

Subtype CTC CombiAir 16M

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC CombiAir 16M
Registration number	012-C700078
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	4 kg
Certification Date	30.10.2020
Testing basis	EN 14511:2013, EN 14825:2013, EN12102:2013

Model CTC CombiAir 16M

Model name	CTC CombiAir 16M
Application	Heating (medium temp)
Units	Outdoor
Climate zone (for heating)	n/a
Cooling mode application (optional)	n/a
Any additional heat sources	n/a

General data

Power supply	1x230V 50Hz
Off-peak product	No

Outdoor Air/Water

EN 14511-4 | Heating

Shutting off the heat transfer medium flow	passed
Complete power supply failure	passed
Defrost test	passed

EN 14511-2 | Heating

	Low temperature	Medium temperature
Heat output	7.03 kW	6.38 kW
El input	1.45 kW	2.04 kW
COP	4.85	3.13

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	61 dB(A)	61 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	176 %	134 %
Prated	14.50 kW	14.00 kW
SCOP	4.47	3.42
Tbiv	-8 °C	-8 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	12.90 kW	12.50 kW
COP Tj = -7°C	2.96	2.01
Pdh Tj = +2°C	7.90 kW	7.60 kW
COP Tj = +2°C	4.37	3.29
Pdh Tj = +7°C	5.10 kW	4.90 kW
COP Tj = +7°C	5.58	4.68
Pdh Tj = 12°C	6.40 kW	6.80 kW
COP Tj = 12°C	6.99	6.51
Pdh Tj = Tbiv	13.40 kW	12.70 kW

COP $T_j = T_{biv}$	2.86	1.95
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	12.50 kW	11.00 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.71	1.95
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.97	0.98
WTOL	58 °C	58 °C
P _{off}	2 W	2 W
PTO	25 W	16 W
PSB	15 W	15 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	2.00 kW	3.00 kW
Annual energy consumption Q _{he}	6702 kWh	8431 kWh