

**Type: Semi-hermetic piston compressors**

**Producer: Copeland**

**Series: DISCUS**

## **Model: D3DC-100 X**

### **Technical data**

Cylinder count:	3
Displacement [m <sup>3</sup> /h]:	38
Weight [kg]:	175
Oil charge [dm <sup>3</sup> ]:	3,4
Max. operating current [A]:	20,5
Locked rotor current [A]:	121
Power supply [V/~/Hz]:	380-420V/3/50Hz

### **Connections**

	<u>milimeters</u>	<u>inches</u>
Suction line:		1 3/8"
Discharge line:		1 1/8"

R22

**Cooling capacity [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	11.32	14.78	18.79	23.43	28.78	34.91	41.90	49.83
<b>35</b>	10.29	13.63	17.47	21.91	27.02	32.88	39.56	47.15
<b>40</b>	9.30	12.50	16.18	20.41	25.28	30.86	37.22	44.45
<b>45</b>	-	11.41	14.92	18.94	23.56	28.85	34.89	41.77
<b>50</b>	-	10.38	13.70	17.51	21.87	26.87	32.59	39.10
<b>55</b>	-	-	12.55	16.13	20.23	24.94	30.32	36.46
<b>60</b>	-	-	11.47	14.82	18.66	23.06	28.10	33.87

**Power input [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	4.86	5.32	5.72	6.02	6.21	6.27	6.17	5.89
<b>35</b>	5.05	5.59	6.08	6.49	6.80	6.98	7.03	6.90
<b>40</b>	5.24	5.85	6.42	6.93	7.35	7.66	7.84	7.87
<b>45</b>	-	6.09	6.74	7.34	7.87	8.30	8.61	8.79
<b>50</b>	-	6.33	7.06	7.74	8.37	8.92	9.36	9.67
<b>55</b>	-	-	7.37	8.13	8.86	9.51	10.08	10.53
<b>60</b>	-	-	7.67	8.52	9.33	10.09	10.77	11.35

**Current [A]**

$t_c \setminus t_e$	<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>30</b>	10.39	11.06	11.64	12.09	12.38	12.47	12.31	11.89
<b>35</b>	10.67	11.46	12.18	12.79	13.25	13.53	13.60	13.41
<b>40</b>	10.94	11.84	12.68	13.44	14.08	14.56	14.83	14.88
<b>45</b>	-	12.20	13.17	14.08	14.88	15.54	16.02	16.29
<b>50</b>	-	12.56	13.65	14.69	15.65	16.49	17.17	17.66
<b>55</b>	-	-	14.11	15.29	16.40	17.41	18.28	18.99
<b>60</b>	-	-	14.58	15.88	17.14	18.31	19.37	20.28

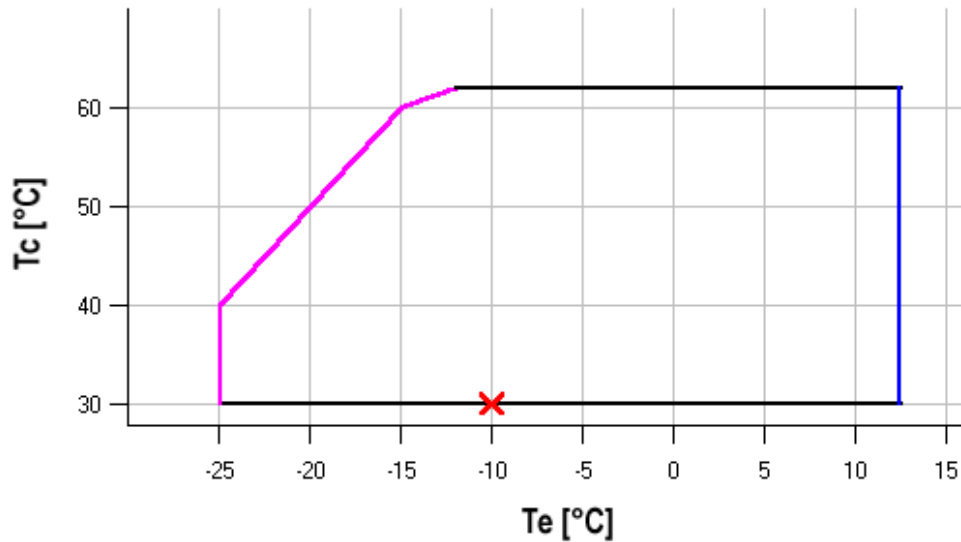
**Mass flow [kg/s]**



$t_c \setminus t_e$	<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>30</b>	246.06	317.53	398.58	490.60	594.96	713.03	846.19	995.81
<b>35</b>	232.97	304.30	385.00	476.44	580.00	697.04	828.94	977.07
<b>40</b>	219.89	290.94	371.14	461.84	564.44	680.29	810.78	957.28
<b>45</b>	-	277.80	357.33	447.16	548.64	663.15	792.08	936.78
<b>50</b>	-	265.22	343.94	432.73	532.94	645.97	773.17	915.94
<b>55</b>	-	-	331.32	418.90	517.70	629.08	754.42	895.09
<b>60</b>	-	-	319.80	406.04	503.27	612.86	736.17	874.59

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	2.33	2.78	3.29	3.89	4.63	5.57	6.79	8.47
<b>35</b>	2.04	2.44	2.87	3.38	3.98	4.71	5.63	6.83
<b>40</b>	1.78	2.14	2.52	2.95	3.44	4.03	4.75	5.65
<b>45</b>	-	1.87	2.21	2.58	2.99	3.48	4.05	4.75
<b>50</b>	-	1.64	1.94	2.26	2.61	3.01	3.48	4.04
<b>55</b>	-	-	1.70	1.98	2.28	2.62	3.01	3.46
<b>60</b>	-	-	1.49	1.74	2.00	2.28	2.61	2.98

**Application range**



 Maximum evaporating temperature  
 25°C suction gas return

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]

