New generation of 2-Pipe ECOi EX MZ1 Series R32

Extreme efficiency, quality, compact.
Panasonic provides safety measure compliant with the latest standards, as required based on R32 refrigerant density under specific project conditions. Everything necessary for R32 refrigerant safety is prepared by Panasonic.

Reliable quality - R32 standard-compliant [1].

$\eta_{s,c}$ 310,1% [2]
$\eta_{s,h}$ 172,4% [2]
High seasonal efficiency.

R32
More sustainable solution [3].

Saving installation space.

Silent mode, maintaining high capacity.

52°C
-25°C
Extended operation range.

Max. 1000 m
Flexible piping installation.

200 %
Maximum indoor / outdoor capacity ratio 200%.

Saving installation cost.

1) Panasonic's R32 safety measures comply with IEC 60335-2-40 (ed. 7.0) and EN 378 (ISO 5149). 2) U-10MZ1E8. 3) Compared to R410A systems.

2-Pipe ECOi EX MZ1 Series R32.
Enjoy greater installation flexibility and cost savings.

WATCH VIDEO

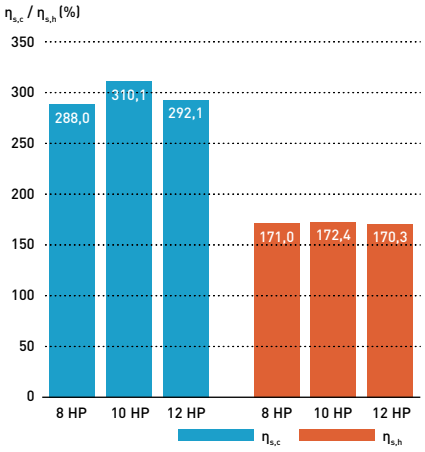
Extensive R32 range to meet any project requirements

- All air to air indoor units are equipped with nanoe™ X for improved indoor air quality
- A range of ventilations including ERVs and AHU connection kits
- A wide range of connectivity options, including stand-alone, central, and remote monitoring, with BMS integration for seamless operation

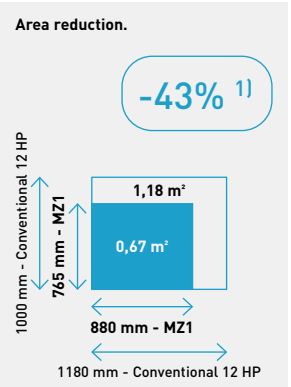
High efficiency in a compact outdoor unit

Significantly reduced volume and a lightweight chassis help reduce design and installation work.

MZ1 Series seasonal efficiency.



Area reduction.



Volume reduction.

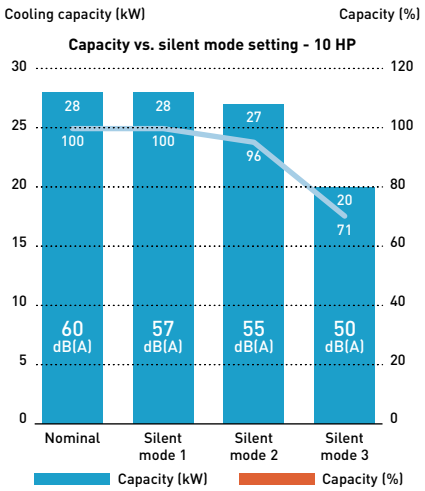
Compact and light weight.

1) 12 HP model compared to the equivalent conventional R410A ECOi EX model. 2) 8 and 10 HP models.

Maximum comfort with silent operation mode

Thanks to the optimised bell mouth design, sound pressure can be reduced to as low as 54 dB(A)* in silent mode while maintaining high cooling capacity.

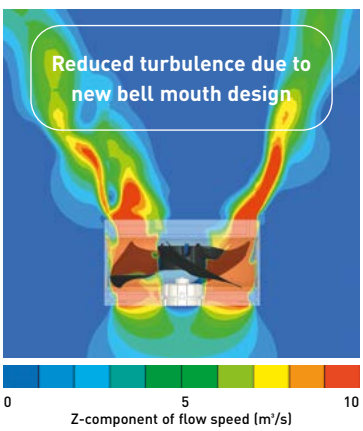
* For model U-8MZ1E8.



