

**Type: Hermetic scroll compressors - digital**

**Producer: Copeland**

**Series: ZBD**

## **Model: ZBD58KCE-TFD**

### **Technical data**

Displacement [m <sup>3</sup> /h]:	22,1
Sound power [dBA]:	76
Sound pressure level [dB]:	65
Net Weight [kg]:	60
Oil charge [dm <sup>3</sup> ]:	2,5
Maximum high pressure [bar]:	32
Maximum standstill pressure [bar]:	22,6

### **Electrical data**

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	95
Max. operating current [A]:	16,4

### **Connections**

	<u>inches</u>
Suction Rotolock valve connection:	1 3/4"
Discharge Rotolock valve connection:	1 1/4"

**R404A/R507**
**Cooling capacity [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>25</b>	7.44	9.53	11.89	14.59	17.69	21.28	25.41	30.15	-
<b>30</b>	6.76	8.86	11.17	13.78	16.73	20.12	23.99	28.42	33.48
<b>35</b>	6.00	8.12	10.40	12.91	15.72	18.91	22.53	26.66	31.36
<b>40</b>	5.14	7.28	9.53	11.96	14.64	17.63	21.01	24.84	29.20
<b>45</b>	-	6.33	8.56	10.91	13.46	16.26	19.41	22.95	26.96
<b>50</b>	-	-	7.46	9.74	12.16	14.79	17.70	20.96	24.63
<b>55</b>	-	-	6.21	8.42	10.73	13.19	15.87	18.86	22.20
<b>60</b>	-	-	-	6.95	9.14	11.44	13.90	16.61	19.63

**Power input [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>25</b>	4.00	4.00	4.05	4.13	4.22	4.29	4.31	4.26	-
<b>30</b>	4.53	4.48	4.50	4.57	4.65	4.72	4.76	4.74	4.63
<b>35</b>	5.14	5.05	5.03	5.07	5.14	5.20	5.25	5.25	5.17
<b>40</b>	5.88	5.72	5.66	5.66	5.70	5.76	5.80	5.81	5.75
<b>45</b>	-	6.51	6.39	6.35	6.36	6.39	6.43	6.43	6.39
<b>50</b>	-	-	7.25	7.16	7.12	7.13	7.14	7.14	7.10
<b>55</b>	-	-	8.25	8.10	8.01	7.97	7.96	7.94	7.90
<b>60</b>	-	-	-	9.18	9.03	8.95	8.90	8.85	8.79

**Current [A]**

$t_c \setminus t_e$	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>25</b>	9.78	9.75	9.81	9.91	10.02	10.10	10.14	10.10	-
<b>30</b>	10.26	10.19	10.22	10.30	10.40	10.50	10.56	10.55	10.44
<b>35</b>	10.88	10.76	10.74	10.79	10.88	10.98	11.05	11.06	10.99
<b>40</b>	11.67	11.48	11.41	11.42	11.48	11.56	11.63	11.66	11.61
<b>45</b>	-	12.38	12.24	12.20	12.22	12.27	12.33	12.36	12.32
<b>50</b>	-	-	13.26	13.15	13.13	13.14	13.17	13.19	13.16
<b>55</b>	-	-	14.50	14.31	14.22	14.19	14.18	14.18	14.13
<b>60</b>	-	-	-	15.70	15.53	15.43	15.38	15.34	15.27

