

**Type: Hermetic scroll compressors**

**Producer: Copeland**

**Series: ZB**

## Model: ZB26KCE-TFD

### Technical data

Displacement [m <sup>3</sup> /h]:	9,9
Sound power [dBA]:	69
Sound pressure level [dB]:	58
Net Weight [kg]:	28
Gross Weight [kg]:	31
Oil charge [dm <sup>3</sup> ]:	1,5
Maximum high pressure [bar]:	28,8
Maximum standstill pressure [bar]:	21
Minimal lowside temperature [°C]:	-35
Maximum lowside temperature [°C]:	50
PED category:	1

### Electrical data

Power supply [V/~/Hz]:	380-420V/3/50Hz
Locked rotor current [A]:	46
Max. operating current [A]:	8,9
Winding resistance [Ω]:	4,0

### Connections

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

R134a

**Cooling capacity [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>
<b>30</b>	2.33	3.04	3.86	4.81	5.90	7.13	8.50	-
<b>35</b>	2.13	2.81	3.61	4.53	5.59	6.79	8.13	-
<b>40</b>	1.95	2.60	3.37	4.27	5.29	6.46	7.76	9.21
<b>45</b>	-	2.42	3.15	4.01	5.00	6.11	7.37	8.78
<b>50</b>	-	2.24	2.94	3.75	4.69	5.76	6.97	8.32
<b>55</b>	-	-	2.72	3.49	4.38	5.40	6.55	7.84
<b>60</b>	-	-	-	3.22	4.05	5.01	6.10	7.33
<b>65</b>	-	-	-	2.93	3.70	4.60	5.62	6.78
<b>70</b>	-	-	-	-	3.33	4.15	5.10	6.18
<b>75</b>	-	-	-	-	2.93	3.67	4.55	5.55

**Power input [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>	<b>10</b>	<b>15</b>
<b>30</b>	1.20	1.17	1.15	1.15	1.14	1.14	1.12	-
<b>35</b>	1.40	1.36	1.34	1.33	1.32	1.32	1.31	-
<b>40</b>	1.61	1.56	1.53	1.51	1.50	1.50	1.49	1.48
<b>45</b>	-	1.77	1.73	1.71	1.69	1.69	1.68	1.67
<b>50</b>	-	2.01	1.95	1.92	1.90	1.89	1.89	1.88
<b>55</b>	-	-	2.21	2.16	2.13	2.12	2.11	2.11
<b>60</b>	-	-	-	2.44	2.40	2.38	2.37	2.37
<b>65</b>	-	-	-	2.76	2.71	2.68	2.67	2.66
<b>70</b>	-	-	-	-	3.07	3.03	3.01	3.00
<b>75</b>	-	-	-	-	3.48	3.44	3.41	3.39

**Current [A]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>30</b>	3.19	3.15	3.10	3.05	3.01	2.98	2.99	-
<b>35</b>	3.44	3.41	3.35	3.30	3.24	3.19	3.16	-
<b>40</b>	3.66	3.63	3.59	3.53	3.46	3.39	3.34	3.30
<b>45</b>	-	3.85	3.81	3.75	3.68	3.61	3.53	3.47
<b>50</b>	-	4.06	4.04	4.00	3.93	3.85	3.76	3.68
<b>55</b>	-	-	4.30	4.27	4.21	4.13	4.04	3.94
<b>60</b>	-	-	-	4.59	4.55	4.47	4.38	4.28
<b>65</b>	-	-	-	4.98	4.96	4.90	4.81	4.71
<b>70</b>	-	-	-	-	5.45	5.41	5.34	5.24
<b>75</b>	-	-	-	-	6.06	6.04	5.99	5.90