R134a

**Cooling capacity [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	6.50	8.86	11.67	15.01	18.95	23.58	28.98	35.22	-	-
<b>45</b>	5.70	7.98	10.67	13.85	17.61	22.02	27.16	33.12	39.97	47.80
<b>50</b>	4.93	7.12	9.69	12.71	16.27	20.46	25.34	31.00	37.53	45.00
<b>55</b>	4.20	6.29	8.73	11.58	14.95	18.89	23.51	28.87	35.07	42.17
<b>60</b>	-	5.50	7.79	10.47	13.63	17.34	21.68	26.73	32.58	39.31
<b>65</b>	-	4.74	6.88	9.38	12.32	15.78	19.84	24.58	30.08	36.43
<b>70</b>	-	-	6.00	8.32	11.03	14.24	18.01	22.42	27.57	33.52
<b>75</b>	-	-	-	7.27	9.76	12.70	16.17	20.25	25.03	30.59
<b>80</b>	-	-	-	6.25	8.50	11.17	14.33	18.08	22.49	27.64

**Power input [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	3.56	3.99	4.39	4.74	5.04	5.25	5.36	5.35	-	-
<b>45</b>	3.61	4.09	4.55	4.98	5.36	5.66	5.87	5.98	5.96	5.79
<b>50</b>	3.66	4.18	4.71	5.21	5.66	6.05	6.36	6.58	6.67	6.63
<b>55</b>	3.69	4.26	4.84	5.41	5.94	6.42	6.83	7.15	7.36	7.44
<b>60</b>	-	4.33	4.96	5.59	6.20	6.76	7.26	7.69	8.01	8.22
<b>65</b>	-	4.38	5.06	5.75	6.43	7.08	7.67	8.19	8.63	8.96
<b>70</b>	-	-	5.14	5.89	6.64	7.36	8.04	8.66	9.21	9.65
<b>75</b>	-	-	-	6.00	6.81	7.61	8.38	9.10	9.75	10.31
<b>80</b>	-	-	-	6.08	6.96	7.83	8.68	9.49	10.24	10.92

**Current [A]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	8.98	9.48	9.97	10.41	10.79	11.06	11.20	11.17	-	-
<b>45</b>	9.08	9.62	10.18	10.71	11.20	11.60	11.88	12.01	11.96	11.70
<b>50</b>	9.15	9.74	10.37	10.99	11.59	12.11	12.54	12.84	12.98	12.92
<b>55</b>	9.20	9.84	10.54	11.25	11.95	12.61	13.18	13.65	13.97	14.12
<b>60</b>	-	9.91	10.68	11.49	12.30	13.08	13.81	14.44	14.95	15.31
<b>65</b>	-	9.96	10.80	11.69	12.62	13.53	14.40	15.21	15.91	16.48
<b>70</b>	-	-	10.88	11.87	12.91	13.95	14.98	15.95	16.84	17.62
<b>75</b>	-	-	-	12.02	13.17	14.35	15.52	16.67	17.75	18.74
<b>80</b>	-	-	-	12.13	13.39	14.71	16.04	17.36	18.63	19.83

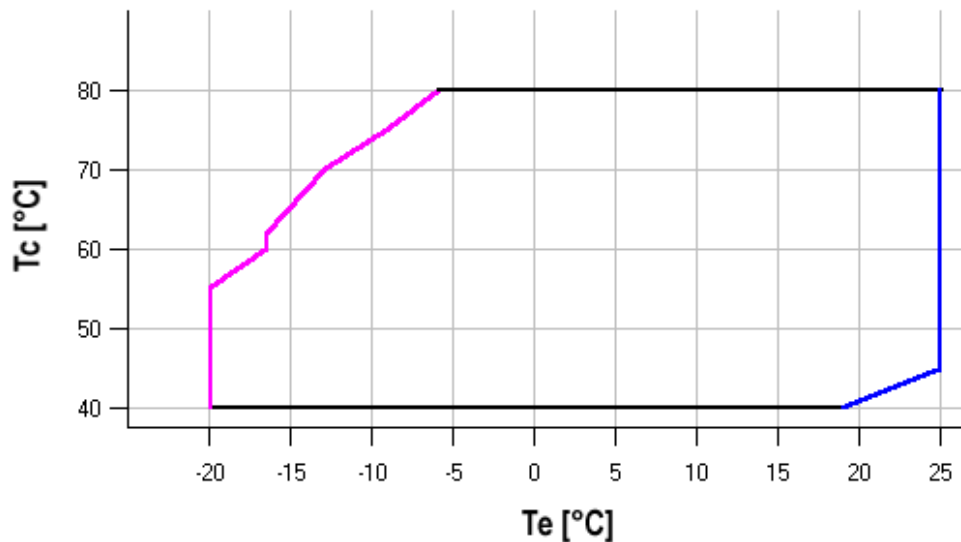
**Mass flow [kg/s]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	168.18	226.55	292.75	368.26	454.55	553.10	665.38	792.88	-	-
<b>45</b>	157.24	216.00	282.52	358.27	444.72	543.36	655.66	783.09	927.12	1089.25
<b>50</b>	145.77	204.87	271.65	347.59	434.16	532.83	645.08	772.40	916.24	1078.09
<b>55</b>	133.95	193.33	260.32	336.39	423.01	521.67	633.83	760.97	904.56	1066.09
<b>60</b>	-	181.55	248.70	324.84	411.47	510.05	622.06	748.97	892.26	1053.41
<b>65</b>	-	169.69	236.94	313.11	399.68	498.13	609.93	736.56	879.50	1040.21
<b>70</b>	-	-	225.21	301.35	387.81	486.08	597.62	723.92	866.44	1026.67
<b>75</b>	-	-	-	289.73	376.03	474.06	585.29	711.19	853.25	1012.94
<b>80</b>	-	-	-	278.42	364.51	462.24	573.10	698.56	840.10	999.18


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

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	1.83	2.22	2.66	3.16	3.76	4.49	5.41	6.58	-	-
<b>45</b>	1.58	1.95	2.34	2.78	3.29	3.89	4.62	5.54	6.71	8.26
<b>50</b>	1.35	1.70	2.06	2.44	2.88	3.38	3.98	4.71	5.62	6.78
<b>55</b>	1.14	1.48	1.80	2.14	2.52	2.94	3.44	4.04	4.77	5.67
<b>60</b>	-	1.27	1.57	1.87	2.20	2.56	2.98	3.48	4.07	4.78
<b>65</b>	-	1.08	1.36	1.63	1.92	2.23	2.59	3.00	3.49	4.07
<b>70</b>	-	-	1.17	1.41	1.66	1.93	2.24	2.59	2.99	3.47
<b>75</b>	-	-	-	1.21	1.43	1.67	1.93	2.23	2.57	2.97
<b>80</b>	-	-	-	1.03	1.22	1.43	1.65	1.91	2.20	2.53

