

Subtype DFT series 12 kW

Certificate Holder	Qingdao Smad Electric Appliance Co., Ltd.
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ZIP	266000
City	QINGDAO
Country	CN
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	DFT series 12 kW
Registration number	011-1W0883
Heat Pump Type	Outdoor Air/Water
Refrigerant	R290
Mass of Refrigerant	1.35 kg
Certification Date	04.09.2024
Testing basis	HP KEYMARK certification scheme rules V14

Model DFT-012CCH2E1-M

Model name	DFT-012CCH2E1-M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Reversibility	Yes
Cooling mode application (optional)	+7°C/12°C, +18°C/+23°C
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

	Low temperature	Medium temperature
Heat output	12.00 kW	12.00 kW
El input	2.45 kW	3.64 kW
COP	4.90	3.30

EN 14511-2 | Cooling

	+7°C/+12°C	+18°C/+23°C
El input	4.07 kW	2.78 kW
Cooling capacity	11.40	11.40
EER	2.80	4.10

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	68 dB(A)	68 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	193 %	151 %
Prated	12.00 kW	12.00 kW
SCOP	4.90	3.85
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C

Pdh Tj = -7°C	10.87 kW	10.90 kW
COP Tj = -7°C	3.15	2.42
Cdh Tj = -7 °C	0.900	0.900
Pdh Tj = +2°C	6.78 kW	6.71 kW
COP Tj = +2°C	4.92	3.86
Cdh Tj = +2 °C	0.900	0.900
Pdh Tj = +7°C	4.31 kW	4.45 kW
COP Tj = +7°C	6.80	5.16
Cdh Tj = +7 °C	0.900	0.900
Pdh Tj = 12°C	4.55 kW	4.42 kW
COP Tj = 12°C	8.40	6.80
Cdh Tj = +12 °C	0.900	0.900
Pdh Tj = Tbiv	12.08 kW	12.38 kW
COP Tj = Tbiv	2.76	2.12
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	12.08 kW	12.38 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	2.76	2.12
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.900	0.900
WTOL	75 °C	75 °C
Poff	10 W	10 W
PTO	40 W	40 W
PSB	10 W	10 W
PCK	18 W	18 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	4931 kWh	6499 kWh

EN 14825 | Cooling

	+7°C/+12°C	+18°C/+23°C
Pdesignc	11.40 kW	11.40 kW
SEER	4.50	6.20
Pdc Tj = 35°C	11.51 kW	11.48 kW
EER Tj = 35°C	2.82	4.18
Cdc Tj = 35 °C	0.900	0.900
Pdc Tj = 30°C	8.84 kW	8.81 kW
EER Tj = 30°C	3.95	6.06
Cdc Tj = 30 °C	0.900	0.900
Pdc Tj = 25°C	5.87 kW	5.74 kW
EER Tj = 25°C	5.42	7.96
Cdc Tj = 25 °C	0.900	0.900
Pdc Tj = 20°C	4.24 kW	5.18 kW
EER Tj = 20°C	8.02	10.59
Cdc Tj = 20 °C	0.900	0.900
Poff	10 W	10 W

PTO	40 W	40 W
PSB	10 W	10 W
PCK	0 W	0 W
Annual energy consumption Qce	1528 kWh	1109 kWh