	102	
96	268/268	24 + 24 + 24 + 24	MMY-UP9611HT8P-E/TR	2.77/6.87	3.53/4.17	104	the same of
98	274.5/274.5	24 + 24 + 24 + 24 + 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 + 20 + 20 + 12	MMY-UP10411HT8P-E/TR	2.88/7.08	3.65/4.3	114	
104	297/297	24 + 24 + 24 + 20 + 12	MMY-UP10611HT8P-E/TR	2.83/7.04	3.63/4.29	116	
108	301.5/301.5	24 + 24 + 24 + 20 + 14	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



















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

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CAPACITY

OPERATION

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HP > **24**HP

-25°C > +52°C

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





SHRM Advan	ice		Performand	es						PRELIMIN	IARY DATA
Outdoor unit	MM	Y-	SUG0801MT8P-E	SUG1001MT8P-E	SUG1201MT8P-	E SUG1401MT8P-	SUG1601MT8P-E	SUG1801MT8P-	SUG2001MT8P-	E SUG2201MT8P-E	SUG2401MT8P-E
			8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24HP
Cooling capacity ¹	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0
Power input	kW	С	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	Α	С	9.14	11.5	14.2	18.9	21.1	24.8	25.4	29.2	38.1
Heating capacity rated/max	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0	61.5	67.0
Power input (rated)	kW	Н	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	Α	Н	8.95	10.6	12.5	16.3	19.9	23.8	23.6	26.1	30.9
Maximum overcurrent protection ²	Α		20	32	32	40	40	50	50	63	80

SHRM Advance

SHRM Advance	Phy	sical data								
Outdoor unit	MMY-	SUG0801MT8P-E	SUG1001MT8P-E	SUG1201MT8P-E	SUG1401MT8P-E	SUG1601MT8P-E	SUG1801MT8P-E	SUG2001MT8P-E	SUG2201MT8P-E	SUG2401MT8P-E
Air flow	m³/h	9900	10500	11700	11880	15300	16800	15900	16500	16800
Sound Power Level	dB(A) H	H 77.0	78.0	82.0	84.0	87.0	89.0	89.0	90.0	90.0
Sound pressure level	dB(A) F	H 56.0	58.0	62.0	63.0	64.0	67.0	67.0	67.0	69.0
Sound Power Level	dB(A)	74.0	75.0	79.0	79.0	83.0	84.0	85.0	86.0	86.0
Sound pressure level	dB(A)	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 1290 x 780	
Weight	kg	232	232	232	232	329	329	361	361	361
Compressor type		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
Kenigerani Charge Roz	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		φ19.1	φ22.2	φ22.2	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6
Liquid line type - diameter for 2-pipe		φ12.7	φ12.7	φ12.7	φ12.7	φ15.9	φ15.9	φ15.9	φ15.9	φ15.9
Suction line type - Diameter for 3-pipe		φ19.1	φ22.2	φ22.2	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6	φ28.6
LP/HP gas line type - Diameter for 3-pipe		φ15.9	φ19.1	φ19.1	φ19.1	φ22.2	φ22.2	φ22.2	φ22.2	φ22.2
Liquid line type - diameter for 3-pipe		φ12.7	φ12.7	φ12.7	φ12.7	φ15.9	φ15.9	φ15.9	φ15.9	φ15.9
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 ²	m	500	500	500	500	500	500	500	500	500
Maximum lift for 3-pipe (indoor unit above/below)	, m	40/90	40/90	40/90	40/90	40/90	40/90	40/90	40/90	40/90
Operating range - db ^{4,5}	°C C	-15 to 50								
Operating range - wb ^{6,7}	°C F	-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 Adv	<i>yance</i> FS	Boxes						PREL	IMINA	RY DATA
Model name	Specification	Picture	Number of outputs	Max piping lenght FSBox/IDU	Max nb of IDUs per port	Max capacity per port	Dimensions (h*l*d)	Weight	Power supply	Comment
RBM-Y1121FUPE	0' 1 1 1		1	50m	5	<4HP		11	Separate	
RBM-Y1801FUPE	Single port flow selector box		1	50m	10	4HP≤ P <6.4HP	206 x 385 x 282	11	Separate	
RBM-Y2801FUPE	3CICCIOI DOX		1	50m	10	6.4HP≤ P <10HP		11	Separate	
RBM-Y1801FU4PE	_	A STATE OF THE PARTY OF THE PAR	4	50m	10		293 x 338 x 468	22	Separate	Embedded
RBM-Y1801FU8PE	Multi port flow selector box	- OF PROPERTY	8	50m	10	<6.4HP	293 x 578 x 468	36	Separate	shut off valve
RBM-Y1801F12PE		- LO AMERICA	12	50m	10		293 x 818 x 468	50	Separate	

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

SHRM Advance	Leak detection				PRELI	MINARY DATA
Model name	Specification	Picture	Dimensions (h*l*d)	Weight	Power supply	Comment
TCB-LD1UPE	Leak sensor	? •	86 x 86 x 25	80g	Powered by the remote	For R32 VRF

SH	IRM Advance	Other accessorie	es			PRELI	MINARY DATA
	Model name	Specification	Picture	Dimensions (h*l*d)	Weight	Power supply	Comment
	TCB-BT1UPE	Battery kit fro flow selector and shuf of valve	0	51 x 176 x 72	0.7kg	Using Fsbox/Shut of valve box power supply	For FS Boxes and shut of valves















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.









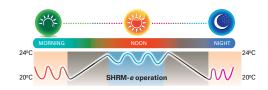
CAPACITY

OPERATION



HP **-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 temperatures at which the indoor unit will begin to operate can now be individually selected giving maximum flexibility to the user.