- Silent operation mode reduces outdoor unit noise down to 50 dB(A)
- 3-step set point available
- Silent mode 1 maintains rated 100% cooling capacity

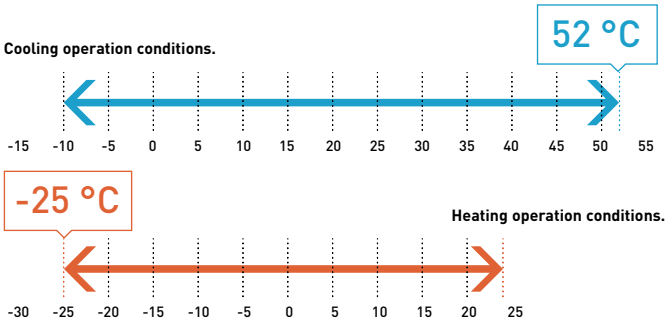
Noise (SPL)	8 HP	10 HP	12 HP
Nominal	57 dB(A)	60 dB(A)	64 dB(A)
Silent mode 1	54 dB(A)	57 dB(A)	61 dB(A)
Silent mode 2	52 dB(A)	55 dB(A)	59 dB(A)
Silent mode 3	50 dB(A)	50 dB(A)	50 dB(A)

Improved bell mouth design.

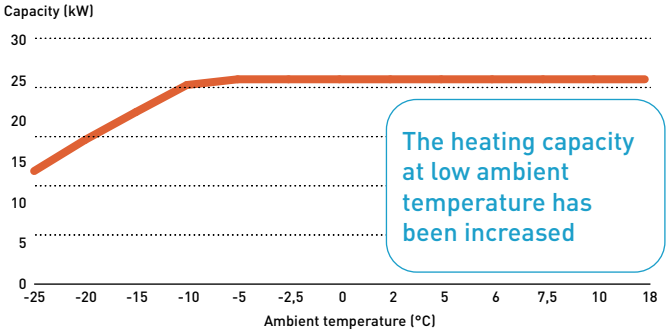


MZ1 Series maintains high performance even at extremely low winter temperatures.

Wide operating limits



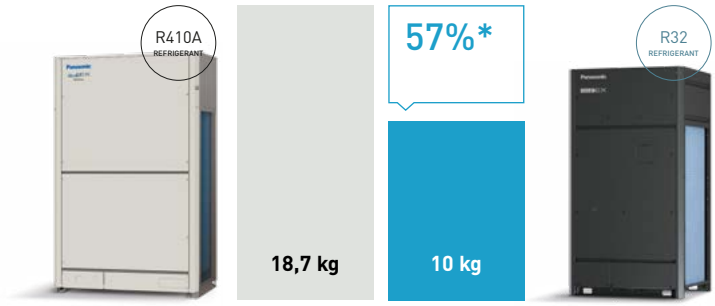
Cooling: Outside air temperature ˚C (DB). Heating: Outside air temperature ˚C (WB).



* Maximum capacity unaffected by defrost operation.

Refrigerant amount reduction and piping material choice

The new MZ1 Series uses only 57%* of the R32 refrigerant compared to the R410A equivalent system and supports imperial or metric piping installation.



* Panasonic's internal research. 12 HP model with 30 m piping installation.

R32 safety measures by Panasonic.

Everything necessary for R32 refrigerant safety is prepared by Panasonic.

Panasonic provides safety measure compliant with the latest standards, as required based on R32 refrigerant density under specific project conditions. Everything necessary for R32 refrigerant safety is prepared by Panasonic.

The safety measures which comply with EN 378 (ISO 5149) and IEC 60335-2-40 (ed. 7.0).

