

**Type: Hermetic piston compressors**

**Producer: Copeland**

**Series: ZB**

## **Model: ZB45KCE-TFD-B**

### **Technical data**

Nominal motor power [HP]:	6
Displacement [m <sup>3</sup> /h]:	17,2
Weight [kg]:	44
Oil charge [dm <sup>3</sup> ]:	1,24

### **Electrical data**

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	74
Max. operating current [A]:	13,1
Winding resistance [ $\Omega$ ]:	2,27

### **Connections**

	<u>millimeters</u>	<u>inches</u>
Suction line:		1 1/4"
Discharge line:		1"

R404A/R507

**Cooling capacity [kW]**

$t_c \setminus t_e$	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>
<b>-20</b>	5.59	-	-	-	-	-	-
<b>-15</b>	5.40	6.84	-	-	-	-	-
<b>-10</b>	5.21	6.60	8.34	-	-	-	-
<b>-5</b>	5.01	6.35	8.03	10.06	-	-	-
<b>0</b>	4.80	6.09	7.70	9.65	11.96	-	-
<b>5</b>	4.58	5.83	7.37	9.23	11.43	14.00	-
<b>10</b>	4.35	5.55	7.02	8.79	10.89	13.34	16.17

**Power input [kW]**

$t_c \setminus t_e$	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>
<b>-20</b>	0.90	-	-	-	-	-	-
<b>-15</b>	1.05	1.04	-	-	-	-	-
<b>-10</b>	1.23	1.21	1.20	-	-	-	-
<b>-5</b>	1.42	1.41	1.39	1.38	-	-	-
<b>0</b>	1.62	1.62	1.61	1.59	1.58	-	-
<b>5</b>	1.85	1.85	1.84	1.83	1.82	1.80	-
<b>10</b>	2.10	2.11	2.10	2.09	2.08	2.06	2.04

**Current [A]**

$t_c \setminus t_e$	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>
<b>-20</b>	5.40	-	-	-	-	-	-
<b>-15</b>	5.63	5.54	-	-	-	-	-
<b>-10</b>	5.83	5.76	5.70	-	-	-	-
<b>-5</b>	5.99	5.94	5.90	5.86	-	-	-
<b>0</b>	6.15	6.12	6.09	6.06	6.04	-	-
<b>5</b>	6.31	6.29	6.28	6.26	6.25	6.24	-
<b>10</b>	6.49	6.48	6.48	6.48	6.47	6.47	6.47