CUDA/ -	Dayfayna		_						
SHRM-e	Perform	ance	S						
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 ¹	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0
Power input	kW	С	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	А	С	9.44	12.49	15.46	19.92	21.81	25.10	29.18
Heating capacity ²	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0
Power input	kW	Н	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	А	Н	8.57	11.06	13.80	16.47	19.14	21.49	24.68
Maximum overcurrer protection ³	nt 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	I/s		2 694	2 694	3 389	3 389	4 806	4 806	4 972
Sound Power Level	dB(A)	Н	82.0	82.0	82.0	83.0	84	84	84
Sound pressure level	dB(A)	Н	61.0	61.0	62.0	64.0	62	62	62
Sound Power Level	dB(A)	С	80.0	80.0	0.08	81.0	83	83	83
Sound pressure level	dB(A)	С	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			Hermectic 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"				
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 ⁴	m		200	200	200	200	200	200	200
Farthest piping actual length	m		180	180	180	180	180	180	180
Maximum pipe length⁵	m		1000	1000	1000	1000	1000	1000	1000
Maximum lift (indoor unit above/below) ⁶	m		30/70	30/70	30/70	30/70	30/70	30/70	30/70
Operating range - db ⁷	°C	С	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46	-10/46
Operating range - wb8	°C	Н	-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°db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°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
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Capacity	Combination	Modèle	Cooling capacity	Heating capacity	EER	SEER	СОР	SCOP	Max indoor connectivity	
8 HP	8	MMY-MAP0806FT8P-E/TR	22.4	25	3.76	6.19	4.14	3.64	18	anc s
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	tone it
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	tone of
18 HP	18	MMY-MAP1806FT8P-E/TR	50.4	565	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	DESCRIPTION OF
26 HP	14 + 12	MMY-AP2616FT8P-E/TR	73.5	82.5	3.27	5.84	3.83	3.64	58	iii iii)
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	HERE SHEET
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	THE CHARLE SHOW
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	

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 heatexchangers: 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.



8HP > 42HP

-25°C > +46°C

3.71

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	Performo	2000	•						
			_						
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 ¹	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0
Power input	kW	С	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	Α	С	9.44	12.49	15.46	19.92	21.81	25.10	29.18
Heating capacity ²	kW		22.4	28.0	33.5	40.0	45.0	50.4	56.0
Power input	kW	Н	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	А	Н	8.57	11.06	13.80	16.47	19.14	21.49	24.68
Maximum overcurrent protection ³	nt A		25.0	32.0	40.0	50.0	50.0	50.0	63.0

SHRM-e

SHRM-e Physical of	data								
Outdoor unit	HP	MMY-	MAP0806FT8P-UK	MAP1006FT8P-UK	MAP1206FT8P-UK	MAP1406FT8P-UK	MAP1606FT8P-UK	MAP1806FT8P-UK	MAP2006FT8P-UK
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)	Н	82.0	82.0	82.0	83.0	84	84	84
Sound pressure level	dB(A)	Н	61.0	61.0	62.0	64.0	62	62	62
Sound Power Level	dB(A)	С	80.0	80.0	80.0	81.0	83	83	83
Sound pressure level	dB(A)	С	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		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			Hermectic 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"				
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 ⁴	m		200	200	200	200	200	200	200
Farthest piping actual length	m		180	180	180	180	180	180	180
Maximum pipe length ⁵	m		1000	1000	1000	1000	1000	1000	1000
Maximum lift (indoor unit above/below) ⁶	m		30/70	30/70	30/70	30/70	30/70	30/70	30/70
Operating range - db ⁷	°C	С	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46	-10 / 46
Operating range - wb8	°C	Н	-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°db. 2) based on an indoor air temperature of 20°C db and an outdoor air temperature of 7°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.

SHRM-e	Capacity table - :	Standard model
JI INIVI'E	CUDUCIIV IUDIE -	aluliuulu Illouei

Capacity	Combination	Modèle	Cooling capacity	Heating capacity	EER	SEER	СОР	SCOP	Max indoor connectivity	
8 HP	8	MMY-MAP0806FT8P-UK	22.4	25	3.76	6.19	4.14	3.64	18	100
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	THE PARTY OF
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	565	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	THE PART OF
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	THE PER
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	Manual Manual
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	HINE HANG
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																	
		Class	003	005	007	009	012	015	018	024	027	030	036	048	056	072	096	112	128	
	Model type	Cooling/Heating	0.9	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	SHRM- Advance
	Modertype	capacity in kW 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	compatibility
	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		•	•	•	•	•	•	•	•	•	•	•	•					•
OPE	Concealed duct high static	MMD-UP***1HP-E							•	•	•		•	•	•	•	•			•
EURC	Ceiling suspended	MMC-UP***1HP-E						•	•	•	•		•	•	•					•
OR E	Floor-standing concealed	MML-UP***1BH-E			•	•	•	•	•	•										
9	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 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 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		AIR H			IANC	ER		
		Alr flow in m ³ /h	150	250	350	500	650	800	1000	1500	2000
OPE	Model type	Cooling/Heating capacity in kW for models with DX coil				4.5/5		6.5/8.6	8.2/10.9		
FOR EUROPE	Air-to-air heat exchanger	VN-M**0HE	•	•	•	•	•	•	•	•	•
	A2A heat exchanger + DXcoll or + Dxcoll & Humidifier	MMD-VN***2HEXE MMD-VNK***2HEXE				•		•	•		

^{• :}Heat pump
* Only compatible with SMMS-u & SHRM Advance

















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

Design

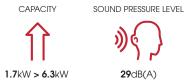
- Smart flat-panel design with clean lines that will complement any decorative style.
- Fit within the T-bar of grid ceiling: 620mm X 620mm.

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.





COMPACT 4-WAY CASSETTE **Performances** MMU-UP0051MH-E/TR UP0071MH-E/TR UP0091MH-E/TR UP0121MH-E/TR UP0151MH-E/TR UP0181MH-E/TR Indoor unit kW 1,7 2,2 kW 2,5 3,2 4.0 6,3 Power consumption kW 0.016 0.023 0.025 0.030 0.052 Running current 0.23 0.24 0.25 0.28 0.46 Α 0.16 Α 0.43 Starting current 0.28 0.41 0.44 0.50 0.80

COMPACT 4-WAY CASSETTE Physical data UP0051MH-E/TR UP0071MH-E/TR UP0091MH-E/TR Air Flow (h/m+/m/l+/l) m³/h 430/415/400/385/365 552/500/462/395/378 570/520/468/395/378 594/550/504/420/402 660/600/552/480/468 840/740/642/540/522 119/115/111/107/101 Air Flow (h/m+/m/l+/l) I/s 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/ 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 m+/m/l+/l) Sound power level (h/m+/m/ 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 l+/l) 256x575x575 Dimensions (HxWxD) 256x575x575 256x575x575 256x575x575 256x575x575 256x575x575 mm Weight 15 15 15 15 15 kg RBC-UM21PG(W)-E Panel 12x620x620 12x620x620 12x620x620 12x620x620 Panel dimensions (HxWxD) 12x620x620 12x620x620 mm Panel weight 2.5 2.5 2.5 2.5 2.5 2.5 kg Connecting pipe, gas 3/8" 3/8" 3/8 3/8 1/2 1/2 in 1/4" 1/4" 1/4" 1/4" Connecting pipe, liquid 1/4" 1/4 Drain port diameter 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















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

SOUND PRESSURE LEVEL







26dB(A)









