## **Panasonic**

Connect with your smartphone using this QR.







Technical documents Download from PRO CLUB

## VRF SYSTEMS











R410A



















# **VRF Systems**

VRF systems are designed for energy savings, high efficiency, and high durability with strong cooling power even operating at high ambient temperature.

Panasonic continuously apply advanced technologies to meet the requirements of diverse situations and contribute to the creation of comfortable living spaces.



#### 2-PIPE FSV-EX ME2 Series

Extraordinary energy-saving performance and powerful operation

#### **Space-saving Combination Model**

Cooling or Heating Type **Anti-Corrosion** Model

- Wide range of systems from 22.4 kW to 224.0 kW
- Class-leading EER of 4.7 (22.4 kW model)
- Industry-leading low noise of 54dB (22.4 kW model)
- $\bullet$  Cooling operation possible with outdoor temperature as high as 52  $^{\circ}\text{C}$  (DB)
- Long pipe length (up to 1,000 m)
- Up to 64 indoor units connectable
- External static pressure up to 80 Pa
- Extended operating range allows heating with outdoor as low as -25 °C (WB)
- Suitable for R22 renewal projects\*

\*(Please refer to technical document for further details)



#### **High Efficiency Combination Model**

Cooling or Heating Type

**Anti-Corrosion** Model

- Wide range of systems from 22.4 kW to 180.0 kW
- Higher EER than the Space-saving Combination Model

(Please refer to page 30 and 31 for details)



R410A

Heat

Recovery **Type** 

R410A







### 3-PIPE FSV-EX Series

For simultaneous heating and cooling operation

Cooling and Heating Simultaneous Type

- Wide range of systems from 22.4 kW to 135 kW
- Top class EER: 4.87 / COP: 5.09 (22.4 kW model)
- Longer piping length (up to 500 m)
- Increased max number of connectable indoor units (up to 52)
- External static pressure up to 80Pa
- Cooling operation is possible when outdoor temperature as high as 52 °C DB
- · Operating range to provide heating at outdoor temperature as low as -20 °C WB
- Suitable for R22 renewal projects

(Please refer to technical document for further details)





R410A





#### 2-PIPE Mini-FSV LE Series

For small-scale commercial and residential use

R410A

Cooling or Heating Type 1-phase Cooling or Heating Type 3-phase

12.1/14.0/15.5 kW

22.4/25.0 kW

- · High external static pressure 35Pa
- Top-class EER: 4.50 (12.1 kW model) / 3.80 (22.4 kW model)
- Wide operation range: Cooling: -10 °C to 46 °C DB, Heating at: -20 °C to 18 °C DB
- Maximum number of connectable indoor units: 13 (22.4/25.0 kW model)
- Actual piping length: 150m
- Max. piping length: 150m (12.1/14.0/15.5 kW) / 300m (22.4/25.0 kW)
- Suitable for R22 renewal projects

(Please refer to technical document for further details)









### 2-PIPE Mini-VRF LZ Series

For small-scale commercial and residential use





Cooling or Heating Type 1-phase Cooling or Heating Type 3-phase

12.1/14.0/15.5 kW

22.4/28.0 kW

- High external static pressure 35Pa
- Top-class EER: 4.53 (12.1 kW model) / 3.84 (22.4 kW model)
- Wide operation range: Cooling: -10 °C to 52 °C DB, Heating at: -20 °C to 18 °C DB
- Maximum number of connectable indoor units: 16 (22.4/28.0 kW model)
- Maximum allowable indoor/outdoor capacity ratio 150%
- Actual piping length : 90m (12.1/14.0/15.5 kW) / 100m (22.4/28.0 kW) Max. piping length: 180m (12.1/14.0/15.5 kW) / 300m (22.4/28.0 kW)
- Suitable for R22 renewal projects

(Please refer to technical document for further details)

- Demand response is capable with additional demand terminal kit CZ-CAPDC3.
- \* In South Australia, demand response capability will be legally required from April 2023.







