Subtype AquaMaster Inverter AQ45IP

Certificate Holder	Master Therm tepelna cerpadla 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 AQ45IP
Registration number	037-0202-25
Heat Pump Type	Brine/Water
Refrigerant	R290
Mass of Refrigerant	0.9 kg
Certification Date	09.04.2025
Testing basis	HP Keymark certification scheme rules rev. no.14
Testing laboratory	SZU Brno, CZ

Model AquaMaster Inverter AQ45IP	
Model name	AquaMaster Inverter AQ45IP
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	n/a

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	16.50 kW	14.65 kW
El input	3.79 kW	5.06 kW
COP	4.35	2.90

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
ηs	186 %	144 %
Prated	35.23 kW	33.93 kW
SCOP	4.85	3.79
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	32.03 kW	30.87 kW
COP Tj = -7°C	4.03	2.94
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	19.78 kW	19.04 kW
COP Tj = +2°C	4.87	3.80
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	12.40 kW	12.06 kW
COP Tj = +7°C	5.39	4.35
Cdh Tj = +7 °C	0.900	0.900

Pdh Tj = 12°C	5.79 kW	5.40 kW
COP Tj = 12°C	5.34	4.33
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	35.23 kW	33.93 kW
COP Tj = Tbiv	3.87	2.75
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	35.23 kW	33.93 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	3.87	2.75
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	19 W	19 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	0.00 kW	0.00 kW
Annual energy consumption Qhe	14996 kWh	18508 kWh