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 consuption	W	20	20	18	26	42	54	68	125	135	137
Starting current	А	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/ L+/L	m³/h	846/792/768/ 738/708	846/792/768/ 738/708	1060/960/920/ 860/800	1260/1160/1100/ 1040/940	1580/1440/1300/ 1210/1120	1770/1590/1380/ 1320/1250	1940/1770/1520/ 1450/1400	2184/1848/1596/ 1356/1260	2262/1998/1740/ 1470/1368	2262/2034/1782/ 1512/1404
Sound pressure level		H/M/L	dB(A)	30/29/28/ 27/26	30/29/28/ 27/26	32/30/30/ 29/28	36/34/33/ 32/31	41/39/37/ 35/35	42/40/37/ 36/35	44/42/39/ 38/37	45/41/38/ 36/32	46/43/39/ 37/33	46/43/40/ 38/35
Sound power level		H/M+/M/ L+/L	dB(A)	45/44/43/ 42/42	45/44/43/ 42/42	46/45/44/ 43/42	50/48/47/ 46/45	55/53/51/ 49/48	56/54/51/ 50/49	58/56/53/ 52/51	60/56/53/ 50/48	61/57/54/ 52/49	61/58/55/ 53/51
Outer -	Main unit	HxLxP	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	319 x 840 x 840	319 x 840 x 840
dimension	Ceiling panel	HxLxP	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	30 x 950 x 950	30 x 950 x 950
Total weight -	Mair	n unit	kg	18	18	25	25	25	25	25	25	25	25
ioiai weigni -	Ceiling	g panel	kg	5	5	5	5	5	5	5	5	5	5
	Mair	n unit					Heat-insulating	material attach	ned Zinc hot dip	ping steel plate			
Appearance	Ceilling	Model						RBC-U41	PG(W)-E				
	panel	Panel color						White (2.5	GY9.0/0.5)				
	Gas	pipe	inch	3/8"	3/8"	1/2"	1/2"	5/8"	5/8"	5/8"	5/8"	5/8"	5/8"
Connecting	Liquid	d pipe	inch	1/4"	1/4"	1/4"	1/4"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
pipe —		n port de dia.)	mm					25 (Polyvinyl d	chloride tube)				
Power supply						1 phase 5	OHz 230V(220V-2	240V) - Separate	e power supply	for indoor units	is required.		

















> 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.





SOUND PRESSURE LEVEL



2.8kW > 18kW

27dB(A)



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	А	0,23	0,23	0,27	0,29	0,38	0,38	0,43	0,78	0,88	0,88
Starting current	Α	0,30	0,30	0,33	0,36	0,42	0,42	0,59	0,87	1,23	1,26

A-MAY CASSETTE Physical data

4-VVAY GA	133E I	IE Phy	sicai aata								
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)	I/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	319x840x840	319x840x840	319x840x840						
Weight	kg	18	18	20	20	20	20	20	25	25	25
Panel						RI	BC-U33P-E				
Panel dimensions (HxWxD)	mm	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.

Desian

• 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.



2.2kW > 18kW

SOUND PRESSURE LEVEL



30dB(A)





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-W/AY CASSETTE Performances

L VVAI OAGO		1 01101111	aiiooo									
Indoor unit	MMU-	UP0071WH-E/TI	R UP0091WH-E/TR	UP0121WH-E/TR	UP0151WH-E/TR	UP0181WH-E/T	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	Α	0,23	0,23	0,23	0,24	0,32	0,39	0,39	0,46	0,48	0,57	0,75
Starting current	Λ	0.35	0.35	0.35	0.36	0.48	0.50	0.50	0.60	0.72	0.86	1 13

2-WAY CASSETTE Physical data

		,	001 0010									
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-UW2	33PG(W)-E			RBC-UW80	03PG(W)-E		RB	C-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

















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.

Comfor

- 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.





1-WAY CASS	ETTE	Performa	inces							
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	А	0.15	0.15	0.18	0.19	0.2	0.24	0.26	0.34	0.41
Starting current	Α	0.19	0.19	0.22	0.23	0.24	0.28	0.3	0.38	0.45

1-WAY CASS	ETTE	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)	m³/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 1180 x 450							
Weight	kg	14	14	14	14	14	15	15	15	15
Panel				RBC-UY32P-E				RBC-U	Y42P-E	
Panel dimensions (HxWxD)	mm	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).



1.7kW > 18kW

23dB(A)





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/T	R UP0121BHP-E/TR	UP0151BHP-E/TE	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	Α	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	Α	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	DU (CT Phy	sical dat	а									
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/T
Air Flow (h/m/l)	m³/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	2350/1920/150
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-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	220/240-1-50

HIGH STATIC PRESSURE DUCT













This is Toshiba's most powerful ducted unit delivering air flows up to 4800m³/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.

- 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

SOUND PRESSURE LEVEL







37dB(A)



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

HIGH STATIC PRESSURE DUCT Physical data

THUIT STATIC PAL	JJUNL	DUCI FII	ysicui uuiu						
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)	m3/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)	I/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

















> 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

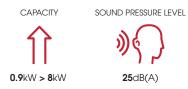
- Compact chassis with 210mm height and 450mm depth whatever the capacity, for integration in most projects.
- Capacity from 0.3HP for high efficiency buildings.
- Static pressure up to 50Pa set directly on the duct or by using a wired remote controller.

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.





SLIM DUCT Performances UPO031SPHY-E UPO051SPHY-E UPO071SPHY-E UPO091SPHY-E UPO121SPHY-E UPO151SPHY-E UPO181SPHY-E UPO241SPHY-E UPO271SPHY-E 1,7 2,2 2,8 3,6 4,5 5,6 7,1 0,9 8.0 1,9 2,5 3,2 4,0 5,0 6,3 8,0 9,0 0.018 / 0.018 0.035 / 0.035 0.044 / 0.044 Power consumption 0.020 / 0.020 0.026 / 0.026 0.029 / 0.029 0.031 / 0.031 0.067 / 0.067 0.072 / 0.072 kW Factory setting Running current 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 0.77 / 0.81 0.60 / 0.63 0.62 / 0.65 0.69 / 0.73 0.73 / 0.77 0.82 / 0.86 0.92 / 0.97 1.21 / 1.27 1.30 / 1.36 Starting current 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 0.092 / 0.092 kW 0.086 / 0.086 Standard ESP Power consumption UP003~018:30Pa, Running current Power consumption 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 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 Physica	l 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			210x90	00x450	210x11	10x450
Weight	kg			16			1	8	2	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	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

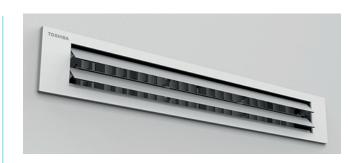
- Motorized horizontal and vertical louvers to perfectly orientate the air flow.
- Optimized air diffusion with swing mode.
- 5Pa pressure drop to not disturb the air flow.