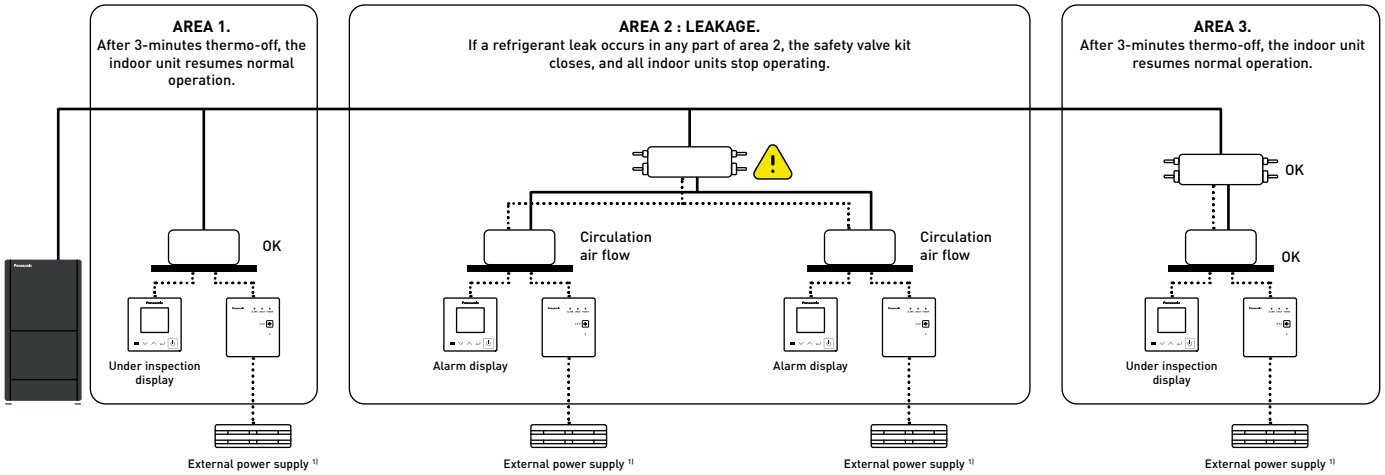
Leak detector - CZ-CGLSC2.
Leak detector designed for 4 way 90x90 cassettes, 4 way 60x60 cassettes, and wall-mounted units.

Leak alarm - CZ-CGLALC1.
R32 refrigerant leak alarm designed for adaptive duct and slim duct units.

2-pipe safety valve kit - CZ-P1160SVK.
A 2-pipe safety valve manages the shutdown of only the area / zone experiencing a refrigerant leak, instead of shutting down the whole system.

External power supply - PAW-16DC-ALC1.
External 16 V power supply (EN 378 compliant), including a leak alarm for remote locations. The leak alarm can be deactivated.

Example of how R32 safety measures work in an HVAC system.



* A maximum of 1 leak detector can be connected per indoor unit or group. If a leak detector is connected, only 1 wired remote controller is allowed (no sub-controller). Up to 8 units, including indoor units and a safety valve, can be connected. 1) In accordance with EN 378-3, alarm systems such as external leak detectors and safety alarms require a power source independent of the air conditioning system they are protecting. In addition, they must have a backup power source and be able to alert a monitored location. For further information, please contact an authorised Panasonic dealer.

NEW 2-Pipe ECOi EX MZ1 Series · R32

Extreme efficiency, quality, compact.

With advanced R32 refrigerant technology and optimised system design, this series offers a more sustainable solution compared to R410A.
Wide operation range from -25 °C in heating to +52 °C in cooling.

New 2025

HP			8 HP	10 HP	12 HP
Outdoor unit			**U-8MZ1E8**	**U-10MZ1E8**	**U-12MZ1E8**
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50
Cooling capacity		kW	22,4	28,0	33,5
EER [1]		W/W	3,30	3,50	3,00
Current		A	11,70 - 11,10 - 10,70	13,50 - 12,80 - 12,40	18,30 - 17,40 - 16,80
Input power		kW	6,78	8,00	11,1
Heating capacity		kW	25,0	31,5	37,5
COP [1]		W/W	4,50	4,30	4,00
Current		A	9,81 - 9,32 - 8,98	12,50 - 11,90 - 11,50	15,70 - 14,90 - 14,40
Input power		kW	5,55	7,32	9,37
Starting current		A	1,00	1,00	1,00
External static pressure (Max)		Pa	80	80	80
Air flow		m³/min	209	209	209
Sound pressure	Normal mode (Cool / Heat)	dB(A)	57/57	60/60	64/67
	Silent mode 1 / 2 / 3 (Cool)	dB(A)	54/52/50	57/55/50	61/59/50
Sound power	Normal mode (Cool / Heat)	dB(A)	75/75	77/77	81/84
Dimension	H x W x D	mm	1660 x 880 x 765	1660 x 880 x 765	1660 x 880 x 765
Net weight		kg	203	203	206
Piping diameter [2]	Liquid	Inch (mm)	3/8 (9,52) / 1/2 (12,70)	3/8 (9,52) / 1/2 (12,70)	3/8 (9,52) / 1/2 (12,70)
	Gas	Inch (mm)	3/4 (19,05) / 7/8 (22,22)	3/4 (19,05) / 7/8 (22,22)	7/8 (22,22) / 1-1/8 (28,58)
	Balance	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R32) / CO_2 Eq		kg / T	6,30 / 4,25	6,40 / 4,32	8,50 / 5,74
Maximum allowable indoor / outdoor capacity ratio [3]		%	50 ~ 200 (130)	50 ~ 200 (130)	50 ~ 200 (130)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24