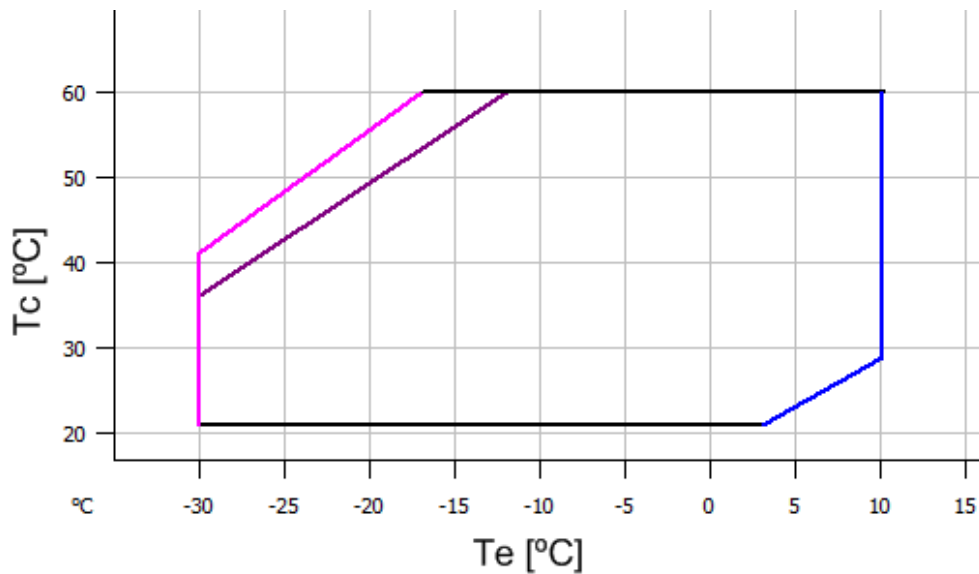
**Mass flow [kg/h]**

$t_c \setminus t_e$	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>
<b>25</b>	170.62	222.34	279.07	343.76	419.31	508.65	614.71	740.40	-
<b>30</b>	164.21	218.02	276.25	341.82	417.65	506.67	611.79	735.95	882.06
<b>35</b>	154.72	211.15	271.39	338.36	414.99	504.19	608.90	732.03	876.51
<b>40</b>	141.47	201.02	263.79	332.68	410.62	500.53	605.34	727.96	871.33
<b>45</b>	-	186.96	252.77	324.09	403.86	494.99	600.41	723.05	865.81
<b>50</b>	-	-	237.63	311.90	394.01	486.89	593.44	716.60	859.28
<b>55</b>	-	-	217.68	295.43	380.40	475.52	583.72	707.92	851.04
<b>60</b>	-	-	-	273.97	362.31	460.21	570.57	696.33	840.40


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

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>25</b>	1.86	2.38	2.94	3.53	4.19	4.96	5.90	7.08	-
<b>30</b>	1.49	1.98	2.48	3.02	3.60	4.26	5.04	6.00	7.23
<b>35</b>	1.17	1.61	2.07	2.55	3.06	3.63	4.29	5.08	6.07
<b>40</b>	0.88	1.27	1.68	2.11	2.57	3.06	3.62	4.28	5.08
<b>45</b>	-	0.97	1.34	1.72	2.12	2.54	3.02	3.57	4.22
<b>50</b>	-	-	1.03	1.36	1.71	2.08	2.48	2.94	3.47
<b>55</b>	-	-	0.75	1.04	1.34	1.65	1.99	2.37	2.81
<b>60</b>	-	-	-	0.76	1.01	1.28	1.56	1.88	2.23

**Application range**



 Maximum evaporating temperature

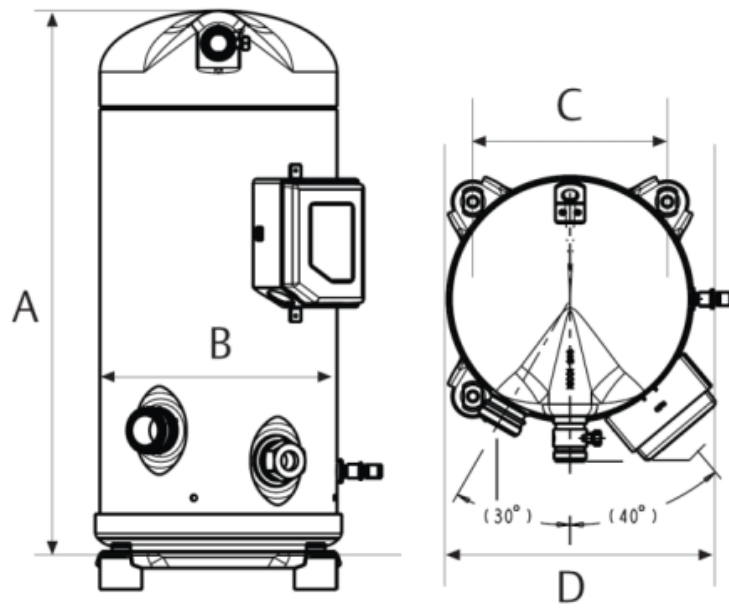
 20°C suction gas temperature

10K gas overheat

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



A	476 mm
B	232 mm
C	190 mm
D	263 mm

