

Type: Condensing units with air cooled condenser and hermetic scroll compressor

Producer: Copeland

Series: MC HAT

Model: MC-M9-ZB45KE-TFD

Condensing unit technical data

Compressor:	ZB45KCE-TFD
Liquid receiver capacity [dm ³]:	7,5
Weight [kg]:	113
Housing Type:	M

Condenser technical data

Model:	M9
Air flow [m ³ /s]:	1,24
Fan type:	611
Fan count:	1
Fan power [W]:	570
Power supply [V/f/Hz]:	420V/3/50Hz

Connections

	<u>milimeters</u>	<u>inches</u>
Suction line:		7/8"
Liquid line:		1/2"


R134a

Cooling capacity [kW]

$t_a \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5
27	4.15	5.25	6.70	8.25	9.95	11.80	12.65	13.90	-
32	3.85	4.90	6.10	7.75	9.35	11.15	11.95	13.15	14.20
38	-	4.45	5.60	6.95	8.70	10.35	11.10	12.20	13.20
43	-	4.10	5.20	6.45	7.90	9.70	10.35	11.40	12.30

Power input [kW]

$t_a \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5
27	2.59	2.64	2.72	2.82	2.93	3.07	3.13	3.22	-
32	2.87	2.92	2.99	3.10	3.22	3.36	3.42	3.51	3.60
38	-	3.31	3.38	3.47	3.61	3.75	3.81	3.91	3.99
43	-	3.68	3.75	3.84	3.96	4.12	4.18	4.28	4.37

 10K suction superheat

Test conditions: 20°C Suction gas return

t_e - Evaporating temperature [°C]

t_a - Ambient temperature [°C]


R404A/R507

Cooling capacity [kW]

$t_a \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
27	2.72	3.55	5.05	6.20	7.45	8.90	10.45	12.10	13.90	15.80	16.60	17.80
32	2.42	3.15	4.05	5.70	6.85	8.15	9.60	11.10	12.75	14.50	15.20	16.30
38	-	-	3.50	5.10	6.15	7.30	8.55	9.90	11.40	12.95	13.60	-
43	-	-	-	3.85	5.50	6.55	7.65	8.90	-	-	-	-

Power input [kW]

$t_a \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	7	10
27	4.04	4.17	4.36	4.50	4.66	4.82	4.99	5.15	5.40	5.60	5.70	5.80
32	4.46	4.61	4.75	4.97	5.15	5.30	5.50	5.65	5.85	6.10	6.15	6.30
38	-	-	5.35	5.60	5.75	5.95	6.10	6.30	6.50	6.70	6.80	-
43	-	-	-	6.05	6.35	6.50	6.70	6.90	-	-	-	-

 10K suction superheat

Test conditions: 20°C Suction gas return

 t_e - Evaporating temperature [°C]

 t_a - Ambient temperature [°C]

R407C

Cooling capacity [kW]

$t_a \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5
27	5.75	7.25	9.15	11.05	13.10	15.30	16.20	17.60	18.80
32	5.10	6.65	8.30	10.30	12.25	14.35	15.20	16.50	17.70
38	-	5.75	7.40	9.20	11.30	13.25	14.05	15.30	16.30
43	-	-	-	8.40	10.25	12.30	13.10	14.25	15.20

Power input [kW]

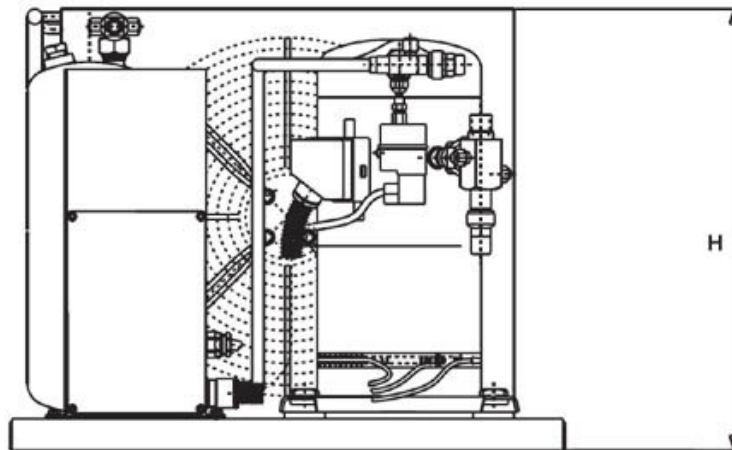
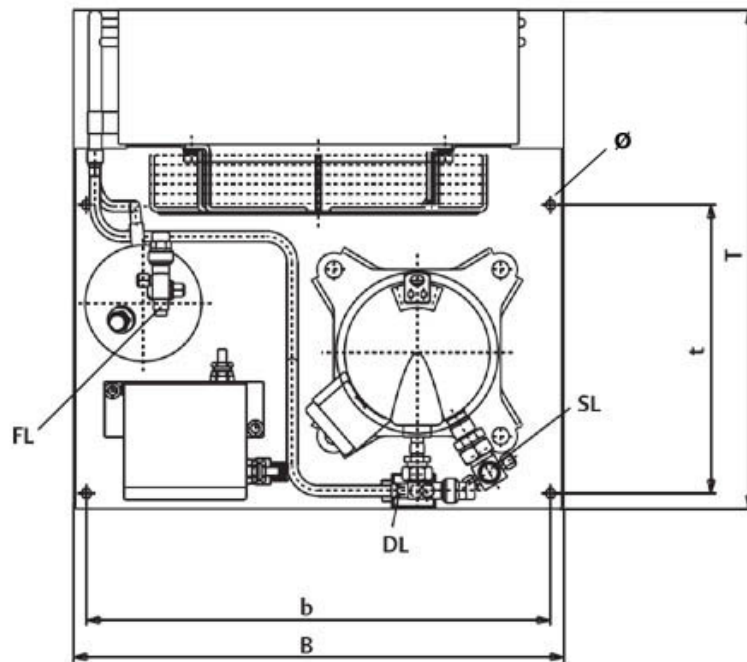
$t_a \setminus t_e$	-20	-15	-10	-5	0	5	7	10	12.5
27	3.68	3.88	4.11	4.33	4.57	4.84	4.96	5.15	5.30
32	4.04	4.28	4.51	4.78	5.05	5.35	5.45	5.65	5.80
38	-	4.79	5.05	5.35	5.70	6.00	6.15	6.35	6.50
43	-	-	-	5.90	6.25	6.60	6.75	7.00	7.20

10K suction superheat

Test conditions: 20°C Suction gas return

t_e - Evaporating temperature [°C]

t_a - Ambient temperature [°C]



T	730 mm
B	735 mm
H	708 mm
t	700 mm
b	390 mm
\varnothing	14 mm