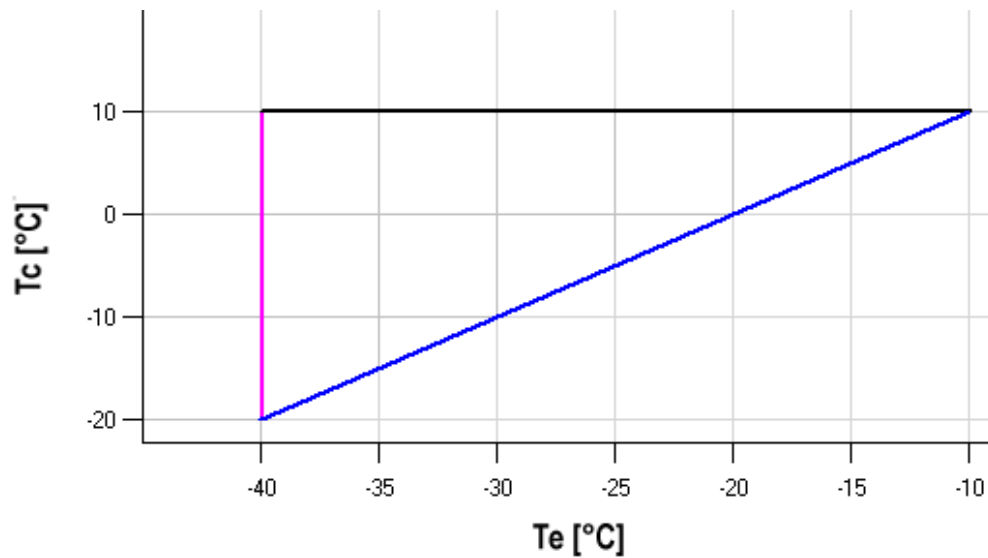
**Mass flow [kg/s]**

$t_c \setminus t_e$	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>
<b>-20</b>	91.46	-	-	-	-	-	-
<b>-15</b>	91.15	115.71	-	-	-	-	-
<b>-10</b>	90.71	115.30	146.04	-	-	-	-
<b>-5</b>	90.13	114.73	145.36	182.78	-	-	-
<b>0</b>	89.42	114.01	144.50	181.65	226.23	-	-
<b>5</b>	88.56	113.13	143.45	180.31	224.48	276.71	-
<b>10</b>	87.56	112.07	142.22	178.77	222.49	274.16	334.53

**C.O.P. [W/W]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10
-20	6.23	-	-	-	-	-	-
-15	5.12	6.57	-	-	-	-	-
-10	4.25	5.43	6.94	-	-	-	-
-5	3.54	4.52	5.76	7.29	-	-	-
0	2.95	3.77	4.79	6.05	7.58	-	-
5	2.47	3.15	4.00	5.04	6.29	7.79	-
10	2.07	2.64	3.34	4.20	5.24	6.47	7.92

**Application range**

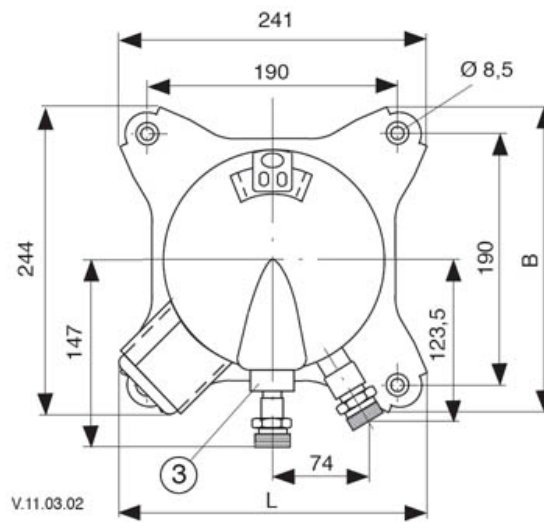
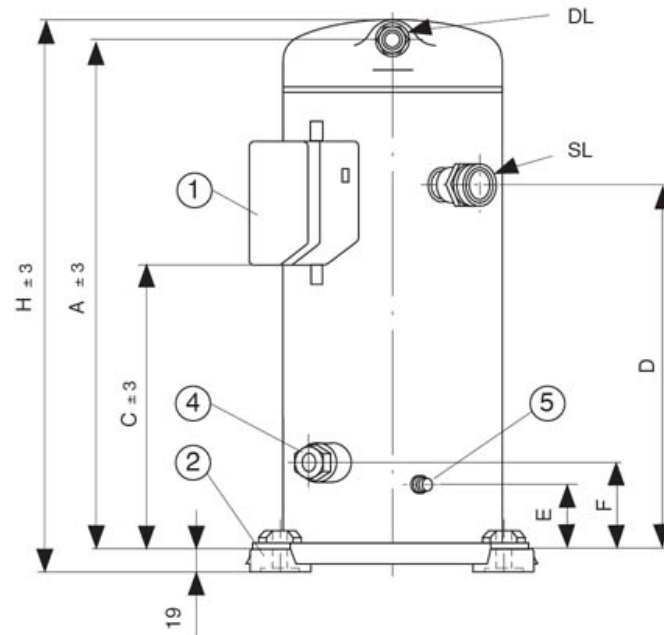


- Maximum evaporating temperature
- 25°C suction gas temperature

Operating conditions: suction gas temperature 20°C, 0K subcooling

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



A	409,8 mm
C	233,4 mm
C1	- mm
D	296,9 mm
E	47,5 mm
F	81,3 mm
G	- mm

