

## 1 Specifications

### 1.1 Outdoor Unit

kW			4	6	8	10
Power supply		V/Ph/Hz	220-240/1/50			
Heating <sup>2</sup>	Capacity	kW	4.20	6.50	8.40	10.00
	Rated input	kW	0.82	1.35	1.73	2.15
	COP			5.15	4.85	4.85
Heating <sup>3</sup>	Capacity	kW	4.20	6.35	8.05	9.85
	Rated input	kW	1.15	1.74	2.16	2.72
	COP			3.65	3.64	3.73
Heating <sup>4</sup>	Capacity	kW	4.10	5.75	7.50	9.30
	Rated input	kW	1.44	1.98	2.49	3.25
	COP			2.85	2.90	3.01
Cooling <sup>5</sup>	Capacity	kW	4.30	6.45	8.35	10.20
	Rated input	kW	0.77	1.32	1.79	2.40
	EER			5.60	4.88	4.67
Cooling <sup>6</sup>	Capacity	kW	4.50	6.50	7.38	8.15
	Rated input	kW	1.36	2.20	2.44	2.76
	EER			3.32	2.95	3.02
Seasonal space heating energy efficiency class <sup>7</sup>	LWT at 35°C		A+++	A+++	A+++	A+++
	LWT at 55°C		A++	A++	A++	A++
SCOP <sup>7</sup>	LWT at 35°C		4.77	4.77	4.79	4.79
	LWT at 55°C		3.34	3.34	3.28	3.28
SEER	LWT at 7°C		5.06	5.25	4.80	4.94
SEER	LWT at 18°C		8.02	8.28	7.81	7.59
MOP		A	30	30	30	30
MCA		A	14	14	19	19
Compressor	Type		Twin rotary DC inverter		Twin rotary DC inverter	
	Poles		6	6	6	6
	Speed range	rps	10-120	10-120	10-120	10-120
	Capacity at 60rps	kW	5.45	5.45	7.10	7.10
	Input at 60rps	kW	1.74	1.74	2.23	2.23
	Max. heating	Hz	96	96	96	96
	Max. cooling	Hz	82	82	72	72
Outdoor fan	Motor type		Brushless DC motor		Brushless DC motor	
	Number of fans		1	1	1	1
	Air flow	m <sup>3</sup> /h	3300	3300	5000	5000
Air side heat exchanger	Type		Finned tube		Finned tube	
	Number of rows		2	2	2	2
	Number of circuits		6	6	8	8
Refrigerant	Type		R32			
	Factory charge	kg	1.55	1.55	1.65	1.65
Throttle type			Electronic expansion valve		Electronic expansion valve	

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kW		4	6	8	10	
Piping connections	Type		Flare	Flare	Flare	Flare
	Liquid Dia.(OD)	mm	Φ6.35	Φ6.35	Φ9.52	Φ9.52
	Gas Dia.(OD)	mm	Φ15.9	Φ15.9	Φ15.9	Φ15.9
	Min. pipe length	m	2	2	2	2
	Max. pipe length	m	30	30	30	30
Installation height difference	OU above	m	20	20	20	20
	OU below	m	15	15	15	15
Sound power level <sup>8</sup>		dB(A)	61	62	63	65
Sound pressure level <sup>9</sup>		dB(A)	46.5	49.5	49.3	52.4
Net dimensions (W×H×D)		mm	960×860×380	960×860×380	1075×965×395	1075×965×395
Packed dimensions (W×H×D)		mm	1040×1000×430	1040×1000×430	1120×1100×435	1120×1100×435
Net/Gross weight		kg	57/68	57/68	67/79	67/79
Operating temperature range	Cooling	°C	-5 to 46			
	Heating	°C	-25 to 35			
	DHW	°C	-25 to 43			

## Abbreviations:

MOP: Maximum overcurrent protection  
MCA: Minimum circuit amps  
OU: Outdoor unit  
DHW: Domestic hot water  
EWT: Entering water temperature  
LWT: Leaving water temperature

## Notes:

1. Relevant EU standards and legislation: EN14511; EN14825; EN50564; EN12102; (EU) No 811:2013; (EU) No 813:2013; OJ 2014/C 207/02:2014.
2. Outdoor air temperature 7°C DB, 85% R.H.; EWT 30°C, LWT 35°C.
3. Outdoor air temperature 7°C DB, 85% R.H.; EWT 40°C, LWT 45°C.
4. Outdoor air temperature 7°C DB, 85% R.H.; EWT 47°C, LWT 55°C.
5. Outdoor air temperature 35°C DB; EWT 23°C, LWT 18°C.
6. Outdoor air temperature 35°C DB; EWT 12°C, LWT 7°C.
7. Seasonal space heating energy efficiency class tested in average climate conditions.
8. Sound power level tested in average climate conditions, outdoor air temperature 7°C DB, 85% R.H.; EWT 30°C, LWT 35°C.
9. Sound pressure level is the maximum value tested under the three conditions of Notes2, Notes3 and Notes4.  
Sound pressure level is measured at a position 1m in front of the unit and (1+H)/2m (where H is the height of the unit) above the floor in a semi-anechoic chamber.

1.2 Hydronic Box

kW				6	8
Function				Heating and cooling	
LWT range	Space heating	Low	°C	25 to 55, default 35	
		High	°C	35 to 60, default 45	
	Space cooling	Low	°C	7 to 25, default 7	
		High	°C	18 to 25, default 18	
	DHW			°C	40 to 60, default 45
Power supply			V/Ph/Hz	220-240/1/50	220-240/1/50
MOP			A	20	20
MCA			A	0.9	0.9
Sound power level <sup>1</sup>			dB(A)	43	43
Dimension (W×H×D)			mm	400×850×427	400×850×427
Packing (W×H×D)			mm	495×1040×495	495×1040×495
Net/gross weight			kg	47/53	47/53
Water circuit	Piping connections		inch	Φ 25 Female BSP	Φ 25 Female BSP
	Safety valve set pressure		MPa	0.3	0.3
	Drainage pipe connection		mm	Φ16	Φ16
	Expansion tank	Volume	L	5.0	5.0
		Max. water pressure	MPa	0.8	0.8
		Pre-pressure	MPa	0.15	0.15
	Water side exchanger	Type		Plate type	Plate type
		Volume	L	0.7	0.7
Water pump head		m	8.5	8.5	
Refrigerant circuit	Liquid Dia. (OD)		mm	Φ9.52	Φ9.52
	Gas Dia. (OD)		mm	Φ15.9	Φ15.9
Backup electric heater	Capacity mounted		kW	3.0	3.0
	Capacity steps			1	1
	MOP		A	17	17
	MCA		A	15	15
	Power supply		V/Ph/Hz	220-240/1/50	220-240/1/50

Abbreviations:

- MOP: Maximum overcurrent protection
- MCA: Minimum circuit amps
- OU: Outdoor unit
- DHW: Domestic hot water
- EWT: Entering water temperature
- LWT: Leaving water temperature

Notes:

1. Sound power level tested in average climate conditions, outdoor air temperature 7°C DB, 85% R.H.; EWT 30°C, LWT 35°C.