

Subtype TTF 27

Certificate Holder	tecalor GmbH
Address	Lütztringer Weg 3
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	TTF 27
Registration number	011-1W0280
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	7.2 kg

Model TTF 27

Model name	TTF 27
Application	Heating (medium temp)
Units	Indoor, Outdoor
Climate zone (for heating)	Warmer Climate, Colder Climate
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

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	29.69 kW	26.69 kW
EI input	6.12 kW	9.57 kW
COP	4.85	2.79

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	55 dB(A)	55 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	203 %	132 %
Prated	30.00 kW	27.00 kW
SCOP	5.28	3.50
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	29.80 kW	27.00 kW
COP Tj = -7°C	4.92	2.92
Pdh Tj = +2°C	30.10 kW	28.00 kW
COP Tj = +2°C	5.31	3.49
Pdh Tj = +7°C	30.40 kW	28.70 kW
COP Tj = +7°C	5.71	3.93
Pdh Tj = 12°C	30.70 kW	29.30 kW
COP Tj = 12°C	6.16	4.47
Pdh Tj = Tbiv	29.70 kW	26.70 kW

COP Tj = Tbiv	4.85	2.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.70 kW	26.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	11619 kWh	15758 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	55 dB(A)	55 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	213 %	139 %
Prated	37.00 kW	34.00 kW
SCOP	5.53	3.68
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	30.20 kW	28.00 kW
COP Tj = -7°C	5.51	3.47
Pdh Tj = +2°C	30.50 kW	28.70 kW
COP Tj = +2°C	5.83	3.92
Pdh Tj = +7°C	30.60 kW	29.20 kW
COP Tj = +7°C	6.09	4.36
Pdh Tj = 12°C	30.70 kW	29.60 kW
COP Tj = 12°C	6.13	4.73
Pdh Tj = Tbiv	30.10 kW	27.60 kW
COP Tj = Tbiv	5.38	3.23
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.70 kW	26.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	0 W	0 W

PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	7.26 kW	7.13 kW
Annual energy consumption Qhe	1646 kWh	22680 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	55 dB(A)	55 dB(A)
Sound power level outdoor	60 dB(A)	60 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	201 %	131 %
Prated	30.00 kW	27.00 kW
SCOP	5.23	3.48
Tbiv	2 °C	2 °C
TOL	2 °C	2 °C
Pdh Tj = +2°C	29.70 kW	26.70 kW
COP Tj = +2°C	4.85	2.79
Pdh Tj = +7°C	30.00 kW	27.60 kW
COP Tj = +7°C	5.22	3.22
Pdh Tj = 12°C	30.50 kW	28.90 kW
COP Tj = 12°C	5.85	4.10
Pdh Tj = Tbiv	29.70 kW	26.70 kW
COP Tj = Tbiv	4.85	2.79
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	29.70 kW	26.70 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.85	2.79
Cdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	0.90	0.90
WTOL	60 °C	60 °C
Poff	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	74 W	74 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	7587 kWh	10292 kWh