Elegant

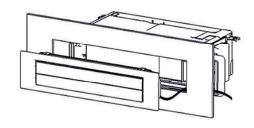
- A color that perfectly fits any type of interiors.
- A sleek design with 2 louvers for sophisticated interiors.

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.







3DW DIFFUSOR Physico	ıl 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) *: 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	
Distance from auct to louver -	max		1000mm	
Pressure lost	Pa		5	
0-1	Mansell		5PB9/1	
Color -	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.





SOUND PRESSURE LEVEL







28dB(A)





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	А	0,38	0,39	0,68	0,68	0,80	0,80	1,03
Starting current	А	0,54	0,55	0,97	0,97	1,16	1,16	1,49

UNDER CEILING Physical data

ONDEN OFICING	i ily sical c	idid						
Indoor unit	MMC-	UP0151HP-E	UP0181HP-E	UP0241HP-E	UP0271HP-E	UP0361HP-E	UP0481HP-E	UP0561HP-E
Air Flow (h/m/l)	m³/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)	I/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.

Healty

- 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

SOUND PRESSURE LEVEL







2.2kW > 6.3kW

26dB(A)



LOCAL CONTROLS



IR control (included)



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

BI-FLOW CONSOLE Performances UP0091NHP-E/TR UP0121NHP-E/TR UP0151NHP-E/TR UP0181NHP-E/TR kW 2.2 4.5 2.8 3.6 5.6 kW 4,0 2.5 3.2 5.0 6.3 Heating capacity Power consumption kW 0,021 0.021 0,025 0,034 0.052 0,20 0,20 0,23 0,29 0,42 Running current Starting current Α 0.26 0.26 0.30 0.38 0.55

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















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

SOUND PRESSURE LEVEL







35dB(A)









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	А	0,26	0,26	0,43	0,43	0,47	0,47
Starting current	А	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)	m³/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

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





CONCEALED CONSOLE	Perforr	mances					
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	А	0.25	0.25	0.25	0.45	0.45	0.46
Starting current	А	0,60	0,60	0,60	0,80	0,80	1,00

CONCEALED CONSOLE	Physic	al 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)	m³/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

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^3/h to 2160 m^3/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 m² up to 8 kW and 0.243 m² up to 16 kW.



SOUND PRESSURE LEVEL





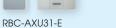
4.5kW > 18kW

37dB(A)



LOCAL CONTROLS







RBC-AMSU51E-ES(EN) RBC-AMTU31-E RBC-ASC1U1-E

FLOOR STANDING	Perform	ances						
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	А	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	А	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	Physica	l data						
Indoor unit	MMF-	UP0151H-E	UP0181H-E	UP0241H-E	UP0271H-E	UP0361H-E	UP0481H-E	UP0561H-E
Air flow (h/l)	m³/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)	I/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 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				
Connecting pipe, liquid	in	1/4" φ6.4	1/4" φ6.4	3/8" φ9.5				
Drain port diameter	mm	20	20	20	20	20	20	20
Power supply	V-ph-Hz	220-240-1-50 / 208-230-1-60						



HIGH-WALL (STD & WITHOUT PMV)



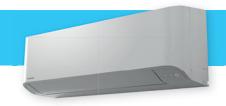












Particularly compact, this high-wall is perfect for limited spaces, such as offices or small shops.

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.





25dB(A)



RBC-ASCU11-E

HIGH-WALL **Performances** UP0031HPL-E/TR UP0051HPL-E/TR UP0071HPL-E/TR UP0091HPL-E/TR UP0121HPL-E/TR UP0151HPL-E/TR UP0181HPL-E/TR UP0241HPL-E/TR Without PMV* 8.0 9 10 kW 2.8 kW 2.5 5.0 6.3 11.2 Heating capacity 1.9 3.2 4.0 8.0 9.0 10 Power consumption L/W 0.013 0.015 0.016 0.028 0.032 0.050 0.034 0.054 0.066 0.29 0.05 Running current Α 0.15 0.15 0.16 0.17 0.18 0.26 0.40 0.030 0.06 0.19 0.19 0.20 0.35 0.38 0.50 0.50 0.22 0.34 0.60 Starting current Α

HIGH-WALL Physical data Indoor unit 455/370/ 455/370/ 480/385/ 510/395/ 540/410/ 840/690/ 900/720/ 1200/900/ 1200/1000/ 1450/1300/ 1650/1350/ Air Flow (h/m/l) m³/h 600 1250 Air Flow (h/m/l) I/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 36/34/31/ 37/35/32/ 40/38/36/ Sound pressure 35/33/30/ 41/39/37/ 45/42/39/ dB(A) 33/29/25 33/29/25 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 293 x 798 320 x 1050 320 x 1050 320 x 1050 348 x 1200 348 x 1200 348 x 1200 (HxWxD) x 230 x 230 x 230 x 230 x 230 x 250 x 250 x 250 x 280 x 280 x 280 Weight kg 11 16 16 16 21 21 21 Connecting pipe, 3/8 3/8 3/8" 3/8' 3/8 1/2 1/2 5/8 5/8' 5/8' 5/8 gas Connecting pipe, 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 16 16 16 16 16 16 16 16 16 16 mm Power supply 220/240-1-50 220/24

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

AIR-TO-AIR HEAT EXCHANGER



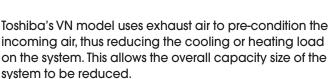












Energy savings

- 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 m³/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

SOUND PRESSURE LEVEL







20dB(A)



AIR-TO-AIR HEA	II EXUF	IAIVGI	ER Perfo	ormance c	and physic	al data					
Model			VN-M150HE	VN-M250HE	VN-M350HE	VN-M500HE	VN-M650HE	VN-M800HE	VN-M1000HE1	VN-M1500HE 1	VN-M2000HE
Air volume	(EH/H/L)	m³/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* **	Н	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**	Н	(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**	Н	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				
	Around	d unit					-10 / 40°C . RH ≤809	6			
Operating range	Outdoor	Air (OA)					-15 / 43°C . RH ≤809	6			
	Return A	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.

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 m³/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).





RBC-AMTU31-E



SOUND PRESSURE LEVEL



AIR FLOW

4.1kW > 10.9kW

34dB(A)

500m3/h > 1000m3/h



AIR-TO-AIR HEAT EXCHANGER WITH DX COIL / WITH HUMIDIFIER Performance and physical data 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)	m³/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	4		Finned tube - R410A	4
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
Humidifier technology						Per	rmeable film humid	ifier
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	
	Around unit			-10 / 40°C . RH ≤80%			-10 / 40°C . RH ≤80%	5
Operating range	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: 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

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 3,060m³/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.









