

Subtype AquaMaster Inverter AQ45I-1

Certificate Holder	Master Therm tepelna cernadla s.r.o.
Address	Vaclavske namesti 819/43
ZIP	110 00
City	Praha
Country	CZ
Certification Body	SZU - Strojirensky zkusebni ustav (Engineering Test Institute, Public Enterprise)
Subtype title	AquaMaster Inverter AQ45I-1
Registration number	037-0130-23
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	2.4 kg
Certification Date	30.08.2023
Testing basis	HP Keymark scheme rules rev. no. 10
Testing laboratory	SZU Brno, CZ

Model AquaMaster Inverter AQ45I-1

Model name	AquaMaster Inverter AQ45I-1
Application	Heating (medium temp)
Units	Indoor
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	Yes

Brine/Water**EN 14511-4 | Heating**

Shutting off the heat transfer medium flow passed

Complete power supply failure	passed
Starting and operating test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	14.01 kW	12.55 kW
El input	3.05 kW	4.25 kW
COP	4.60	2.95

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	48 dB(A)	48 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	196 %	151 %
Prated	21.37 kW	19.40 kW
SCOP	5.10	3.96
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	18.53 kW	16.68 kW
COP Tj = -7°C	4.23	2.95
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	11.28 kW	10.79 kW
COP Tj = +2°C	5.21	4.11
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	7.46 kW	6.96 kW
COP Tj = +7°C	5.45	4.36
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	3.62 kW	3.26 kW
COP Tj = 12°C	5.47	4.47
Cdh Tj = +12 °C	0.971	0.900
Pdh Tj = Tbiv	21.37 kW	19.40 kW
COP Tj = Tbiv	3.99	2.71
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	21.37 kW	19.40 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.99	2.71
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	19 W	19 W
PSB	19 W	19 W
PCK	0 W	0 W
Supplementary Heater: Type of energy input	n/a	n/a
Supplementary Heater: PSUP	kW	kW
Annual energy consumption Qhe	8658 kWh	10112 kWh