# Indoor Units Range

Class	22	28	36	45	56	60	73	90
	Cooling/Heating	Cooling/Heating	Cooling/Heating	Cooling/Heating	Cooling/Heating	Cooling/Heating	Cooling/Heating	Cooling/Heating
Capacity kW Type BTU/h	2.2/2.5 7,500/8,500	2.8/3.2 9,600/10,900	3.6/4.2 12,300/14,300	4.5/5.0 15,400/17,100	5.6/6.3 19,100/21,500	6.0/7.1 20,500/24,200	7.3/8.0 24,900/27,300	9.0/10.0 30,700/34,100
Generator Mark3 F3 type Mid Static Adaptive Ducted R410A	NEW /// S-22MF3E5AN	NEW /// S-28MF3E5AN	NEW /// S-36MF3E5AN	NEW /// S-45MF3E5AN	NEW /// S-56MF3E5AN	NEW /// S-60MF3E5AN	NEW /// S-73MF3E5AN	NEW /// S-90MF3E5AN
Generator Mark3 F3 type Mid Static Adaptive Ducted R32	NEW /// S-22MF3E5BN	NEW /// S-28MF3E5BN	NEW /// S-36MF3E5BN	NEW /// S-45MF3E5BN	NEW /// S-56MF3E5BN	NEW /// S-60MF3E5BN	NEW /// S-73MF3E5BN	NEW /// S-90MF3E5BN
M1 type Slim Low Static Ducted R410A/R32	S-22MM1E5B	S-28MM1E5B	S-36MM1E5B	S-45MM1E5B	S-56MM1E5B			
Z1 type Slim & Narrow Ducted R410A	S-22MZ1H4A	S-28MZ1H4A	S-36MZ1H4A	S-45MZ1H4A	S-56MZ1H4A	S-60MZ1H4A	S-73MZ1H4A	
E2 type High Static Ducted / Energy Saving High- Fresh Air Ducted R410A								
E1 type <b>High Static Ducted</b> R410A								S-90ME1R5A
K2 type <b>Wall Mounted</b> R410A/R32	S-22MK2E5B	S-28MK2E5B	S-36MK2E5B	S-45MK2E5B	S-56MK2E5B		S-73MK2E5B	
Generator Mark3 U2 type 4-Way Cassette Panel No.CZ-KPU3H R410A/R32	NEW /// S-22MU2E5BN	NEW /// S-28MU2E5BN	NEW /// S-36MU2E5BN	NEW /// S-45MU2E5BN	NEW /// S-56MU2E5BN	NEW /// S-60MU2E5BN	NEW /// S-73MU2E5BN	NEW/// S-90MU2E5BN
Generator Mark3 Y3 type 4-Way Mini Cassette Panel No. CZ-KPY4 R410A/R32	S-22MY3E	S-28MY3E	S-36MY3E	S-45MY3E	S-56MY3E			
L1 type 2-Way Cassette Panel No. OZ-02KPL2 Panel No. CZ-03KPL2 (Only for S-73ML1E5) R410A	S-22ML1E5	S-28ML1E5	S-36ML1E5	S-45ML1E5	S-56ML1E5		S-73ML1E5	
D1 type 1-Way Cassette Panel No. CZ-KPD2 R410A		S-28MD1E5	S-36MD1E5	S-45MD1E5	S-56MD1E5		S-73MD1E5	
T2 type Under Ceiling R410A			S-36MT2E5A	S-45MT2E5A	S-56MT2E5A		S-73MT2E5A	
Generator Mark1 G1 type Floor Console R410A	S-22MG1E5N	S-28MG1E5N	S-36MG1E5N	S-45MG1E5N	S-56MG1E5N			
P1 type Floor Standing R410A	S-22MP1E5	S-28MP1E5	S-36MP1E5	S-45MP1E5	S-56MP1E5		S-71MP1E5	
R1 type Concealed Floor Standing R410A	S-22MR1E5	S-28MR1E5	S-36MR1E5	S-45MR1E5	S-56MR1E5		S-71MR1E5	

<sup>\*</sup> High flesh air system is not allowed for 18 kW model.

