Subtype Q-ton HP KEYMARK

Certificate Holder	Mitsubishi Heavy Industries Air Conditioning Europe
Address	5 The Square
ZIP	UB11 1ET
City	Uxbridge, Middlesex
Country	GB
Certification Body	BRE Global Limited
Subtype title	Q-ton HP KEYMARK
Registration number	041-K0003-01
Heat Pump Type	Outdoor Air/Water
Refrigerant	R744
Mass of Refrigerant	8.5 kg
Certification Date	01.09.2022
Testing basis	Heat Pump Keymark Scheme Rules Rev 09

Model ESA30EH-25

Model name	ESA30EH-25
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XXL
Efficiency ηDHW	114 %
COP	2.85
Heating up time	01:09 h:min
Standby power input	183.0 W
Reference hot water temperature	51.0 °C
Mixed water at 40°C	1647 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	22.70 kW	kW
El input	8.53 kW	kW
COP	2.66	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	146 %	%
Prated	27.00 kW	kW
SCOP	3.65	
Tbiv	-10 °C	°C
TOL	-10 °C	°C

Pdh Tj = -7°C	23.60 kW	kW
COP Tj = -7°C	2.53	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	14.20 kW	kW
COP Tj = +2°C	3.49	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.00 kW	kW
COP Tj = +7°C	4.77	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.80 kW	kW
COP Tj = 12°C	6.05	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	26.50 kW	kW
COP Tj = Tbiv	2.43	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	26.50 kW	kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	
WTOL	52 °C	°C
Poff	47 W	W
PTO	71 W	W
PSB	47 W	W
PCK	20 W	W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	kW
Annual energy consumption Qhe	1909 kWh	kWh

Model ESA30EH2-25

Model name	ESA30EH2-25
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water

EN 16147 | Average Climate

Declared load profile	XXL
Efficiency ηDHW	114 %
COP	2.85
Heating up time	01:09 h:min
Standby power input	183.0 W
Reference hot water temperature	51.0 °C
Mixed water at 40°C	1647 l

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	22.70 kW	kW
El input	8.53 kW	kW
COP	2.66	

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	77 dB(A)	dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
ηs	146 %	%
Prated	27.00 kW	kW
SCOP	3.65	
Tbiv	-10 °C	°C
TOL	-10 °C	°C

Pdh Tj = -7°C	23.60 kW	kW
COP Tj = -7°C	2.53	
Cdh Tj = -7 °C	0.980	
Pdh Tj = +2°C	14.20 kW	kW
COP Tj = +2°C	3.49	
Cdh Tj = +2 °C	0.980	
Pdh Tj = +7°C	12.00 kW	kW
COP Tj = +7°C	4.77	
Cdh Tj = +7 °C	0.980	
Pdh Tj = 12°C	14.80 kW	kW
COP Tj = 12°C	6.05	
Cdh Tj = +12 °C	0.980	
Pdh Tj = Tbiv	26.50 kW	kW
COP Tj = Tbiv	2.43	
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	26.50 kW	kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.43	
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.980	
WTOL	52 °C	°C
Poff	47 W	W
PTO	71 W	W
PSB	47 W	W
PCK	20 W	W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	0.00 kW	kW
Annual energy consumption Qhe	1909 kWh	kWh

Model ESA30E-25	
Model name	ESA30E-25
Application	Heating + DHW + low temp
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data	
Power supply	3x400V 50Hz
Off-peak product	n/a

Outdoor Air/Water EN 16147 | Average Climate	
Declared load profile	XXL
Efficiency ηDHW	114 %
COP	2.85
Heating up time	01:09 h:min
Standby power input	183.0 W
Reference hot water temperature	51.0 °C
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