**Application range**



 Maximum evaporating temperature

 20K suction superheat

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]

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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	7.09	9.39	12.20	15.58	19.59	24.29	29.74	36.01	43.15	51.23
<b>25</b>	6.58	8.79	11.47	14.66	18.44	22.86	27.98	33.87	40.58	48.18
<b>30</b>	5.98	8.10	10.63	13.63	17.17	21.29	26.07	31.57	37.85	44.97
<b>35</b>	5.34	7.35	9.73	12.53	15.81	19.63	24.06	29.16	34.99	41.61
<b>40</b>	4.69	6.59	8.80	11.38	14.40	17.92	21.99	26.68	32.05	38.17
<b>45</b>	-	5.84	7.88	10.24	12.99	16.18	19.88	24.16	29.06	34.66
<b>50</b>	-	5.15	7.00	9.13	11.60	14.46	17.79	21.63	26.06	31.13
<b>55</b>	-	-	6.21	8.10	10.27	12.80	15.73	19.14	23.09	27.62

**Power input [kW]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	3.54	4.04	4.50	4.91	5.26	5.51	5.65	5.65	5.51	5.20
<b>25</b>	3.70	4.25	4.78	5.26	5.69	6.04	6.29	6.42	6.41	6.24
<b>30</b>	3.80	4.40	4.99	5.55	6.06	6.50	6.86	7.11	7.22	7.19
<b>35</b>	3.87	4.51	5.15	5.78	6.37	6.91	7.36	7.72	7.97	8.07
<b>40</b>	3.91	4.59	5.29	5.98	6.64	7.26	7.82	8.29	8.65	8.89
<b>45</b>	-	4.66	5.41	6.16	6.89	7.60	8.24	8.82	9.30	9.66
<b>50</b>	-	4.74	5.53	6.33	7.14	7.92	8.65	9.33	9.92	10.41
<b>55</b>	-	-	5.67	6.52	7.39	8.24	9.07	9.84	10.54	11.14



**Current [A]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	9.02	9.61	10.18	10.69	11.11	11.41	11.55	11.49	11.20	10.65
<b>25</b>	9.12	9.76	10.41	11.03	11.57	12.02	12.33	12.47	12.41	12.10
<b>30</b>	9.20	9.89	10.61	11.32	11.99	12.58	13.06	13.40	13.55	13.49
<b>35</b>	9.26	10.00	10.79	11.59	12.38	13.11	13.75	14.28	14.64	14.81
<b>40</b>	9.33	10.10	10.95	11.84	12.74	13.61	14.41	15.11	15.68	16.09
<b>45</b>	-	10.21	11.11	12.09	13.09	14.08	15.04	15.92	16.69	17.32
<b>50</b>	-	10.32	11.28	12.32	13.42	14.54	15.65	16.70	17.67	18.52
<b>55</b>	-	-	11.45	12.57	13.76	15.00	16.25	17.47	18.63	19.69

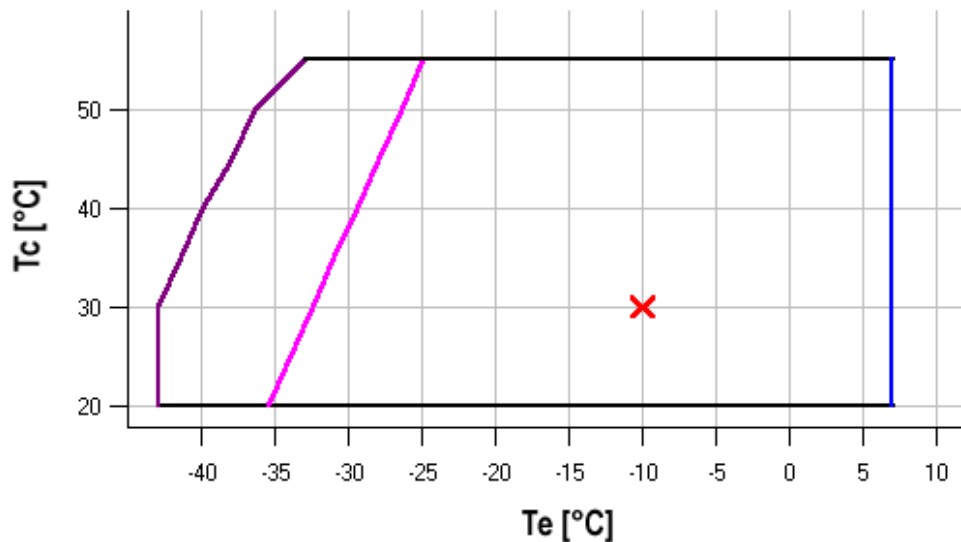
**Mass flow [kg/s]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	152.10	207.40	271.49	347.09	436.95	543.81	670.39	819.45	993.70	1 195.90
<b>25</b>	148.61	203.69	267.34	342.31	431.34	537.17	662.52	810.15	982.78	1 183.15
<b>30</b>	142.69	197.24	260.17	334.21	422.12	526.62	650.45	796.35	967.05	1 165.30
<b>35</b>	135.30	189.03	250.93	323.76	410.24	513.12	635.13	779.01	947.50	1 143.33
<b>40</b>	127.40	180.01	240.60	311.91	396.68	497.64	617.54	759.10	925.08	1 118.19
<b>45</b>	-	171.16	230.14	299.64	382.39	481.15	598.63	737.59	900.75	1 090.86
<b>50</b>	-	163.44	220.51	287.90	368.35	464.60	579.38	715.43	875.49	1 062.30
<b>55</b>	-	-	212.68	277.67	355.52	448.96	560.75	693.60	850.26	1 033.47