AIR FLOW

SOUND PRESSURE LEVEL



8.9kW > 40kW 1,080m³/h > 3,060m³/h

31dB



FRESH AIR INTAKE Performance UP0721HFP-E/TR MMD UP0481HFP-E/TR UP1281HFP-E/TR kW 14,0 22,4 28,0 33,5 40,0 Heating capacity kW 8,9 13,9 17,4 20,8 25,2 kW 0,110 0,160 0,200 0,250 0,330 1.07 Running current Α 0,77 0.86 1,30 1.83 Starting current 2,01 7,80 7,80 7,80 7,80 Α

FRESH AIR INTA	AKE Phy	ysical d	lata				
Indoor unit		MMD-	UP0481HFP-E/TR	UP0721HFP-E/TR	UP0961HFP-E/TR	UP1121HFP-E/TR	UP1281HFP-E/TR
Air flow (h)		m³/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)		I/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	39/38/3635/33	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		
Eexternal static pressure - settina	- factory	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	Cooling (*2)	°C			+5/+46 (Note 4)		
range for SMMS-u	Heating (*3)	°C			-10/46		
Operation	Cooling (*2)	°C			+5/+43		
range dor SMMS-e	Heating (*3)	°C			-5/43		

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

* Helght 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.















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.
- \bullet New boundaries: Up to 120HP equal to 60,000m³/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







Up to **60,000**m³/h



DX KIT Physical data

DX Controller unit		TCB-IFDMX01UP-E All simple terminal block	TCB-IFDMR01UP-E 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 - TC2/TCJ sensor(φ6) x2 ; 7.500 mm - 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 2	209 x 80
Weight	kg	2.3	2.4
Integrated components			olates for sensors nsulation

Note

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

RBC-DXC 0/10V DX KIT

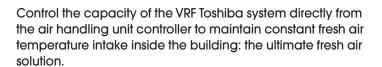












Third party control

- 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

AIR FLOW





16kW > 31.5kW

Up to 6000m3/h



0/10V DX KIT

LC / VRF DX Coil Controller Unit VRF DX PMV valve unit	RBC- MM-	DXC031 DXV141	DXC031 DXV281	DXC031 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	m³/h	2310	3010	3500
Maximum air flow rate	m³/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 mm²)	m	200	200	200
Cable Max Length (Digital Input) (Non screened cable: 1.5 ~ 2.5 mm²)	m	100	100	100
Cable Max Length (Digital Output) (Non screened cable: 1.5 ~ 2.5 mm²)	m	500	500	500
Cable Max Length (TCC Link) (Screened cable: 1.5 ~ 2.5 mm²)	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













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 m³/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.







Up to 30000m3/h



STANDARD DX KIT Physical data

DX Controller unit	MM-	DXC010 VRF DX COIL CONTROLLER (Individual / Header)	DXC012 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			
Name in all a real and the		5.6kW, 7.1kW, 8.0kW	11.2kW, 14.0kW, 16.0kW	22.4kW, 28.0kW			
Nominal capacity		1.7 - 3.2 HP	1.7 - 3.2 HP 4 - 6HP				
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)					

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.





HOT WATER MODULE Performance UP0271LQ-E/TR UP0561LQ-E/TR kW Heating capacity kW 8 16 0.014 0.014 Power consumption kW Running current Α 0.08 0.08 Starting current Α

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 (hxwxd)	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	RI	RI
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

> M

MMW-AP_CHQ HIGH TEMPERATURE HOT WATER MODULE















82°C

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.
- \bullet Operating range from -25°c WD to +40°C DB ambiant condition.

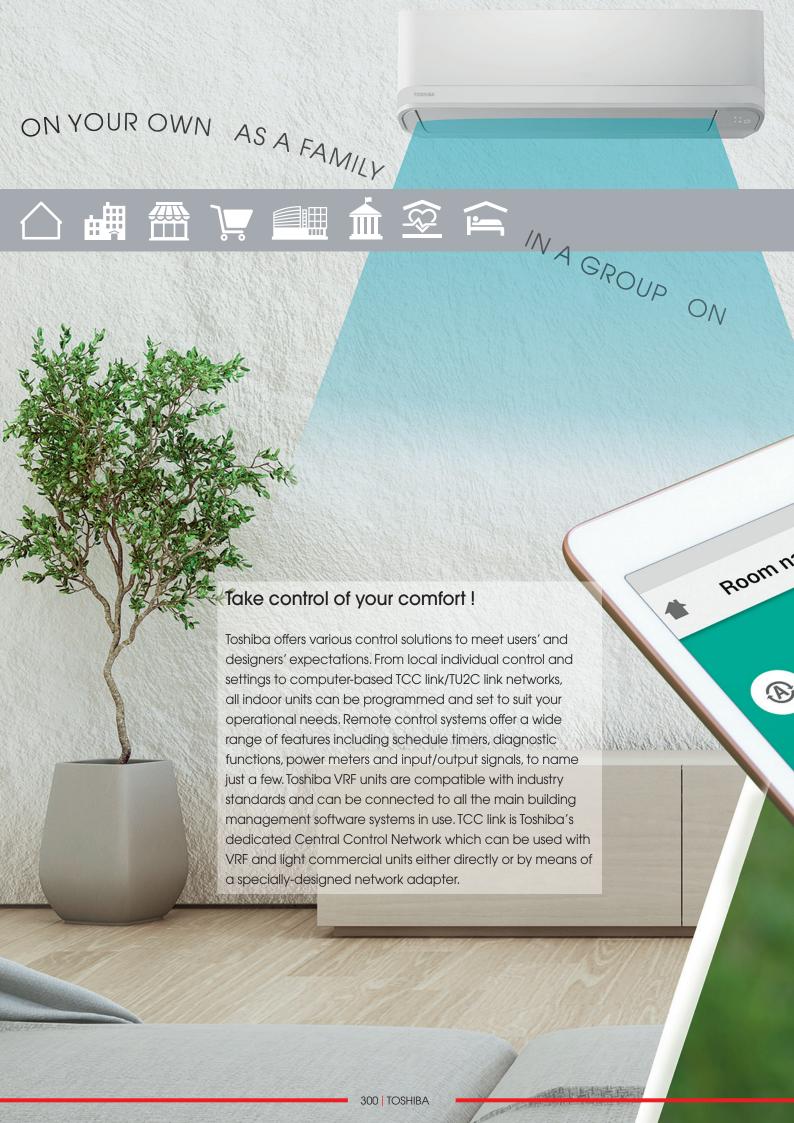


5HP



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

HOT WATER MODULE	Physical data	PRELIMINARY DATA
Indoor unit	MMW-	AP0481CHQ-E
Water flow	m³/h	2.400
Water flow	l/min	40
Sound pressure level	dB(A)	44
Dimensions (hxwxd)	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