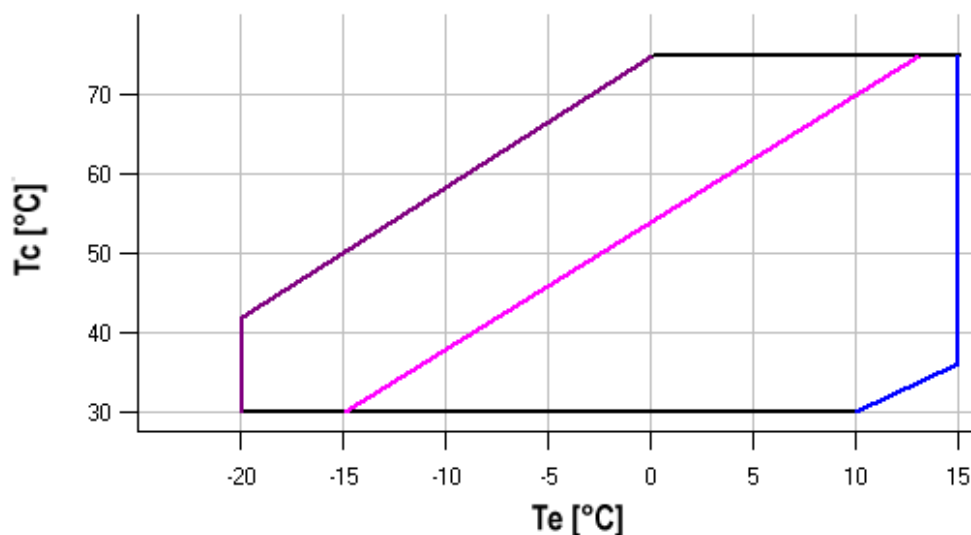
**Mass flow [kg/h]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>30</b>	46.82	61.64	78.86	98.82	121.86	148.35	178.61	-
<b>35</b>	45.01	59.77	77.05	97.20	120.57	147.49	178.33	-
<b>40</b>	43.55	58.22	75.53	95.85	119.50	146.84	178.22	213.99
<b>45</b>	-	56.79	74.11	94.54	118.45	146.18	178.07	214.47
<b>50</b>	-	55.27	72.55	93.08	117.21	145.29	177.65	214.66
<b>55</b>	-	-	70.66	91.25	115.58	143.97	176.78	214.35
<b>60</b>	-	-	-	88.85	113.32	142.00	175.22	213.34
<b>65</b>	-	-	-	85.65	110.25	139.18	172.78	211.40
<b>70</b>	-	-	-	-	106.14	135.29	169.24	208.33
<b>75</b>	-	-	-	-	100.79	130.12	164.38	203.92

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

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>30</b>	1.95	2.59	3.34	4.20	5.17	6.27	7.57	-
<b>35</b>	1.52	2.06	2.69	3.42	4.23	5.16	6.22	-
<b>40</b>	1.21	1.67	2.21	2.83	3.52	4.31	5.20	6.22
<b>45</b>	-	1.36	1.82	2.35	2.95	3.63	4.38	5.24
<b>50</b>	-	1.12	1.50	1.96	2.47	3.05	3.70	4.42
<b>55</b>	-	-	1.24	1.62	2.05	2.55	3.10	3.72
<b>60</b>	-	-	-	1.32	1.69	2.11	2.57	3.10
<b>65</b>	-	-	-	1.06	1.37	1.72	2.11	2.55
<b>70</b>	-	-	-	-	1.09	1.37	1.70	2.06
<b>75</b>	-	-	-	-	0.84	1.07	1.33	1.63

**Application range**



- Maximum evaporating temperature
- 25°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]

R404A/R507

**Cooling capacity [kW]**

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	4.03	5.02	6.19	7.57	-	-	-	-	-
<b>15</b>	3.86	4.79	5.91	7.22	8.75	-	-	-	-
<b>20</b>	3.68	4.56	5.61	6.85	8.30	9.97	-	-	-
<b>25</b>	3.48	4.32	5.31	6.47	7.83	9.41	11.22	-	-
<b>30</b>	3.27	4.06	4.99	6.08	7.36	8.83	10.54	12.49	14.71
<b>35</b>	3.04	3.79	4.66	5.68	6.87	8.24	9.83	11.66	13.74
<b>40</b>	2.80	3.50	4.31	5.26	6.36	7.64	9.12	10.82	12.76
<b>45</b>	2.54	3.20	3.95	4.82	5.84	7.02	8.38	9.96	11.76
<b>50</b>	-	2.87	3.57	4.37	5.30	6.38	7.63	9.08	10.75
<b>55</b>	-	-	3.17	3.90	4.74	5.72	6.87	8.19	9.72
<b>60</b>	-	-	-	3.40	4.16	5.05	6.08	7.28	8.68