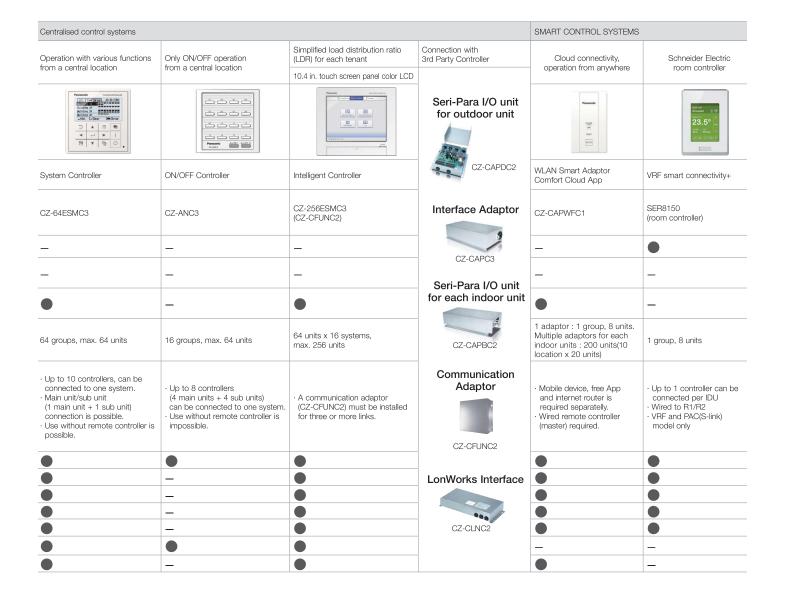
106	112	140	160	180	224	280	
Cooling/Heating							
10.6/11.4 36,200/38,900	11.2/12.5 38,200/42,700	14.0/16.0 47,800/54,600	16.0/18.0 54,600/61,400	18.0/20.0 61,400/68,200	22.4/25.0 76,400/85,300	28.0/31.5 95,500/107,500	Functions
	NEW ///	NEW ///	NEW ///				((!)) DRY
							self-diagnosis Auto fan Dry mode
	S-112MF3E5AN	S-140MF3E5AN	S-160MF3E5AN				Auto restart Drain pump DC motor
	NEW ///	NEW ///	NEW ///				self-diagnosis Auto fan DRY
	S-112MF3E5BN	S-140MF3E5BN	S-160MF3E5BN				Auto restart Drain pump DC motor
							self-diagnosis Auto fan Dry mode
							Auto restart Drain pump DC motor
							(((2))) DRY
							self-diagnosis Auto fan Dry mode  Auto restart  DC motor
					High Fresh Air	High Fresh Air	DRY
				S-180ME2E5 *	S-224ME2E5	S-280ME2E5	self-diagnosis Auto fan Dry mode  Auto restart  DC motor
							((!)) DRY #
	S-112ME1R5A	S-140ME1R5A	S-160ME1R5A				self-diagnosis Auto fan Dry mode Auto restart
							DRY AUTO
S-106MK2E5B							self-diagnosis Auto fan Dry mode Auto flap
	NEW ///	NEW ////	NEW ////				Auto restart Air swing DC motor
	700	100	100				self-diagnosis Auto fan Dry mode Auto flap
	S-112MU2E5BN	S-140MU2E5BN	S-160MU2E5BN				Auto restart Air swing Drain pump DC motor
							self-diagnosis Auto fan Dry mode Auto fap  Auto restart Air swing Drain pump DC motor
							self-diagnosis Auto fan  Dry mode  Auto flap  Auto restart  Air swing  Drain pump
							self-diagnosis Auto fan DRY Auto fap Auto flap
							Auto restart Air swing Drain pump DC motor
							self-diagnosis Auto fan Dry mode Auto lap
S-106MT2E5A		S-140MT2E5A					Auto restart Air swing DC motor
							self-diagnosis Auto fan  Auto restart  Ar swing  DC motor
							self-diagnosis Auto fan DRY Dry mode Auto restart
							self-diagnosis Auto fan Dry mode Auto restart

# Controllers

A wide variety of control options to meet the requirements of different applications.

Operation system	Individual control systems							
Requirements	Simplified high-spec operation	High-spec operation	Normal operation	Operation from anywhere in the room				
External appearance	25.0°c = V A - 0	17   37   16   16   16   16   16   16   16   1	1 26   National   1 26   Natio	**				
Type, model name	Simplified high-spec Wired Remote Controller with Bluetooth	High-spec Wired Remote Controller	Timer Remote Controller (Wired)	Wireless Remote Controller				
	CZ-RTC6WBL (White) CZ-RTC6BL (Black)	CZ-RTC5B	CZ-RTC4	Controller: CZ-RWS3 Receiver: CZ-RWRU3 CZ-RWRL3 CZ-RWRD3 CZ-RWRT3 CZ-RWRC3				
Built-in thermostat	•	•	•	_				
nanoe™ X on/off control *not applies to Floor Console	•	•	_	•				
ECONAVI ON/OFF control	•	•	•	•				
Number of indoor units which can be controlled	1 group, 8 units	its 1 group, 8 units		1 group, 8 units				
Use limitations	Up to 1 controller can be connected per group	Up to 2 controllers can be connected per group (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	Up to 2 controllers can be connected per group (When using ECONAVI sensor, only one remote controller is possible to connect at indoor unit)	Up to 2 controllers can be connected per group.				
Function ON/OFF	•	•	•	•				
Mode setting	•			•				
Fan speed setting	•	•	•	•				
Temperature setting	•	•	•	•				
Air flow direction				•				
Permit/Prohibit switching	_	_	_	_				
Weekly program *		•		_				

All specifications are subject to change without notice. \*(CZ-RTC6WBL/CZ-RTC6BL with H&C Control App)



## **Panasonic**



We face a time in which "quality air" differentiates business. It's a time for Panasonic to fully display its strengths. Our ability to assemble and build superior systems isn't just due to the rich resources we have as a comprehensive electronics manufacturer, but also to Panasonic's 100 years of tradition, where each person thinks and acts on their own initiative while working in a team to reach further heights. We do not compromise. Each of our independent selves is a one stop solution. We face our customers' challenges together with our customers and do all that we can to build effective systems. As a true partner for our customers, we strive to always be at the forefront of business.

- Please read the Installation Instructions carefully before installing the unit, and the Operating Instructions before using it.
- Specifications are subject to change without prior notice.
- The contents of this catalogue are accurate as of July 2023.
- Due to printing considerations, actual colours may vary slightly from those shown.
- All graphics are provided solely for the purpose of illustrating a point.



Do not add or replace refrigerant other than the specified type. Manufacturer is not responsible for damage or deterioration in safety due to usage of other refrigerant.

Authorised Dealer

 $\mathsf{VRF}\,\mathsf{AU}\_\,\mathsf{JULY}\,2023$ 

#### Panasonic Australia Pty. Limited.