ErP data [4]			
SEER [5]	**7,27**	**7,82**	**7,37**
$\eta_{s,c}$	**288,0%**	**310,1%**	**292,1%**
SCOP [5]	**4,35**	**4,38**	**4,33**
$\eta_{s,h}$	**171,0%**	**172,4%**	**170,3%**

1) EER and COP calculation is based in accordance to EN 14511. 2) Piping diameter under 100 m for ultimate indoor unit / over 100 m for ultimate indoor unit (if the longest piping equivalent length exceeds 100 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 3) If the following conditions are satisfied, the effective range is above 130% and below 200%: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130% of connectable indoor units. 4) SEER / SCOP and $\eta_{s,c}$ / $\eta_{s,h}$ are in accordance with ErP test data for U2 type 4 way 90x90 cassette indoor units. 5) SEER / SCOP is calculated based on the seasonal space cooling / heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF.

Technical focus

- Compact outdoor unit with a significant 43% [1] footprint reduction, delivering high seasonal efficiency, reliable quality, and R32 standard compliance
- The series uses only 57% [2] of the R32 refrigerant compared to R410A equivalent system, minimizing the need for extra safety measures
- Extensive R32 Range with all air-to-air indoor units equipped with nanoe™ X, along with ERVs and AHU connection kits
- A wide range of connectivity options, including stand-alone, central, and remote monitoring, with BMS integration for seamless operation

1) 12 HP model compared to the equivalent conventional R410A ECOi EX ME2.
2) Panasonic's internal research. 12 HP model with 30 m piping installation.

R32 REFRIGERANT | INVERTER+ | ALL INVERTER COMPRESSORS | -25 °C HEATING MODE | 52 °C COOLING MODE | BLUEFIN | PANASONIC AC SMART CLOUD | 5 YEARS COMPRESSOR WARRANTY

EUROVENT CERTIFIED PERFORMANCE www.eurovent-certification.com

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.