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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	2.00	2.33	2.71	3.17	3.73	4.41	5.27	6.37	7.83	9.86
<b>25</b>	1.78	2.07	2.40	2.79	3.24	3.78	4.45	5.27	6.33	7.72
<b>30</b>	1.57	1.84	2.13	2.46	2.83	3.27	3.80	4.44	5.24	6.25
<b>35</b>	1.38	1.63	1.89	2.17	2.48	2.84	3.27	3.78	4.39	5.16
<b>40</b>	1.20	1.43	1.66	1.90	2.17	2.47	2.81	3.22	3.70	4.29
<b>45</b>	-	1.25	1.46	1.66	1.88	2.13	2.41	2.74	3.13	3.59
<b>50</b>	-	1.09	1.27	1.44	1.62	1.83	2.05	2.32	2.63	2.99
<b>55</b>	-	-	1.10	1.24	1.39	1.55	1.74	1.95	2.19	2.48

**Application range**



- Maximum evaporating temperature
- 25°C suction gas return
- 25°C suction gas return + additional cooling

Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R407C

**Cooling capacity [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>35</b>	11.63	15.19	19.56	24.78	30.90	37.96	46.00	-
<b>40</b>	10.56	13.84	17.89	22.76	28.49	35.12	42.70	-
<b>45</b>	9.57	12.57	16.30	20.82	26.17	32.38	39.50	-
<b>50</b>	-	11.37	14.80	18.97	23.93	29.73	36.40	-
<b>55</b>	-	10.24	13.37	17.20	21.79	27.17	33.39	-
<b>60</b>	-	-	12.02	15.51	19.72	24.69	30.47	-

**Power input [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>35</b>	5.08	5.57	6.03	6.42	6.70	6.84	6.80	-
<b>40</b>	5.33	5.88	6.42	6.91	7.32	7.61	7.73	-
<b>45</b>	5.58	6.18	6.79	7.38	7.90	8.32	8.61	-
<b>50</b>	-	6.46	7.14	7.81	8.45	9.00	9.44	-
<b>55</b>	-	6.75	7.48	8.23	8.97	9.64	10.22	-
<b>60</b>	-	-	7.82	8.64	9.46	10.25	10.97	-

**Current [A]**

$t_c \setminus t_e$	<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>35</b>	10.71	11.43	12.11	12.70	13.13	13.34	13.27	-
<b>40</b>	11.08	11.89	12.70	13.44	14.06	14.50	14.69	-
<b>45</b>	11.44	12.33	13.25	14.14	14.94	15.59	16.03	-
<b>50</b>	-	12.77	13.79	14.82	15.78	16.63	17.31	-
<b>55</b>	-	13.20	14.31	15.46	16.58	17.62	18.52	-
<b>60</b>	-	-	14.82	16.08	17.35	18.57	19.68	-

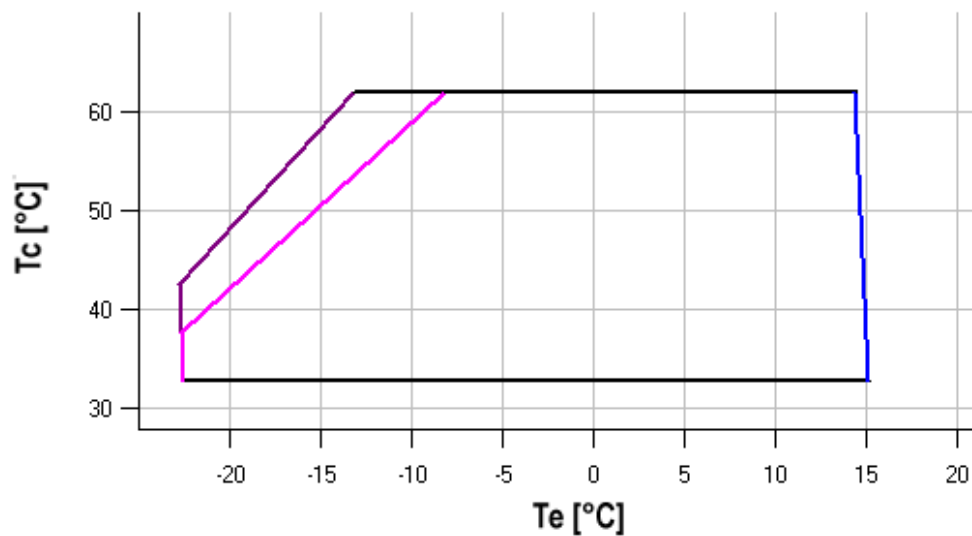
**Mass flow [kg/s]**

$t_c \setminus t_e$	<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>35</b>	256.76	329.71	417.39	520.19	638.51	772.74	923.27	-
<b>40</b>	245.64	315.96	401.10	501.47	617.46	749.46	897.86	-
<b>45</b>	235.18	302.88	385.52	483.49	597.18	726.98	873.29	-
<b>50</b>	-	290.69	370.86	466.45	577.87	705.50	849.75	-
<b>55</b>	-	279.57	357.30	450.55	559.73	685.22	827.43	-
<b>60</b>	-	-	345.03	435.98	542.94	666.33	806.53	-

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

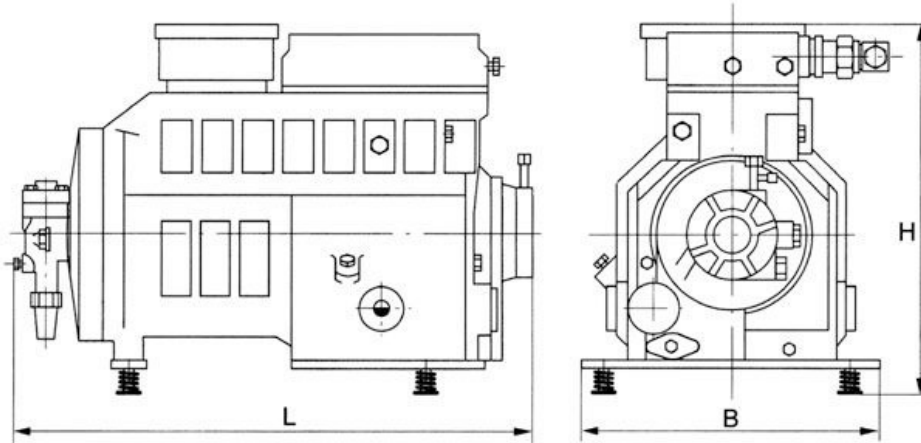
$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>35</b>	2.29	2.73	3.24	3.86	4.61	5.55	6.77	-
<b>40</b>	1.98	2.35	2.79	3.29	3.89	4.62	5.52	-
<b>45</b>	1.71	2.03	2.40	2.82	3.31	3.89	4.59	-
<b>50</b>	-	1.76	2.07	2.43	2.83	3.30	3.86	-
<b>55</b>	-	1.52	1.79	2.09	2.43	2.82	3.27	-
<b>60</b>	-	-	1.54	1.80	2.08	2.41	2.78	-