**Power input [kW]**

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	1.29	1.29	1.29	1.29	-	-	-	-	-
<b>15</b>	1.45	1.46	1.46	1.45	1.45	-	-	-	-
<b>20</b>	1.64	1.64	1.64	1.64	1.63	1.63	-	-	-
<b>25</b>	1.85	1.85	1.85	1.85	1.84	1.83	1.83	-	-
<b>30</b>	2.08	2.08	2.08	2.08	2.07	2.06	2.05	2.05	2.04
<b>35</b>	2.34	2.34	2.34	2.34	2.33	2.32	2.31	2.30	2.29
<b>40</b>	2.64	2.64	2.63	2.63	2.62	2.61	2.59	2.58	2.56
<b>45</b>	2.96	2.96	2.96	2.95	2.94	2.93	2.91	2.89	2.87
<b>50</b>	-	3.33	3.32	3.31	3.30	3.28	3.26	3.24	3.22
<b>55</b>	-	-	3.73	3.71	3.70	3.68	3.66	3.63	3.61
<b>60</b>	-	-	-	4.16	4.14	4.12	4.09	4.06	4.03

**Current [A]**

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	3.98	3.98	3.98	3.97	-	-	-	-	-
<b>15</b>	4.13	4.13	4.13	4.13	4.13	-	-	-	-
<b>20</b>	4.29	4.30	4.31	4.31	4.31	4.31	-	-	-
<b>25</b>	4.49	4.51	4.52	4.52	4.52	4.52	4.51	-	-
<b>30</b>	4.74	4.76	4.77	4.77	4.77	4.77	4.76	4.75	4.74
<b>35</b>	5.03	5.05	5.07	5.07	5.07	5.07	5.05	5.04	5.02
<b>40</b>	5.39	5.41	5.43	5.43	5.43	5.42	5.40	5.38	5.36
<b>45</b>	5.81	5.84	5.85	5.86	5.86	5.84	5.82	5.79	5.76
<b>50</b>	-	6.34	6.36	6.36	6.35	6.34	6.31	6.27	6.23
<b>55</b>	-	-	6.94	6.95	6.94	6.91	6.88	6.84	6.78
<b>60</b>	-	-	-	7.62	7.61	7.58	7.54	7.49	7.43

