

Heating and cooling simultaneously

SHRMu



Highlights

- Maximum efficiency through heat recovery
- Combinations up to 168 kW cooling and heating capacity
- Robust and highly efficient twin or triple rotary compressors

VRF 3-pipe outdoor unit for simultaneous cooling and heating operation with a wide capacity range. For combination with VRF indoor units, DX-kits, and HRV heat exchangers. Uses refrigerant R410A.



Performance

- Outstanding energy and cost efficiency
- SEER efficiency values $\times$ up to 8.02
- Cooling efficiency η_s $\times$ up to 317 %
- SCOP efficiency values $\times$ up to 4.67
- Heating efficiency η_s $\times$ up to 183.8 %
- Suitable for monovalent heating operation



Flexibility

- Wide outdoor temperature operating range from -25 °C to +52 °C
- Maximum piping lengths up to 1,200 m
- Maximum height difference up to 90 m
- Up to 54 indoor units can be connected (single unit)
- Capacities up to 24 HP (64.5 kW) available with only one outdoor unit
- Fast TU2C-Link system bus
- Flexible control options for all applications
- Optimal ratio of unit output to installation area
- Quiet operation protects people and the environment
- System diversity 70 to 200 %
- Simple system design with the Selection Tool software



Technical Details

- For use with single- and multi-port flowboxes for independent heating/cooling operation
- Compact multi-port flowboxes with 4, 8, or 12 outlets
- Intelligent refrigerant flow management ensures optimal supply to all indoor units, regardless of their number and location in the building
- 1 inverter-controlled twin rotary compressor (8 to 14 HP)
- 1 inverter-controlled triple rotary compressor (16 to 20 HP)
- 2 inverter-controlled twin rotary compressors (22 and 24 HP)
- Outdoor unit modulation for maximum operational reliability and longevity
- Split high-efficiency heat exchangers for optimal adaptation to the outdoor temperature
- Refrigerant-cooled inverter system
- Propeller fan with high static pressure enables maximum performance with minimal noise and power consumption
- Special KO-BE-TSU or REN-KEI defrosting technology for combinations
- Short defrost cycles prevent loss of comfort in Heating operation
- Easy access to all system components
- Connection option for service tool on the outdoor or indoor unit bus
- Wireless WaveTool function simplifies commissioning, service, and system monitoring with Android/iOS smartphones
- Freely combinable with up to 121 options



Technical data			MMY-MUP1601FT8P-E
Capacity code	HP		16
Cooling capacity	kW	❄️	45,00
Power consumption (min./nom./max.)	kW	❄️	13,51
Energy efficiency EER	W/W	❄️	3,33
Energy efficiency SEER		❄️	8,02
Energy efficiency ETAs	%	❄️	317,8
Running current	A	❄️	21,00
Heating capacity	kW	🔥	45,00
Power consumption (min./nom./max.)	kW	🔥	11,94
Energy efficiency COP	W/W	🔥	3,77
Energy efficiency SCOP		🔥	4,65
Energy efficiency ETAs	%	🔥	183,0
Running current	A	🔥	18,75
Airflow	m³/h		14800
External static pressure	Pa		80
Sound pressure level (low/med/high)	dB(A)	❄️	61
Sound pressure level (low/med/high)	dB(A)	🔥	63
Sound power level	dB(A)	❄️	84
Sound power level	dB(A)	🔥	86
Sound pressure level (night operation, @ 1m)	dB(A)	❄️	53
Compressor type			Twin-Rotary
Liquid pipe diameter	mm (inch)		15,8 (5/8)
Suction gas pipe diameter	mm (inch)		28,6 (1 1/8)
Hot gas pipe diameter	mm (inch)		22,2 (7/8)
Outdoor temperature operating range (min.-max.)	°C	❄️	-10 / +52
Outdoor temperature operating range (min.-max.)	°C	🔥	-25 / +15,5
Power supply	V/Ph+N/Hz		380-415/3+N/50
Recommended fusing	A		3x 40
Recommended power supply line type			H07RN-F 3G4,0
Communication line			YSLCY 2x1,5
Current consumption (nom.)	A		21,00
Current consumption (max.)	A		3x 34
Connectable indoor units (max.)	Pce.		36
Pipe length (max.)	m		500
Height difference (max.)	m		90
Refrigerant			R410A
Refrigerant charge	kg		9,00
Dimensions (HxWxD)	mm		1690 x 1290 x 780
Weight	kg		348

❄️ Cooling 🔥 Heating

The measuring conditions for this product can be found at <https://www.toshiba-aircondition.com/en/measuring-conditions.html>