2-Pipe ECOi EX MZ1 Series R32 combination from 16 to 48 HP · R32

HP			16 HP	18 HP	20 HP	20 HP	22 HP	24 HP	24 HP	26 HP
Outdoor unit			U-8MZ1E8 U-8MZ1E8	U-8MZ1E8 U-10MZ1E8	U-8MZ1E8 U-12MZ1E8	U-10MZ1E8 U-10MZ1E8	U-10MZ1E8 U-12MZ1E8	U-12MZ1E8 U-12MZ1E8	U-8MZ1E8 U-8MZ1E8	U-8MZ1E8 U-8MZ1E8
									U-8MZ1E8	U-10MZ1E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	44,8	50,4	55,9	56,0	61,5	67,0	67,2	72,8
EER [1]		W/W	3,20	3,40	3,10	3,50	3,20	3,00	3,20	3,30
SEER [2] / $\eta_{s,c}$			**7,24 / 286,8%**	**7,56 / 299,6%**	**7,29 / 288,9%**	**7,82 / 310,1%**	**7,55 / 299,1%**	**7,33 / 290,2%**	**7,24 / 286,8%**	**7,46 / 295,6%**
Current		A	23,40-22,20-21,40	25,20-23,90-23,10	30,00-28,50-27,50	27,00-25,60-24,80	31,80-30,20-29,20	36,60-34,80-33,60	35,10-33,30-32,10	36,90-35,00-33,80
Input power		kW	13,6	14,8	17,9	16,0	19,1	22,2	20,4	21,6
Heating capacity		kW	50,0	56,5	62,5	63,0	69,0	75,0	75,0	81,5
COP [1]		W/W	4,50	4,30	4,10	4,20	4,10	3,90	4,40	4,40
SCOP [2] / $\eta_{s,h}$			**4,32 / 169,8%**	**4,33 / 170,3%**	**4,29 / 168,8%**	**4,38 / 172,2%**	**4,34 / 170,7%**	**4,33 / 170,2%**	**4,32 / 169,8%**	**4,31 / 169,5%**
Current		A	19,62-18,64-17,96	22,31-21,22-20,48	25,51-24,22-23,38	25,00-23,80-23,00	28,20-26,80-25,50	31,40-29,80-28,80	29,43-27,96-26,94	32,12-30,54-29,46
Input power		kW	11,1	12,9	15,0	14,7	16,7	18,8	16,7	18,5
Starting current		A	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m^3/min	418	418	418	418	418	418	627	627
Sound pressure	Normal mode (Cool / Heat)	dB(A)	60,0 / 60,0	62,0 / 62,0	65,0 / 67,5	63,0 / 63,0	65,5 / 68,0	67,0 / 70,0	62,0 / 62,0	63,0 / 63,0
	Silent mode 1 / 2 (Cool)	dB(A)	57,0 / 55,0	59,0 / 57,0	62,0 / 60,0	60,0 / 58,0	62,5 / 60,5	64,0 / 62,0	59,0 / 57,0	60,0 / 58,0
Sound power	Normal mode (Cool / Heat)	dB(A)	78,0 / 78,0	79,5 / 79,5	82,0 / 84,5	80,0 / 80,0	82,5 / 85,0	84,0 / 87,0	80,0 / 80,0	80,5 / 80,5
Dimension	H x W x D	mm	1660 x 1760 (+60) x 765	1660 x 1760 (+60) x 765	1660 x 1760 (+60) x 765	1660 x 1760 (+60) x 765	1660 x 1760 (+60) x 765	1660 x 1760 (+60) x 765	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765
Net weight		kg	406	406	409	406	409	412	609	609
Piping diameter [3]	Liquid	Inch (mm)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)
	Gas	Inch (mm)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)
	Balance	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R32) / CO_2 Eq.		kg / T	12,6 / 8,51	12,7 / 8,57	14,8 / 9,99	12,8 / 8,64	14,9 / 10,06	17,0 / 11,48	18,9 / 12,76	19,0 / 12,83
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24

