

Subtype CTC CombiAir 8M

Certificate Holder	CTC AB
Address	Box 309, Näsvägen
ZIP	SE-341 26
City	Ljungby
Country	SE
Certification Body	RISE CERT
Subtype title	CTC CombiAir 8M
Registration number	012-C700076
Heat Pump Type	Outdoor Air/Water
Refrigerant	R410A
Mass of Refrigerant	2.6 kg
Certification Date	30.10.2020
Testing basis	EN 14511:2013, EN 14825:2013, EN12102:2013
Testing laboratory	Austrian Institute of Technology (AIT)

Model CTC CombiAir 8M

Model name	CTC CombiAir 8M
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	3.86 kW	3.50 kW
El input	0.83 kW	1.17 kW
COP	4.65	2.99

EN 12102-1 | Average Climate

	Low temperature	Medium temperature
Sound power level outdoor	54 dB(A)	54 dB(A)

EN 14825 | Average Climate

	Low temperature	Medium temperature
η_s	172 %	127 %
Prated	8.20 kW	7.00 kW
SCOP	4.37	3.25
Tbiv	-8 °C	-9 °C
TOL	-10 °C	-10 °C
Pdh Tj = -7°C	7.40 kW	6.30 kW
COP Tj = -7°C	2.92	1.94
Pdh Tj = +2°C	4.50 kW	3.90 kW
COP Tj = +2°C	4.30	3.11
Pdh Tj = +7°C	2.90 kW	2.60 kW
COP Tj = +7°C	5.41	4.42
Pdh Tj = 12°C	3.50 kW	3.70 kW
COP Tj = 12°C	6.51	5.93
Pdh Tj = Tbiv	7.40 kW	6.60 kW

COP $T_j = T_{biv}$	2.86	1.83
$P_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	6.80 kW	5.90 kW
COP $T_j = TOL$ or COP $T_j = T_{designh}$ if $TOL < T_{designh}$	2.67	1.86
$C_{dh} T_j = TOL$ or $P_{dh} T_j = T_{designh}$ if $TOL < T_{designh}$	0.96	0.97
WTOL	58 °C	58 °C
P _{off}	2 W	2 W
PTO	15 W	10 W
PSB	15 W	15 W
PCK	20 W	20 W
Supplementary Heater: Type of energy input	Electricity	Electricity
Supplementary Heater: PSUP	1.40 kW	1.10 kW
Annual energy consumption Q _{he}	3882 kWh	4447 kWh