**Application range**

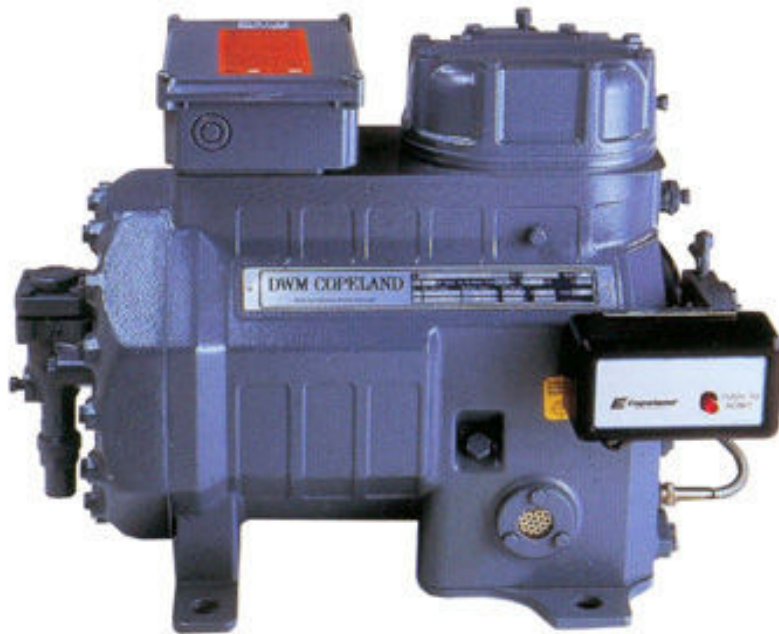


- Maximum evaporating temperature
- 25°C suction gas return
- 20K suction superheat

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]



L	680 mm
B	370 mm
H	480 mm



**Type: Semi-hermetic piston compressors**

**Producer: Copeland**

**Series: DISCUS**

## **Model: D3DS-150 X**

### **Technical data**

Cylinder count:	3
Displacement [m <sup>3</sup> /h]:	49,9
Weight [kg]:	178
Oil charge [dm <sup>3</sup> ]:	3,4
Max. operating current [A]:	29
Locked rotor current [A]:	129
Power supply [V/~/Hz]:	380-420V/3/50Hz

### **Connections**

	<u>milimeters</u>	<u>inches</u>
Suction line:		1 5/8"
Discharge line:		1 1/8"



**R22**
**Cooling capacity [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></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>30</b>	15.90	20.07	24.97	30.68	37.33	45.03	53.87	63.98
<b>35</b>	14.85	18.89	23.58	29.04	35.37	42.69	51.10	60.72
<b>40</b>	13.82	17.71	22.20	27.39	33.41	40.35	48.33	57.45
<b>45</b>	-	16.55	20.83	25.76	31.45	38.01	45.55	54.17
<b>50</b>	-	15.43	19.49	24.15	29.51	35.68	42.77	50.89
<b>55</b>	-	-	18.19	22.57	27.60	33.38	40.02	47.63
<b>60</b>	-	-	16.94	21.04	25.72	31.11	37.29	44.39

**Power input [kW]**

<b>t<sub>c</sub> \ t<sub>e</sub></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>30</b>	6.68	7.25	7.74	8.13	8.39	8.49	8.40	8.09
<b>35</b>	7.00	7.66	8.26	8.78	9.18	9.44	9.53	9.42
<b>40</b>	7.31	8.06	8.76	9.40	9.94	10.36	10.62	10.70
<b>45</b>	-	8.44	9.25	10.00	10.67	11.24	11.67	11.93
<b>50</b>	-	8.82	9.72	10.58	11.38	12.09	12.68	13.12
<b>55</b>	-	-	10.18	11.15	12.07	12.92	13.66	14.28
<b>60</b>	-	-	10.65	11.71	12.75	13.73	14.62	15.40

**Current [A]**

<b>t<sub>c</sub> \ t<sub>e</sub></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>30</b>	13.59	14.47	15.23	15.84	16.24	16.39	16.25	15.77
<b>35</b>	14.08	15.10	16.04	16.85	17.48	17.88	18.02	17.85
<b>40</b>	14.56	15.72	16.82	17.82	18.67	19.32	19.74	19.86
<b>45</b>	-	16.32	17.58	18.76	19.82	20.72	21.39	21.82
<b>50</b>	-	16.91	18.32	19.68	20.94	22.07	23.01	23.71
<b>55</b>	-	-	19.05	20.58	22.04	23.39	24.58	25.56
<b>60</b>	-	-	19.78	21.47	23.12	24.68	26.11	27.36