HP			28 HP	28 HP	30 HP	30 HP	32 HP	32 HP	32 HP	34 HP
Outdoor unit			U-8MZ1E8 U-8MZ1E8	U-8MZ1E8 U-10MZ1E8	U-8MZ1E8 U-10MZ1E8	U-10MZ1E8 U-10MZ1E8	U-8MZ1E8 U-12MZ1E8	U-10MZ1E8 U-12MZ1E8	U-8MZ1E8 U-8MZ1E8	U-10MZ1E8 U-12MZ1E8
									U-8MZ1E8	
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	78,3	78,4	83,9	84,0	89,4	89,5	89,6	95,0
EER [1]		W/W	3,10	3,40	3,20	3,50	3,00	3,30	3,20	3,10
SEER [2] / $\eta_{s,c}$			**7,23 / 286,3%**	**7,61 / 301,5%**	**7,45 / 295,1%**	**7,82 / 310,1%**	**7,26 / 287,4%**	**7,63 / 302,4%**	**7,24 / 286,8%**	**7,37 / 291,8%**
Current		A	41,70-39,60-38,20	38,70-36,70-35,50	43,50-41,30-39,90	40,50-38,40-37,20	48,30-45,90-44,30	45,30-43,00-41,60	46,80-44,40-42,80	50,10-47,60-46,00
Input power		kW	24,7	22,8	25,9	24,0	29,0	27,1	27,2	30,2
Heating capacity		kW	87,5	88,0	94,0	94,5	100,0	100,0	100,0	106,0
COP [1]		W/W	4,20	4,30	4,20	4,20	4,10	4,10	4,50	4,00
SCOP [2] / $\eta_{s,h}$			**4,34 / 170,9%**	**4,35 / 171,2%**	**4,33 / 170,4%**	**4,38 / 172,4%**	**4,31 / 169,6%**	**4,38 / 172,2%**	**4,32 / 169,8%**	**4,29 / 168,7%**
Current		A	35,32-33,54-32,36	34,81-33,12-31,98	38,01-36,12-34,88	37,50-35,70-34,50	41,21-39,12-37,78	40,70-38,70-37,40	39,24-37,28-35,92	43,90-41,70-40,30
Input power		kW	20,5	20,2	22,3	22,0	24,3	24,1	22,2	26,1
Starting current		A	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m^3/min	627	627	627	627	627	627	836	627
Sound pressure	Normal mode (Cool / Heat)	dB(A)	65,5 / 68,0	64,0 / 64,0	66,0 / 68,5	65,0 / 65,0	67,5 / 70,5	66,5 / 68,5	63,0 / 63,0	68,0 / 70,5
	Silent mode 1 / 2 (Cool)	dB(A)	62,5 / 60,5	61,0 / 59,0	63,0 / 61,0	62,0 / 60,0	64,5 / 62,5	63,5 / 61,5	60,0 / 58,0	65,0 / 63,0
Sound power	Normal mode (Cool / Heat)	dB(A)	83,0 / 85,0	81,5 / 81,5	83,5 / 85,5	82,0 / 82,0	84,5 / 87,5	83,5 / 85,5	81,0 / 81,0	85,0 / 87,5
Dimension	H x W x D	mm	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765	1660 x 2640 (+120) x 765	1660 x 3520 (+180) x 765	1660 x 2640 (+120) x 765
Net weight		kg	612	609	612	609	615	612	812	615
Piping diameter [3]	Liquid	Inch (mm)	1/2 (12,70) / 5/8 (15,88)	1/2 (12,70) / 5/8 (15,88)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)
	Gas	Inch (mm)	1-1/8 (28,58) / 1-3/8 (34,96)	1-1/8 (28,58) / 1-3/8 (34,96)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)
	Balance	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R32) / CO_2 Eq.		kg / T	21,1 / 14,24	19,1 / 12,89	21,2 / 14,31	19,2 / 12,96	23,3 / 15,73	21,3 / 14,38	25,2 / 17,01	23,4 / 15,80
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24

1) EER and COP calculation is based in accordance to EN 14511. 2) SEER / SCOP is calculated based on the seasonal space cooling / heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Piping diameter under 100 m for ultimate indoor unit / over 100 m for ultimate indoor unit (if the longest piping equivalent length exceeds 100 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) If the following conditions are satisfied, the effective range is above 130% and below 200%: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130% of connectable indoor units.
4) SEER / SCOP and $\eta_{s,c}$ / $\eta_{s,h}$ are in accordance with ErP test data for U2 type 4 way 90x90 cassette indoor units.