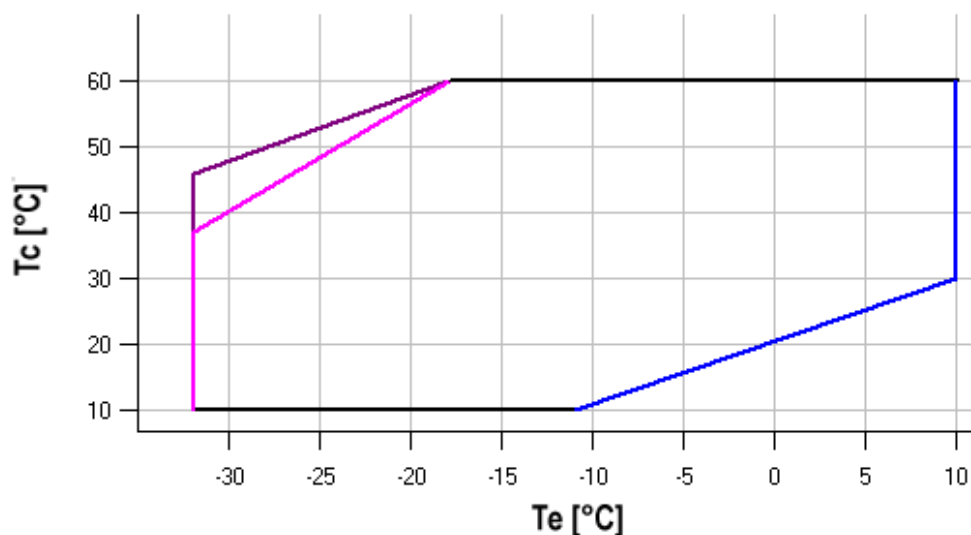
**Mass flow [kg/h]**

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	79.48	101.76	126.96	156.16	-	-	-	-	-
<b>15</b>	80.46	102.12	126.71	155.34	189.09	-	-	-	-
<b>20</b>	80.83	101.93	126.01	154.14	187.43	226.95	-	-	-
<b>25</b>	80.62	101.24	124.86	152.57	185.47	224.64	271.17	-	-
<b>30</b>	79.85	100.05	123.29	150.65	183.23	222.12	268.39	323.15	387.48
<b>35</b>	78.53	98.39	121.32	148.41	180.74	219.41	265.51	320.12	384.33
<b>40</b>	76.68	96.27	118.97	145.85	178.01	216.54	262.53	317.06	381.23
<b>45</b>	74.32	93.72	116.25	143.00	175.07	213.53	259.48	314.00	378.20
<b>50</b>	-	90.76	113.20	139.89	171.92	210.39	256.37	310.97	375.26
<b>55</b>	-	-	109.82	136.52	168.60	207.14	253.24	307.97	372.44
<b>60</b>	-	-	-	132.93	165.12	203.81	250.09	305.03	369.74

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

$t_c \setminus t_e$	-30	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	3.12	3.88	4.79	5.88	-	-	-	-	-
<b>15</b>	2.65	3.29	4.06	4.96	6.03	-	-	-	-
<b>20</b>	2.24	2.78	3.42	4.18	5.08	6.12	-	-	-
<b>25</b>	1.88	2.34	2.87	3.51	4.26	5.13	6.14	-	-
<b>30</b>	1.57	1.95	2.40	2.93	3.55	4.28	5.13	6.11	7.22
<b>35</b>	1.30	1.62	1.99	2.43	2.95	3.55	4.26	5.07	6.01
<b>40</b>	1.06	1.33	1.64	2.00	2.43	2.93	3.51	4.19	4.98
<b>45</b>	0.86	1.08	1.33	1.63	1.98	2.40	2.88	3.44	4.09
<b>50</b>	-	0.86	1.07	1.32	1.61	1.94	2.34	2.80	3.34
<b>55</b>	-	-	0.85	1.05	1.28	1.56	1.88	2.26	2.70
<b>60</b>	-	-	-	0.82	1.01	1.23	1.49	1.79	2.15

**Application range**



- Maximum evaporating temperature
- 25°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]

R407C

**Cooling capacity [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
15	3.48	4.12	5.00	6.13	7.51	9.15	-	-
20	3.27	3.94	4.84	5.97	7.36	8.99	10.87	-
25	3.05	3.73	4.63	5.77	7.14	8.75	10.61	-
30	2.83	3.51	4.41	5.52	6.87	8.45	10.26	12.32
35	2.61	3.28	4.16	5.25	6.56	8.09	9.85	11.85
40	2.41	3.05	3.89	4.94	6.20	7.68	9.38	11.30
45	-	2.82	3.62	4.62	5.82	7.23	8.85	10.68
50	-	-	3.35	4.28	5.41	6.74	8.27	10.01
55	-	-	-	3.94	4.99	6.22	7.65	9.28
60	-	-	-	-	4.55	5.68	6.99	8.50
65	-	-	-	-	-	5.12	6.31	7.68