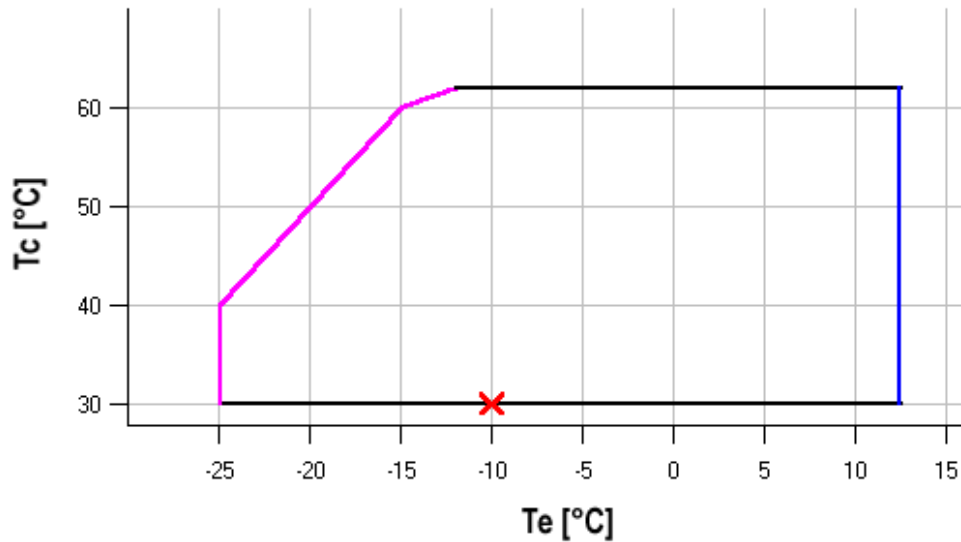
**Mass flow [kg/s]**

<b>t<sub>c</sub> \ t<sub>e</sub></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>30</b>	302.98	385.92	481.99	594.60	727.17	883.12	1 065.85	1 278.78
<b>35</b>	293.16	375.77	471.13	582.66	713.78	867.89	1 048.42	1 258.78
<b>40</b>	283.35	365.46	459.94	570.22	699.71	851.82	1 029.98	1 237.59
<b>45</b>	-	355.28	448.72	557.57	685.27	835.21	1 010.82	1 215.52
<b>50</b>	-	345.56	437.77	545.04	670.76	818.37	991.26	1 192.87
<b>55</b>	-	-	427.41	532.91	656.50	801.60	971.61	1 169.95
<b>60</b>	-	-	417.94	521.51	642.79	785.20	952.16	1 147.07

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	2.38	2.77	3.22	3.77	4.45	5.30	6.42	7.91
<b>35</b>	2.12	2.47	2.85	3.31	3.85	4.52	5.36	6.45
<b>40</b>	1.89	2.20	2.53	2.91	3.36	3.90	4.55	5.37
<b>45</b>	-	1.96	2.25	2.58	2.95	3.38	3.90	4.54
<b>50</b>	-	1.75	2.01	2.28	2.59	2.95	3.37	3.88
<b>55</b>	-	-	1.79	2.02	2.29	2.58	2.93	3.34
<b>60</b>	-	-	1.59	1.80	2.02	2.27	2.55	2.88

**Application range**



- Maximum evaporating temperature
- 25°C suction gas return

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R134a

**Cooling capacity [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	9.57	12.61	16.24	20.56	25.68	31.70	38.73	46.87	-	-
<b>45</b>	8.61	11.54	15.01	19.12	23.99	29.72	36.40	44.15	53.06	63.25
<b>50</b>	7.69	10.49	13.79	17.69	22.30	27.71	34.04	41.39	49.85	59.54
<b>55</b>	6.81	9.48	12.60	16.27	20.60	25.70	31.66	38.59	46.60	55.78
<b>60</b>	-	8.50	11.42	14.86	18.91	23.67	29.25	35.76	43.29	51.96
<b>65</b>	-	7.55	10.27	13.46	17.21	21.63	26.82	32.89	39.94	48.08
<b>70</b>	-	-	9.14	12.07	15.51	19.58	24.37	29.99	36.55	44.15
<b>75</b>	-	-	-	10.69	13.82	17.51	21.90	27.06	33.11	40.16
<b>80</b>	-	-	-	9.33	12.12	15.44	19.40	24.10	29.64	36.12

**Power input [kW]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	5.06	5.60	6.12	6.58	6.97	7.26	7.42	7.44	-	-
<b>45</b>	5.18	5.80	6.39	6.95	7.45	7.86	8.16	8.33	8.35	8.19
<b>50</b>	5.31	5.98	6.66	7.30	7.90	8.43	8.87	9.19	9.37	9.39
<b>55</b>	5.43	6.16	6.90	7.64	8.34	8.98	9.55	10.01	10.35	10.54
<b>60</b>	-	6.33	7.13	7.95	8.75	9.50	10.19	10.80	11.29	11.65
<b>65</b>	-	6.48	7.35	8.24	9.13	9.99	10.80	11.54	12.18	12.71
<b>70</b>	-	-	7.54	8.50	9.47	10.44	11.36	12.24	13.02	13.71
<b>75</b>	-	-	-	8.73	9.79	10.85	11.89	12.88	13.81	14.65
<b>80</b>	-	-	-	8.93	10.07	11.22	12.36	13.48	14.55	15.54

**Current [A]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	11.96	12.63	13.28	13.88	14.38	14.76	14.96	14.95	-	-
<b>45</b>	12.16	12.89	13.63	14.35	15.00	15.55	15.96	16.18	16.18	15.92
<b>50</b>	12.35	13.13	13.96	14.80	15.60	16.33	16.94	17.40	17.66	17.70
<b>55</b>	12.51	13.36	14.28	15.23	16.18	17.09	17.90	18.60	19.13	19.46
<b>60</b>	-	13.56	14.57	15.64	16.74	17.82	18.85	19.78	20.58	21.20
<b>65</b>	-	13.73	14.83	16.03	17.27	18.53	19.77	20.94	22.00	22.92
<b>70</b>	-	-	15.07	16.38	17.78	19.22	20.66	22.07	23.40	24.61
<b>75</b>	-	-	-	16.71	18.26	19.88	21.53	23.17	24.77	26.28
<b>80</b>	-	-	-	17.01	18.70	20.50	22.36	24.25	26.11	27.92