HP			34 HP	36 HP	36 HP	36 HP	38 HP	38 HP	40 HP	40 HP
Outdoor unit			U-8MZ1E8	U-12MZ1E8	U-8MZ1E8	U-8MZ1E8	U-8MZ1E8	U-8MZ1E8	U-8MZ1E8	U-10MZ1E8
			U-8MZ1E8	U-12MZ1E8	U-8MZ1E8	U-8MZ1E8	U-8MZ1E8	U-10MZ1E8	U-8MZ1E8	U-10MZ1E8
			U-8MZ1E8	U-12MZ1E8	U-10MZ1E8	U-8MZ1E8	U-10MZ1E8	U-10MZ1E8	U-12MZ1E8	U-10MZ1E8
			U-10MZ1E8		U-10MZ1E8	U-12MZ1E8	U-12MZ1E8	U-10MZ1E8	U-12MZ1E8	U-10MZ1E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50	50
Cooling capacity		kW	95,2	100,0	100,0	100,0	106,0	106,0	111,0	112,0
EER [1]		W/W	3,30	3,00	3,30	3,10	3,20	3,40	3,10	3,50
SEER [2] / $\eta_{s,c}$			**7,37 / 291,8%**	**7,37 / 292,0%**	**7,53 / 298,2%**	**7,25 / 287,0%**	**7,36 / 291,7%**	**7,66 / 303,4%**	**7,30 / 289,0%**	**7,82 / 310,1%**
Current		A	48,60-46,10-44,50	54,90-52,20-50,40	50,40-47,80-46,20	53,40-50,70-48,90	55,20-52,40-50,60	52,20-49,50-47,90	60,00-57,00-55,00	54,00-51,20-49,60
Input power		kW	28,4	33,3	29,6	31,5	32,7	30,8	35,8	32,0
Heating capacity		kW	106,0	112,0	113,0	112,0	119,0	119,0	125,0	126,0
COP [1]		W/W	4,40	3,90	4,30	4,20	4,20	4,30	4,10	4,30
SCOP [2] / $\eta_{s,h}$			**4,29 / 168,7%**	**4,33 / 170,3%**	**4,33 / 170,3%**	**4,32 / 170,1%**	**4,31 / 169,6%**	**4,36 / 171,4%**	**4,29 / 168,8%**	**4,38 / 172,2%**
Current		A	41,93-39,86-38,44	47,10-44,70-43,20	44,62-42,44-40,96	45,13-42,86-41,34	47,82-45,44-43,86	47,31-45,02-43,48	51,02-48,44-46,76	50,00-47,60-46,00
Input power		kW	24,0	28,2	25,8	26,1	27,8	27,6	29,9	29,3
Starting current		A	1,00	1,00	1,00	1,00	1,00	1,00	1,00	1,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80	80
Air flow		m^3/min	836	627	836	836	836	836	836	836
Sound pressure	Normal mode (Cool / Heat)	dB(A)	64,0 / 64,0	69,0 / 72,0	65,0 / 65,0	66,0 / 68,5	66,5 / 68,5	65,5 / 65,5	68,0 / 70,5	66,0 / 66,0
	Silent mode 1 / 2 (Cool)	dB(A)	61,0 / 59,0	66,0 / 64,0	62,0 / 60,0	63,0 / 61,0	63,5 / 61,5	62,5 / 60,5	65,0 / 63,0	63,0 / 61,0
Sound power	Normal mode (Cool / Heat)	dB(A)	82,0 / 82,0	86,0 / 89,0	82,5 / 82,5	83,5 / 85,5	84,0 / 86,0	83,0 / 83,0	85,0 / 87,5	83,0 / 83,0
Dimension	H x W x D	mm	1660 x 3520 (+180) x 765	1660 x 2640 (+120) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765
Net weight		kg	812	618	812	815	815	812	818	812
Piping diameter [3]	Liquid	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)
	Gas	Inch (mm)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)
	Balance	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R32) / CO_2 Eq.		kg / T	25,3 / 17,08	25,5 / 17,21	25,4 / 17,15	27,4 / 18,50	27,5 / 18,56	25,5 / 17,21	29,6 / 19,98	25,6 / 17,28
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24