**Power input [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
15	1.19	1.15	1.12	1.10	1.09	1.09	-	-
20	1.34	1.31	1.29	1.28	1.27	1.26	1.25	-
25	1.51	1.49	1.47	1.46	1.46	1.45	1.43	-
30	1.70	1.68	1.67	1.67	1.66	1.65	1.64	1.61
35	1.91	1.90	1.90	1.90	1.89	1.88	1.86	1.82
40	2.15	2.15	2.15	2.15	2.15	2.14	2.11	2.07
45	-	2.42	2.43	2.44	2.44	2.42	2.39	2.35
50	-	-	2.75	2.76	2.76	2.75	2.71	2.66
55	-	-	-	3.12	3.12	3.11	3.07	3.01
60	-	-	-	-	3.54	3.52	3.48	3.41
65	-	-	-	-	-	3.98	3.94	3.86



**Current [A]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
15	3.53	3.45	3.39	3.36	3.35	3.34	-	-
20	3.61	3.54	3.50	3.48	3.47	3.46	3.44	-
25	3.73	3.67	3.64	3.62	3.62	3.61	3.59	-
30	3.88	3.84	3.82	3.81	3.81	3.80	3.78	3.74
35	4.08	4.05	4.04	4.04	4.04	4.03	4.01	3.96
40	4.34	4.32	4.32	4.33	4.33	4.32	4.29	4.24
45	-	4.65	4.66	4.67	4.67	4.66	4.63	4.56
50	-	-	5.06	5.08	5.08	5.07	5.03	4.95
55	-	-	-	5.56	5.56	5.54	5.50	5.41
60	-	-	-	-	6.12	6.09	6.04	5.94
65	-	-	-	-	-	6.73	6.67	6.56

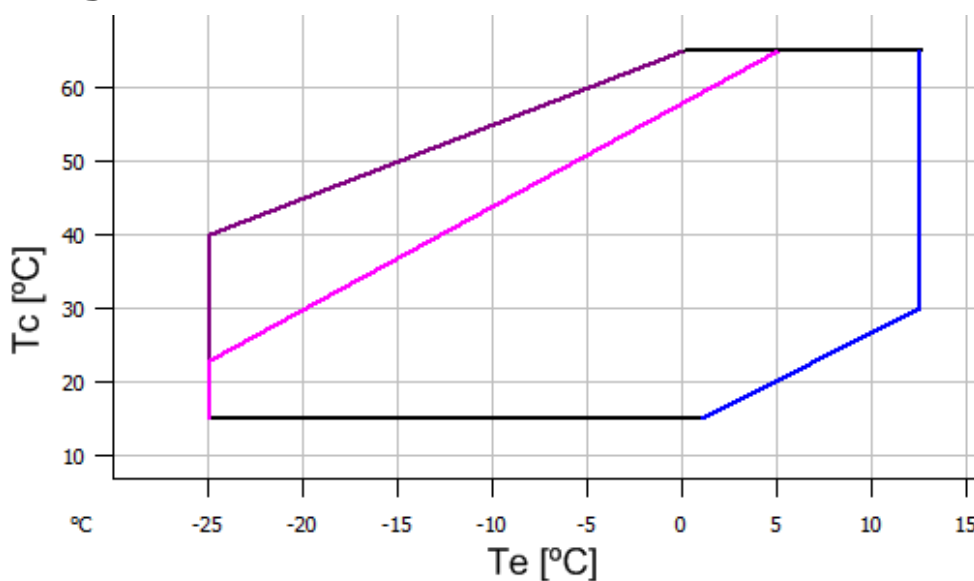
**Mass flow [kg/h]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
15	56.12	67.62	82.78	101.96	125.52	153.83	-	-
20	54.67	66.81	82.69	102.69	127.15	156.46	190.96	-
25	53.17	65.77	82.20	102.83	128.02	158.13	193.53	-
30	51.65	64.53	81.32	102.40	128.13	158.88	195.00	236.86
35	50.14	63.11	80.09	101.45	127.54	158.73	195.39	237.87
40	48.67	61.56	78.54	99.99	126.26	157.72	194.73	237.66
45	-	59.89	76.70	98.05	124.32	155.87	193.06	236.25
50	-	-	74.58	95.67	121.76	153.21	190.40	233.67
55	-	-	-	92.87	118.60	149.78	186.78	229.95
60	-	-	-	-	114.87	145.59	182.22	225.12
65	-	-	-	-	-	140.68	176.76	219.21