> CONTROLS

YOUR OWN AS A FAMILY IN A GROUP ON YOUR OWN 10:48 Timer & ame door temperature is 32° 3 301 | TOSHIBA

>

RAS

INDIVIDUAL REMOTE CONTROLLER

>INFRARED CONTROL

										Func	tions									suc	lay	aldic
Compatible with		Plasma ion purifier / Ionizer	3D air flow	Silent outdoor unit	Fire place mode	On demand defrost	On touch my comfort	Comfort sleep	Preset	Hi power	Eco logic	Fix or Swing Iouvers	Powerfull fan speed	Floor warming	Quiet	Power select	၁့ 8	Off timer	Weekly fimer	Luminous buttons	Backlight display	Wired connectable
Daiseikai 9 WH-TA01LE <i>Included</i>		•	•	•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	
HAORI WH-TB03LE Included		•	•	•	•	•				•	•	•	•		•	•	•	•		•	•	
SHORAL Edge WH-TA15PE WH-TA12PE Included	= # = = = = = = = = = = = = = = = = = =		•	•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•
SHORAI Nordic WH-TA04LE Included				•	•	•	•	•	•	•	•	•	•		•	•	•	•	•	•	•	
SEIYA WH-TG01NE Included				•		•		•	•	•	•	•	•		•		•	•				•
Console WH-TA12LE Included	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
IR for 4way cassette RBC-AX32UM(W)-E <i>Option</i>	-							•	•	•	•	•	•		•	•	•	•				
Wired for : 4way cassette & Duct RB-RWS21-E Option	124 v							•	•	•	•	•	•		•	•	•		•	•	•	•
Seiya RB-RXS33-E <i>Option</i>				•	•	•		•	•	•	•	•	•		•	•	•	•	•	•	•	

> WIRED CONTROL

Remote for multisplit cassette and duct



RB-RWS21E

• Large backlighted screen

- Multilanguage menu
- Integrated weekly timer
- Enables ambient temperature sensor
- Quik access to standard functions (mode, fan speed & set point)
- Wired connection

> WIFI CONTROL

Toshiba Home AC Control Toshiba Wi-Fi control solution for RAS units

Multiple units, one app

- 1 user can control up to 10 AC units
- \bullet 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



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

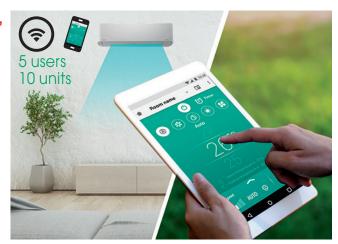
 Toshiba AC Control App for your Android and iOS smartphone from Google Play or the App Store



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 Toshibaspecific features.

FLOOR

8°C

Holiday frost protection mode



Boost mode



Fireplace mode



Silent CDU to reduce the outdoor unit noise level



Plasma & ionizer filters



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.





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

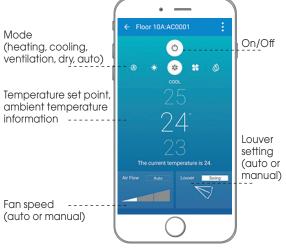
COMPATIBLE PRODUCTS

 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





Administrator-specific functions:

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

INDIVIDUAL REMOTE CONTROLLER

INFRARED REMOTE CONTROLLER

One remote compatible with every LC/VRF indoor units



Included with bi-flow console



Included with



LC/VRF higwall



• Smart cassette panel corner receiver



 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

· Stand alone receiver (compatible with all indoor units)

• 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-AX31UC-E

> WIRED REMOTE CONTROLLER

One solution for every projects



RBC-ASCU11-E

Back to basics with this new remote of-

compact dimensions and large screen.

fering all the standard functionalities with

RBC-AMTU31-E The standard remote to control an individual indoor unit or a group of 8 indoor units

()

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

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 bvacklight 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

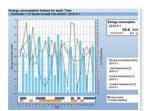


BMS-SM1281ETLE

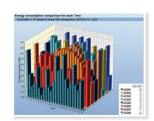
The Smart Manager has the same hardware control function as the Compliant Manager, but also has the ability of control from a Local Area Network with dedicated interface accessible from every Web Browser. Energy Monitoring and Data Analyser function is included and brings to the user strong tool to analyse power comsumption 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 Conditionners is required from networked computer systems





Energy consumption history



Energy consumption comparison

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



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 between3 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).
•••••

Model	Picture	Description	Α	В	С
TCB-LDS1		Leak detector with plastic cover	V	V	<i>V</i>
TCB-LDS2	3.5.	Leak detector with metal cover	~	V	V
TCB-AW1786*		Shut off valve		V	V
TCB-LD1	TCB-LD1	Control box		V	
TCB-LD2	999 98	Control box			V
TCB-LDSBB1		Flush mountir (d	ng for le		tor
TCB-LDSBB2		Flush mountin	ng for le oncrete	ak detec)	tor

> SHRM ADVANCE

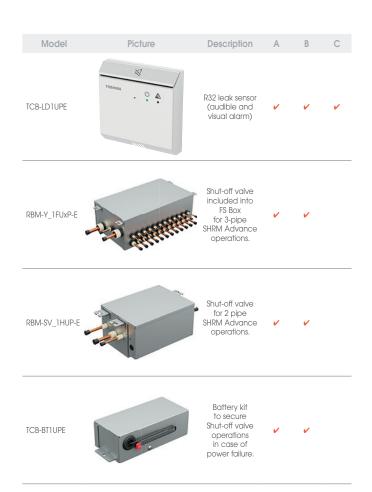
R32 refrigerant

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.