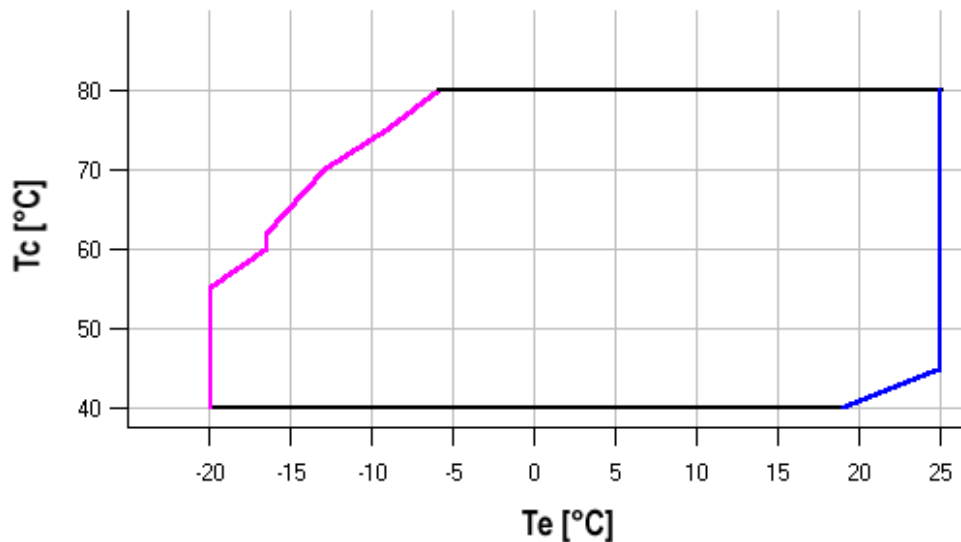
**Mass flow [kg/s]**

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	248.46	322.62	407.34	504.49	615.94	743.57	889.26	1 054.87	-	-
<b>45</b>	237.60	312.14	397.11	494.36	605.79	733.25	878.63	1 043.81	1 230.65	1 441.03
<b>50</b>	226.84	301.53	386.50	483.63	594.79	721.85	866.69	1 031.19	1 217.22	1 426.65
<b>55</b>	216.35	290.94	375.68	472.44	583.09	709.52	853.58	1 017.16	1 202.14	1 410.38
<b>60</b>	-	280.53	364.80	460.95	570.86	696.40	839.45	1 001.88	1 185.57	1 392.38
<b>65</b>	-	270.45	354.00	449.31	558.24	682.66	824.46	985.49	1 167.65	1 372.81
<b>70</b>	-	-	343.45	437.67	545.38	668.44	808.74	968.15	1 148.55	1 351.80
<b>75</b>	-	-	-	426.18	532.43	653.90	792.47	950.01	1 128.40	1 329.51
<b>80</b>	-	-	-	414.99	519.54	639.18	775.78	931.22	1 107.36	1 306.09


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

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15	20	25
<b>40</b>	1.89	2.25	2.65	3.12	3.68	4.37	5.22	6.30	-	-
<b>45</b>	1.66	1.99	2.35	2.75	3.22	3.78	4.46	5.30	6.36	7.73
<b>50</b>	1.45	1.75	2.07	2.42	2.82	3.29	3.84	4.50	5.32	6.34
<b>55</b>	1.25	1.54	1.82	2.13	2.47	2.86	3.32	3.85	4.50	5.29
<b>60</b>	-	1.34	1.60	1.87	2.16	2.49	2.87	3.31	3.83	4.46
<b>65</b>	-	1.17	1.40	1.63	1.89	2.17	2.48	2.85	3.28	3.78
<b>70</b>	-	-	1.21	1.42	1.64	1.88	2.14	2.45	2.81	3.22
<b>75</b>	-	-	-	1.22	1.41	1.61	1.84	2.10	2.40	2.74
<b>80</b>	-	-	-	1.04	1.20	1.38	1.57	1.79	2.04	2.32

**Application range**



 Maximum evaporating temperature

 20K suction superheat

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]

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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	9.92	12.84	16.42	20.71	25.82	31.81	38.76	46.76	55.89	66.22
<b>25</b>	9.45	12.29	15.72	19.81	24.65	30.31	36.87	44.42	53.03	62.78
<b>30</b>	8.74	11.48	14.75	18.61	23.16	28.47	34.62	41.69	49.76	58.91
<b>35</b>	7.89	10.50	13.58	17.19	21.43	26.36	32.08	38.65	46.16	54.69
<b>40</b>	6.97	9.44	12.30	15.64	19.54	24.08	29.34	35.39	42.33	50.21
<b>45</b>	-	8.37	11.01	14.06	17.60	21.72	26.50	32.01	38.34	45.56
<b>50</b>	-	7.40	9.78	12.51	15.68	19.36	23.64	28.59	34.29	40.83
<b>55</b>	-	-	8.71	11.11	13.88	17.10	20.85	25.21	30.27	36.09

**Power input [kW]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	4.94	5.58	6.20	6.76	7.25	7.63	7.88	7.98	7.89	7.59
<b>25</b>	5.14	5.84	6.53	7.19	7.78	8.28	8.67	8.91	8.99	8.88
<b>30</b>	5.30	6.06	6.82	7.56	8.25	8.87	9.39	9.79	10.03	10.09
<b>35</b>	5.44	6.25	7.08	7.90	8.69	9.42	10.07	10.61	11.01	11.24
<b>40</b>	5.56	6.42	7.31	8.21	9.10	9.94	10.71	11.39	11.94	12.35
<b>45</b>	-	6.58	7.53	8.50	9.48	10.43	11.32	12.13	12.84	13.41
<b>50</b>	-	6.73	7.74	8.79	9.85	10.90	11.91	12.85	13.71	14.44
<b>55</b>	-	-	7.96	9.07	10.22	11.36	12.49	13.56	14.56	15.45

**Current [A]**

<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</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>20</b>	11.80	12.62	13.41	14.13	14.73	15.19	15.45	15.47	15.21	14.63
<b>25</b>	12.03	12.92	13.81	14.67	15.46	16.12	16.62	16.91	16.96	16.71
<b>30</b>	12.23	13.18	14.18	15.17	16.12	16.98	17.71	18.27	18.62	18.71
<b>35</b>	12.41	13.42	14.51	15.63	16.73	17.79	18.74	19.56	20.20	20.61
<b>40</b>	12.57	13.64	14.81	16.05	17.31	18.54	19.72	20.79	21.71	22.44
<b>45</b>	-	13.85	15.10	16.45	17.85	19.27	20.65	21.96	23.16	24.20
<b>50</b>	-	14.07	15.39	16.84	18.38	19.96	21.55	23.10	24.57	25.91
<b>55</b>	-	-	15.68	17.22	18.89	20.64	22.42	24.20	25.93	27.57

