

Subtype TTF 66

Certificate Holder	tecalor GmbH
Address	Fürstenbergerstr. 77
ZIP	37603
City	Holzminden
Country	DE
Certification Body	DIN CERTCO Gesellschaft für Konformitätsbewertung mbH
Subtype title	TTF 66
Registration number	011-1W0282
Heat Pump Type	Brine/Water
Refrigerant	R410A
Mass of Refrigerant	14.5 kg

Model TTF 66

Model name	TTF 66
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	67.10 kW	62.30 kW
El input	14.23 kW	21.60 kW
COP	4.56	2.82

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level indoor	59 dB(A)	59 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	190 %	131 %
Prated	67.00 kW	62.00 kW
SCOP	4.95	3.48
Tbiv	-10 °C	-10 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	67.20 kW	62.80 kW
COP Tj = -7°C	4.62	2.94
Pdh Tj = +2°C	67.20 kW	62.80 kW
COP Tj = +2°C	4.93	3.44
Pdh Tj = +7°C	68.20 kW	65.50 kW
COP Tj = +7°C	5.25	3.82
Pdh Tj = 12°C	68.70 kW	66.50 kW
COP Tj = 12°C	5.61	4.28
Pdh Tj = Tbiv	67.10 kW	62.30 kW

COP Tj = Tbiv	4.56	2.82
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	67.10 kW	62.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	2.82
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	99 W	99 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Qhe	28022 kWh	37120 kWh

EN 12102-1 | Colder Climate

	Low temperature	Medium temperature
Sound power level indoor	59 dB(A)	59 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Colder Climate

	Low temperature	Medium temperature
η_s	197 %	136 %
Prated	83.00 kW	78.00 kW
SCOP	5.13	3.60
Tbiv	-15 °C	-15 °C
TOL	-22 °C	-22 °C
Pdh Tj = -7°C	68.00 kW	64.40 kW
COP Tj = -7°C	5.09	3.42
Pdh Tj = +2°C	68.30 kW	65.50 kW
COP Tj = +2°C	5.34	3.81
Pdh Tj = +7°C	68.60 kW	66.30 kW
COP Tj = +7°C	5.55	4.18
Pdh Tj = 12°C	68.70 kW	67.00 kW
COP Tj = 12°C	5.58	4.49
Pdh Tj = Tbiv	67.80 kW	63.70 kW
COP Tj = Tbiv	4.99	3.21
Pdh Tj = TOL or Pdh Tj = Tdesignh if TOL < Tdesignh	67.10 kW	62.30 kW
COP Tj = TOL or COP Tj = Tdesignh if TOL < Tdesignh	4.56	2.82
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	99 W	99 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	16.03 kW	15.83 kW
Annual energy consumption Q _{he}	39996 kWh	53447 kWh

EN 12102-1 | Warmer Climate

	Low temperature	Medium temperature
Sound power level indoor	59 dB(A)	59 dB(A)
Sound power level outdoor	63 dB(A)	63 dB(A)

EN 14825 | Warmer Climate

	Low temperature	Medium temperature
η_s	190 %	130 %
Prated	67.00 kW	62.00 kW
SCOP	4.95	3.45
T _{biv}	2 °C	2 °C
TOL	2 °C	2 °C
P _{d,h} T _j = +2°C	67.10 kW	62.30 kW
COP T _j = +2°C	4.56	2.82
P _{d,h} T _j = +7°C	67.60 kW	63.70 kW
COP T _j = +7°C	4.86	3.20
P _{d,h} T _j = 12°C	68.40 kW	65.90 kW
COP T _j = 12°C	5.37	3.96
P _{d,h} T _j = T _{biv}	67.10 kW	62.30 kW
COP T _j = T _{biv}	4.56	2.82
P _{d,h} T _j = TOL or P _{d,h} T _j = T _{designh} if TOL < T _{designh}	67.10 kW	62.30 kW
COP T _j = TOL or COP T _j = T _{designh} if TOL < T _{designh}	4.56	2.82
C _{d,h} T _j = TOL or P _{d,h} T _j = T _{designh} if TOL < T _{designh}	0.90	0.90
WTOL	60 °C	60 °C
P _{off}	0 W	0 W
PTO	7 W	7 W
PSB	7 W	7 W
PCK	99 W	99 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	0.00 kW	0.00 kW
Annual energy consumption Q _{he}	18119 kWh	24059 kWh