HP			40 HP	42 HP	42 HP	44 HP	44 HP	46 HP	48 HP
Outdoor unit			U-8MZ1E8	U-8MZ1E8	U-10MZ1E8	U-8MZ1E8	U-10MZ1E8	U-10MZ1E8	U-12MZ1E8
			U-10MZ1E8	U-10MZ1E8	U-10MZ1E8	U-12MZ1E8	U-10MZ1E8	U-12MZ1E8	U-12MZ1E8
			U-10MZ1E8	U-12MZ1E8	U-10MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8
			U-12MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8	U-12MZ1E8
Power supply	Voltage	V	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415	380 - 400 - 415
	Phase		Three phase	Three phase	Three phase	Three phase	Three phase	Three phase	Three phase
	Frequency	Hz	50	50	50	50	50	50	50
Cooling capacity		kW	111,0	117,0	117,0	122,0	123,0	128,0	134,0
EER [1]		W/W	3,20	3,10	3,30	3,00	3,20	3,00	3,00
SEER [2] / $\eta_{s,c}$			**7,53 / 298,2%**	**7,43 / 294,4%**	**7,65 / 303,2%**	**7,28 / 288,5%**	**7,56 / 299,4%**	**7,41 / 293,7%**	**7,37 / 292,1%**
Current		A	57,00-54,10-52,30	61,80-58,70-56,70	58,80-55,80-54,00	66,60-63,30-61,10	63,60-60,40-58,40	68,40-65,00-62,80	73,20-69,60-67,20
Input power		kW	33,9	37,0	35,1	40,1	38,2	41,3	44,4
Heating capacity		kW	125,0	131,0	132,0	137,0	138,0	144,0	150,0
COP [1]		W/W	4,20	4,10	4,20	4,00	4,10	4,00	4,00
SCOP [2] / $\eta_{s,h}$			**4,34 / 170,6%**	**4,35 / 171,0%**	**4,36 / 171,6%**	**4,33 / 170,3%**	**4,34 / 170,7%**	**4,35 / 171,2%**	**4,33 / 170,3%**
Current		A	50,51-48,02-46,38	53,71-51,02-49,28	53,20-50,60-48,90	56,91-54,02-52,18	56,40-53,60-51,80	59,60-56,60-54,70	62,80-59,60-57,60
Input power		kW	29,6	31,7	31,4	33,7	33,4	35,5	37,5
Starting current		A	1,00	1,00	1,00	1,00	1,00	1,00	1,00
External static pressure (Max)		Pa	80	80	80	80	80	80	80
Air flow		m^3/min	836	836	836	836	836	836	836
Sound pressure	Normal mode (Cool / Heat)	dB(A)	67,0 / 69,0	68,5 / 71,0	67,5 / 69,0	69,0 / 72,0	68,5 / 71,0	69,5 / 72,0	70,0 / 73,0
	Silent mode 1 / 2 (Cool)	dB(A)	64,0 / 62,0	65,5 / 63,5	64,5 / 62,5	66,0 / 64,0	65,5 / 63,5	66,5 / 64,5	67,0 / 65,0
Sound power	Normal mode (Cool / Heat)	dB(A)	84,5 / 86,0	85,5 / 88,0	84,5 / 86,0	86,5 / 89,0	85,5 / 88,0	86,5 / 89,0	87,0 / 90,0
Dimension	H x W x D	mm	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765	1660 x 3520 (+180) x 765
Net weight		kg	815	818	815	821	818	821	824
Piping diameter [3]	Liquid	Inch (mm)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)	5/8 (15,88) / 3/4 (19,05)
	Gas	Inch (mm)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)	1-3/8 (34,96) / 15/8 (15,88)
	Balance	Inch (mm)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)	1/4 (6,35)
Refrigerant (R32) / CO_2 Eq.		kg / T	27,6 / 18,63	29,7 / 20,05	27,7 / 18,70	31,8 / 21,47	29,8 / 20,12	31,9 / 21,53	34,0 / 22,95
Maximum allowable indoor / outdoor capacity ratio [4]		%	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)	50 ~ 130 (200)
Operating range	Cool Min ~ Max	°C	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52	-10 ~ +52
	Heat Min ~ Max	°C	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24	-25 ~ +24

1) EER and COP calculation is based in accordance to EN 14511. 2) SEER / SCOP is calculated based on the seasonal space cooling / heating efficiency "η" values of the COMMISSION REGULATION (EU) 2016/2281. SEER, SCOP = (η + Correction) × PEF. 3) Piping diameter under 100 m for ultimate indoor unit / over 100 m for ultimate indoor unit (if the longest piping equivalent length exceeds 100 m, increase the sizes of the main tubes by 1 rank for gas tubes and liquid tubes). 4) If the following conditions are satisfied, the effective range is above 130% and below 200%: A. Obey the limited number of connectable indoor units. B. The lower limit of operating range for heating outdoor temperature is limited to -10 °C WB (standard -25 °C WB). C. Simultaneous operation is limited to less than 130% of connectable indoor units.
4) SEER / SCOP and $\eta_{s,c}$ / $\eta_{s,h}$ are in accordance with ErP test data for U2 type 4 way 90x90 cassette indoor units.

Rating conditions: Cooling indoor 27 °C DB / 19 °C WB. Cooling outdoor 35 °C DB / 24 °C WB. Heating indoor 20 °C DB. Heating outdoor 7 °C DB / 6 °C WB. (DB: Dry Bulb; WB: Wet Bulb).
Specifications subject to change without notice. For detailed information about ErP / Energy Labelling, please visit our websites www.aircon.panasonic.eu or www.ptc.panasonic.eu.