

Subtype FDCW60VN-X-A

Certificate Holder	Mitsubishi Heavy Industries Air Conditioning Europe
Address	5 The Square
ZIP	UB11 1ET
City	Uxbridge, Middlesex
Country	GB
Certification Body	RISE CERT
Subtype title	FDCW60VN-X-A
Registration number	012-SC0824-18
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	1.5 kg
Certification Date	21.01.2019
Testing laboratory	RISE Research Institutes of Sweden

Model FDCW60VN-X-A + HMA60-S

Model name	FDCW60VN-X-A + HMA60-S
Application	Heating + DHW + low temp
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water
EN 16147 | Average Climate

Declared load profile	XL
Efficiency η_{DHW}	91 %
COP	2.22
Heating up time	01:40 h:min
Standby power input	45.0 W
Reference hot water temperature	51.0 °C
Mixed water at 40°C	230 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	4.80 kW	3.84 kW
El input	0.93 kW	1.37 kW
COP	5.14	2.81

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	33 dB(A)	33 dB(A)
Sound power level outdoor	53 dB(A)	53 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	188 %	138 %
Prated	4.80 kW	5.30 kW

SCOP	4.70	3.45
Tbiv	-7 °C	-7 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	4.30 kW	4.70 kW
COP Tj = -7°C	2.60	1.88
Cdh Tj = -7 °C	0.980	0.990
Pdh Tj = +2°C	2.60 kW	2.80 kW
COP Tj = +2°C	4.84	3.59
Cdh Tj = +2 °C	0.980	0.990
Pdh Tj = +7°C	1.70 kW	1.80 kW
COP Tj = +7°C	6.91	4.72
Cdh Tj = +7 °C	0.980	0.990
Pdh Tj = 12°C	2.70 kW	2.70 kW
COP Tj = 12°C	7.72	6.47
Cdh Tj = +12 °C	0.980	0.990
Pdh Tj = Tbiv	4.30 kW	4.70 kW
COP Tj = Tbiv	2.60	1.88
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	3.20 kW	4.10 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.24	1.77
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.98	0.99
WTOL	58 °C	58 °C
Poff	7 W	7 W
PTO	12 W	12 W
PSB	12 W	12 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.60 kW	1.20 kW
Annual energy consumption Qhe	2089 kWh	3091 kWh

Model FDCW60VNX-A + HSB60-W

Model name	FDCW60VNX-A + HSB60-W
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	n/a

Outdoor Air/Water
EN 14511-4 | Heating

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Defrost test	passed
Starting and operating test	passed

EN 14511-2 | Heating

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EI input	0.93 kW	1.37 kW
COP	5.14	2.81

EN 12102-1 | Average Climate

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