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
15	2.93	3.60	4.47	5.56	6.86	8.40	-	-
20	2.43	3.01	3.75	4.68	5.80	7.12	8.68	-
25	2.02	2.51	3.15	3.94	4.90	6.04	7.39	-
30	1.66	2.09	2.63	3.31	4.13	5.11	6.27	7.67
35	1.37	1.73	2.19	2.77	3.47	4.30	5.30	6.50
40	1.12	1.42	1.81	2.30	2.89	3.60	4.44	5.46
45	-	1.16	1.49	1.90	2.39	2.98	3.70	4.55
50	-	-	1.22	1.55	1.96	2.45	3.05	3.76
55	-	-	-	1.26	1.60	2.00	2.49	3.08
60	-	-	-	-	1.29	1.61	2.01	2.49
65	-	-	-	-	-	1.29	1.60	1.99

**Application range**

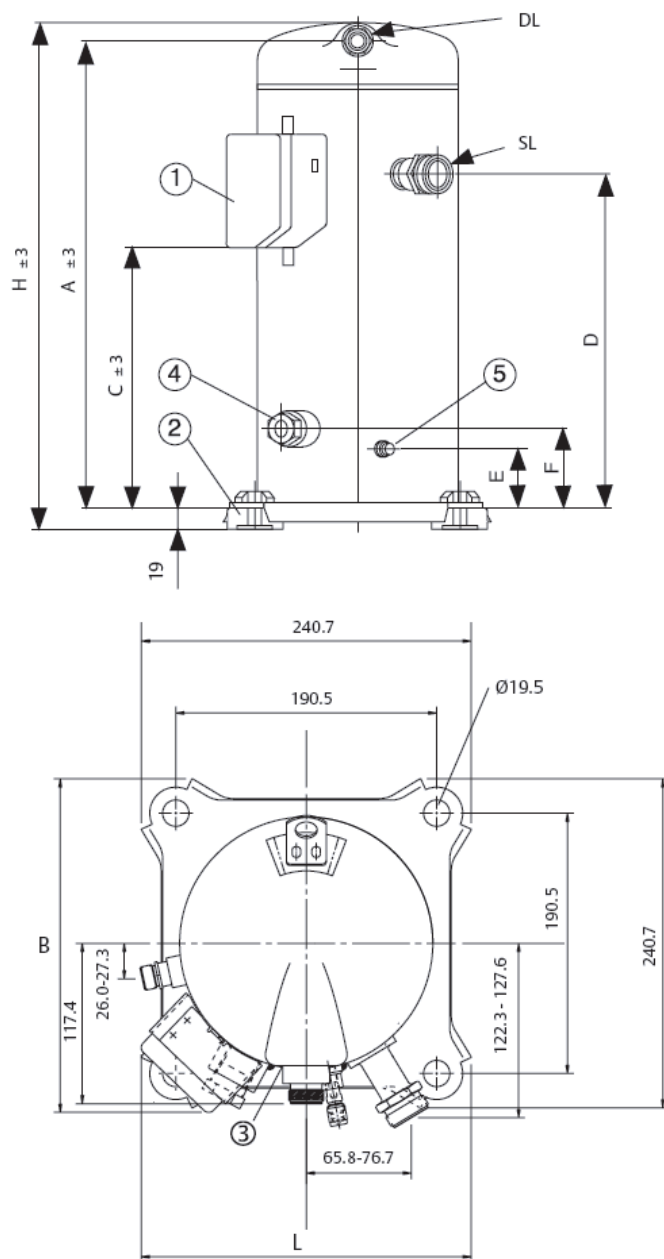


- Maximum evaporating temperature
- 25°C suction gas temperature
- 10K gas overheat

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

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



A	380 mm
B	244 mm
C	235 mm
D	277 mm
E	50 mm
F	75 mm
H	406 mm
L	243 mm