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

> 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-IFCB5PF

TCB-PSMT1E

> MULTI-TENANT

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

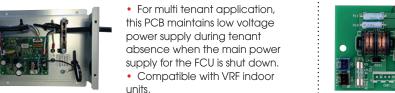
> OPTIONAL CONNECTION KIT



TCB-PCUC2E

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

> 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-IFMBOUCW- E (RAV/VRF) BMS-IFMBOUEW- 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



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

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)

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.

required for connection of DI/SDI

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- llnk	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-IFMBOUEW-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-IWF0320E	Smart Device Control Interface	•		Enables full control of up to 32 indoor units by usin 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. EN = English, Italian, Polish, Greek, Russian, Turkish. 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 Application Control DC De suel	•		For CN80	
TCB-PCDM4E	Application Control PC Board	•		Power Peak Cut Control Error/Individual compressor Operation Output	
TCB-PCIN4E	Application Control PC Board	•		Control Board	
TCB-PCMO4E	Application Control PC Board	•		External Master ON/OFF Control Board	
TCB-PCUC2E	Optionnal connection kit	•		Multi-Top and Vit for VDF Cut	SMMS-e, SHRM-e and Mini-SMMS Indoor Units
TCB-PSMT1E	Optional connector kit Enclosure for the Window Switch /	•		Multi-Tenant Kit for VRF Systems For use when the Window Switch / Remote On/Off	(refer to I/M for more details of connectable Indoor units)
TCB-PX100-PE	Remote On/Off	•		Accessory cannot fit within the AC unit, eg. High Walls For 1:1 Model connection I/F and Window Switch /	For use with TCB-IFCB5-PE
TCB-PX30MUE	E-Box Extension Enclosure	•		Remote On/Off PCB For 1:1 Model connection I/F and Window Switch /	4-Way Cassettes only & TCB-IFCB5-PE
TCB-PX40MUE	E-Box Extension Enclosure	•		Remote On/Off PCB	4-Way Compact Cassettes only & TCB-IFCB5-PE
TCB-SC640U-E	Centralized remote controlle	•	•	Up to 64 indoor units	
TCB-TC41U-E	Remote temperature sensor	•	•	Remote temperature sensor for cassette & duct	



LIGHT COMMERCIAL ACCESSORIES

Indoor unit type						
	Standard panel	RBC-U41PG(W)-E		Required accessory		
Smart 4-way Air Discharge cassette type	Motion Sensor	TCB-SIR41U-E				
	Fresh air and filter chamber	TCB-GFC1603UE		For fresh air inlet box		
	Fresh air inlet box	TCB-GB1602UE	RAV-HM***UT-E	For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm)	Use with TCB-GFC1603UE	
	Auxiliary fresh air flange	TCB-FF101URE2		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.)		
	MTO straight, white color panel	RBC-U33P-E				
	Motion Sensor	TCB-SIR33UP-E				
4-way Air Discharge cassette type	Fresh air and filter chamber	TCB-GFC1602UE		For fresh air inlet box		
	Fresh air inlet box	TCB-GB1602UE		For fresh air intake by using the knockout hole of Fresh air and filter chamber. (dia.=100 mm)	Use with TCB-GFC1602UE	
	Auxiliary fresh air flange	TCB-FF101URE2	RAV-HM***UTP-E	For easy fresh air intake by using the knockout hole of indoor unit. (dia.=100mm)		
	Spacer for height adjustment	TCB-SP1602UE		height 50 mm		
	Air discharge direction kit	TCB-BC1602UE		Air direction change by cutting off air discharge port (3 pcs.)		
	PM2.5 filters	TCB-PLFC1UPE-120		Before pre filter		
-		TCB-PLFC2UPE-80		After pre filter		
	Standard panel	RBC-UM21PG(W)-E		Required accessory		
Compact 4-way cassette type	Motion Sensor	TCB-SIR41UM-E	RAV-HM***MUT-E		Wireless remote controller kit (RBC-AX32UM(W)-E) and Occupancy sensor cannot b used on the same indoor un	
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)		
		TCB-SF56C6BE	RAV-HM561BTP-E			
Concealed duct	Spigot shaped flange	TCB-SF80C6BE	RAV-HM801BTP-E			
type		TCB-SF160C6BE	RAV-HM1**1BTP-E			
	Drain pump kit	TCB-DP31CE	RAV-HM***1CTP-E	Lift up to 600 mm	Use TCB-KP13, 23CE	
Ceiling-suspended type	File and Discharge 1/14	TCB-KP13CE	RAV-HM401CTP & RAV-HM501CTP-E	Needed when drain pump kit is used		
	Elbow Piping Kit	TCB-KP23CE	RAV-HM801CTP-E & RAV-HM1**1CTP-E	needed when didiri pump kir is used		
Concealed Duct	Long life filter kit	TCB-LK2801DP-E				
high static pressure type	Drain Pump kit	TCB-DP40DPE	RAV-RM***DTP-E			
Code		Descript	ion	Capacities		
RBC-TWP30E2		Twin-bra	nch kit for DI & SDI	1.5 HP + 1.5 HP 2 HP + 2 HP		
RBC-TWP50E2	Twin-branch kit for DI & SDI			3 HP + 3 HP		
RBC-TWP101E	Twin-branch kit for BigDI			4 HP + 4 HP 5 HP + 5 HP		
BC-TRP100E	Triple-branch kit for DI & Big DI			2 HP + 2 HP + 2 HP 3 HP + 3 HP + 3 HP		
RBC-DTWP101E	Double-twin branch kit fir Big DI			2 HP ± 2 HP ± 2 HP ± 2HP		

BUSINESS REFRIGERANT ACCESSORIES

	Model Name				
Compatible Mini SMMS, Mini SMMS-e & SMMS-e	Compatible SHRM-e	Comaptible SHRM Advance	Specification	Picture	Total capacity codes
RBM-BY55E	RBM-	BY55FE	Branching joint	Mary S	under 6.4hp
RBM-BY105E	RBM-I	BY105FE			from 6.4 to 14.2hp
RBM-BY205E	RBM-I	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-H	Y1043FE	Handra kanakan fara sa	111111111111	< 14.2 HP
RBM-HY2043E	RBM-H	Y2043FE	Headers branching four-way	HELLING	< 14.2 - 25.2 HP
RBM-HY1083E	RBM-H	Y1083FE	Headers branching eight-way	FFF	< 14.2 HP
RBM-HY2083E	RBM-H	Y2083FE			< 14.2 - 25.2 HP
RBM-BT14E	RBM-BT14FE				< 26 HP system capacity
RBM-BT24E	RBM-BT24FE		Joints for connection of outdoor units	*** *********************************	>26 <46 HP system capacity
RBM-BT34E			_	~	>44 HP system capacity
	RBM-Y1123FE				< 4.0 HP indoor units
	RBM-Y1803FE		Flow selector unit	7	< 4.0 - 6.4 HP indoor units
	RBM-Y2803FE				< 6.4 - 10.0 HP indoor units
	RBM-Y1124FE	RBM-Y1121FUPE*	Flow selector unit long piping		< 4.0 HP indoor units
	RBM-Y1804FE	RBM-Y1801FUPE*			< 4.0 - 6.4 HP indoor units
	RBM-Y2804FE	RBM-Y2801FUPE*			< 6.4 - 10.0 HP indoor units
	RBM-Y1801F4PE	RBM-Y1801FU4PE*			< 6.4 HP indoor units x 4 port
RBM-Y180	RBM-Y1801F6PE		Multi part flavusalaatar unit		< 6.4 HP indoor units x 6 port
		RBM-Y1801FU8PE*	Multi-port flow selector unit	The state of the s	< 6.4 HP indoor units x 8 port
	RBM-Y1801FU12PE*			Mari	< 6.4 HP indoor units x 12 po
	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





Indoor unit type	Parts name	Model name	Comply with VRF FCU	Notes	Remarks
	Standard panel	RBC-U41PG(W)-E	MMU-UP***1H-E/TR	Required accessory	
4-way Air Discharge Smart cassette type	Fresh air and filter chamber	TCB-GFC1603UE		For fresh air inlet box	
				For easy fresh air intake by using	
	Auxiliary fresh air flange	TCB-FF101URE2	MMU-UP***1H-E/TR .	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.)	
Discharge	Standard panel	RBC-U33P-E		Required accessory	
	PM2.5 filters	TCB-PLFC1UPE-120	MMU-UP***1HP-E/TR	Before pre filter	
cassette type		TCB-PLFC2UPE-80		After pre filter	
Compact 4-way cassette type	Decoration panel	RBC-UM21PG(W)-E	MMU-UP***1MH-E/TR	Required accessory	
7,000		RBC-UW283PG(W)-E	MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR		
	Decoration panel	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		
	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	
2-way cassette		TCB-FC283UW-E	MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR		
type	Filter chamber	TCB-FC803UW-E	MMU-UP0181WH-E/TR to MMU-UP0301WH-E/TR		
		TCB-FC1403UW-E	MMU-UP0361WH-E/TR to MMU-UP0561WH-E/TR		
		TCB-LF283UW-E	MMU-UP0071WH-E/TR to MMU-UP0151WH-E/TR		Use with TCB-FC283UW-E
	Super Long life filter	TCB-LF803UW-E	MMU-UP0181WH-E/TR to MMU-UP0301WH-E/TR	For use with filter chamber	Use with TCB-FC803UW-E
		TCB-LF1403UW-E	MMU-UP0361WH-E/TR to MMU-UP0561WH-E/TR		Use with TCB-LF1403UW-E
		RBC-UY32P-E	MMU-UP0031YHP-E/TR to MMU-UP0121YHP-E/TR	Required accessory	030 WIII 10B EI 14000W E
		RBC-UY42P-F	MMU-UP0151YHP-E/TR to MMU-UP0271YHP-E/TR	Required accessory	
1-way cassette		KDC-0142F-L	IVIVIO-OFOTSTYNF-E/TR TO IVIVIO-OFOZ/TYNF-E/TR	Set of Plasma Air Purifier.	
type	Air purifier kit	TCB-EAPC1UYHP-E	MMU-UP-1YHP-E/TR	Dust sensor, Air quality indicator and Wireless receiver	
	3DW Louvers	TCB-TDL0141SDY-E	MMD-UP0031SPHY-E/TR to MMD-UP0121SPHY-E/TR	Horizontal, veritcla motirized louver for slim duct	RBC-AMSU51E-ES/EN needed
Slim duct type		TCB-TDL0181SDY-E	MMD-UP0151SPHY-E/TR to MMD-UP0181SPHY-E/TR		
		TCB-TDL0271SDY-E	MMD-UP0201SPHY-E/TR to MMD-UP0271SPHY-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		
	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		
		TCB-LK2801DP-E	MMD-UP0721/0961HP-E/TR		
Concealed Duct	Spigot shaped flange	TCB-SF56C6BPE	MMD-UP0181HP-E/TR to MMD-UP0271HP-E/TR		
high static pressure type		TCB-SF80C6BE	MMD-UP0361HP-E/TR to MMD-UP0561HP-E/TR		
		TCB-SF160C6BE	MMD-UP0721HP-E/TR to MMD-UP0961HP-E/TR		
	Auxiliary fresh air flange	TCB-FF151US-E	MMD-UP***1HP-E/TR		
	Drain Pump kit	TCB-DP40DPE	MMD-UP***1HP-E/TR		
	·	RBM-PMV0361U-E	·	For FCU capacity 0.3-1.3HP	Suitable for high wall 1 serie with o
High Wall	PMV Kit	RBM-PMV0901U-E		For FCU capacity 1.7-2.5HP	without embedded PMV
	Drain pump kit	TCB-DP31CE	MMC-UP***1HP-E/TR	Lift up to 600 mm	Use TCB-KP13, 23CE
Ceiling-suspended	Elbow Piping kit	TCB-KP14CPE	MMC-UP0151/0181HP-E/TR	- 1	
type		TCB-KP24CPE	MMC-UP0241HP-E/TR to MMC-UP561HP-E/TR		
	High-efficiency filter 65 High-efficiency filter 90	TCB-UFM0481D-E	MMD-UP0481HF-E/TR	Dust collecting effect: 65% (NBS Colorimetric method) Dust collecting effect: 90%	Use with TCB-FC0481DF-E
		TCB-UFM1281D-E	MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR		Use with TCB-FC1281DF-E
Fresh air intake type -		TCB-UFH0481D-E	MMD-UP0481HF-E/TR		Use with TCB-FC0481DF-E
		TCB-UFH1281D-E	MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR	(NBS Colorimetric method)	Use with TCB-FC1281DF-E
	Long life prefilter	TCK-PF1281DF-E	MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR	•	Use with TCB-FC1281DF-E
		TCB-FC0481DF-E	MMD-UP0481HF-E/TR	For high officionaly filter or land	100 1 0 120101 E
	Filter chamber	TCB-FC1281DF-E	MMD-UP0721HF-E/TR to MMD-UP1281HF-E/TR	For high efficiency filter or long life prefilter	
	Drain pump kit	TCB-DP40DFP-E	All models	Lift up to 330 mm	
Air-to-air heat	ычный мі	I CU-UF 40DFF-E		an up 10 300 mm	
exchanger with DX coil	Drain pump kit	TCB-DP31HEXE	MMD-VN502/802/1002HEXE & MMD-VNK502/802/1002HEXE	Lift up to 330 mm	

SOFTWARE

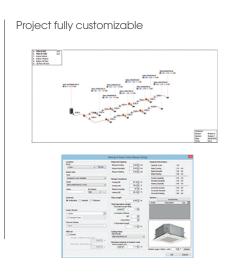
> SELECTION TOOL



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.

Software main screen







> 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

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



System operation self record using link adaptor

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

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 Ecodesing website





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.