**Mass flow [kg/s]**

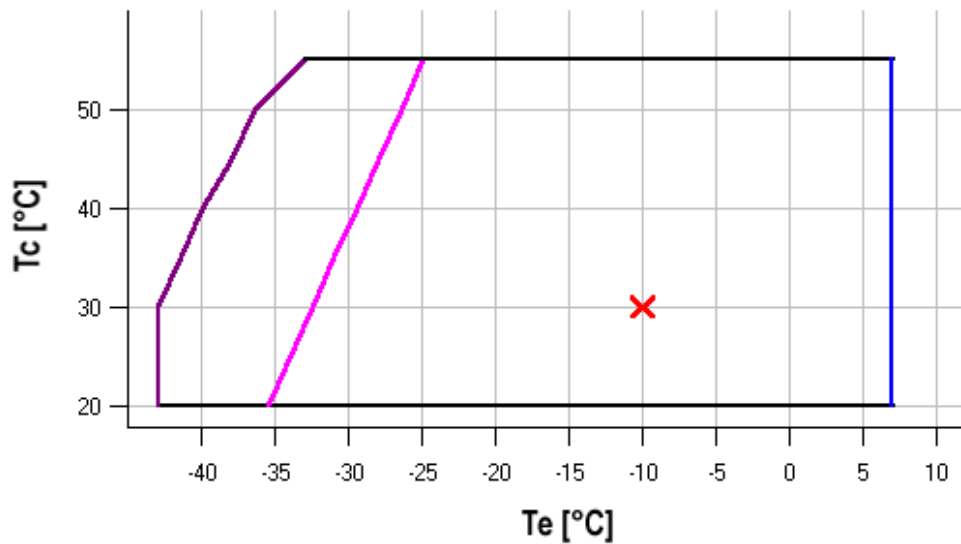
<b>t<sub>c</sub> \ t<sub>e</sub></b>	<b>-40</b>	<b>-35</b>	<b>-30</b>	<b>-25</b>	<b>-20</b>	<b>-15</b>	<b>-10</b>	<b>-5</b>	<b>0</b>	<b>5</b>
<b>20</b>	213.46	283.76	365.22	461.38	575.78	711.97	873.49	1 063.88	1 286.68	1 545.43
<b>25</b>	213.82	284.60	366.32	462.50	576.71	712.47	873.33	1 062.82	1 284.50	1 541.91
<b>30</b>	208.60	279.22	360.55	456.12	569.48	704.16	863.71	1 051.68	1 271.59	1 527.00
<b>35</b>	199.77	269.59	349.89	444.20	556.06	689.02	846.62	1 032.40	1 249.91	1 502.67
<b>40</b>	189.30	257.68	336.30	428.70	538.43	669.02	824.03	1 006.98	1 221.43	1 470.91
<b>45</b>	-	245.45	321.75	411.60	518.54	646.13	797.89	977.37	1 188.12	1 433.67
<b>50</b>	-	234.88	308.21	394.86	498.38	622.31	770.18	945.55	1 151.95	1 392.92
<b>55</b>	-	-	297.66	380.47	479.91	599.53	742.88	913.48	1 114.89	1 350.64



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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	2.01	2.30	2.65	3.06	3.56	4.17	4.92	5.86	7.08	8.72
<b>25</b>	1.84	2.10	2.41	2.76	3.17	3.66	4.25	4.98	5.90	7.07
<b>30</b>	1.65	1.90	2.16	2.46	2.81	3.21	3.68	4.26	4.96	5.84
<b>35</b>	1.45	1.68	1.92	2.18	2.47	2.80	3.18	3.64	4.19	4.86
<b>40</b>	1.25	1.47	1.68	1.91	2.15	2.42	2.74	3.11	3.54	4.07
<b>45</b>	-	1.27	1.46	1.65	1.86	2.08	2.34	2.64	2.99	3.40
<b>50</b>	-	1.10	1.26	1.42	1.59	1.78	1.99	2.22	2.50	2.83
<b>55</b>	-	-	1.09	1.22	1.36	1.50	1.67	1.86	2.08	2.34

**Application range**



- Maximum evaporating temperature
- 25°C suction gas return
- 25°C suction gas return + additional cooling

Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

R407C

**Cooling capacity [kW]**

$t_c \setminus t_e$	<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>35</b>	16.89	21.27	26.65	33.09	40.65	49.42	59.46	-
<b>40</b>	15.74	19.80	24.79	30.78	37.84	46.03	55.42	-
<b>45</b>	14.64	18.39	23.01	28.55	35.10	42.72	51.48	-
<b>50</b>	-	17.03	21.27	26.39	32.44	39.50	47.63	-
<b>55</b>	-	15.70	19.58	24.28	29.84	36.34	43.86	-
<b>60</b>	-	-	17.93	22.21	27.29	33.25	40.16	-

**Power input [kW]**

$t_c \setminus t_e$	<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>35</b>	7.01	7.62	8.19	8.70	9.08	9.28	9.27	-
<b>40</b>	7.40	8.08	8.76	9.39	9.92	10.31	10.51	-
<b>45</b>	7.79	8.53	9.30	10.05	10.73	11.29	11.69	-
<b>50</b>	-	8.97	9.82	10.68	11.49	12.22	12.81	-
<b>55</b>	-	9.40	10.32	11.28	12.22	13.11	13.88	-
<b>60</b>	-	-	10.81	11.86	12.92	13.95	14.90	-

**Current [A]**

$t_c \setminus t_e$	<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>35</b>	14.10	15.04	15.94	16.73	17.32	17.65	17.63	-
<b>40</b>	14.71	15.77	16.83	17.82	18.66	19.27	19.59	-
<b>45</b>	15.32	16.47	17.68	18.85	19.93	20.82	21.45	-
<b>50</b>	-	17.16	18.50	19.85	21.14	22.29	23.23	-
<b>55</b>	-	17.83	19.29	20.80	22.30	23.70	24.93	-
<b>60</b>	-	-	20.06	21.72	23.40	25.04	26.56	-

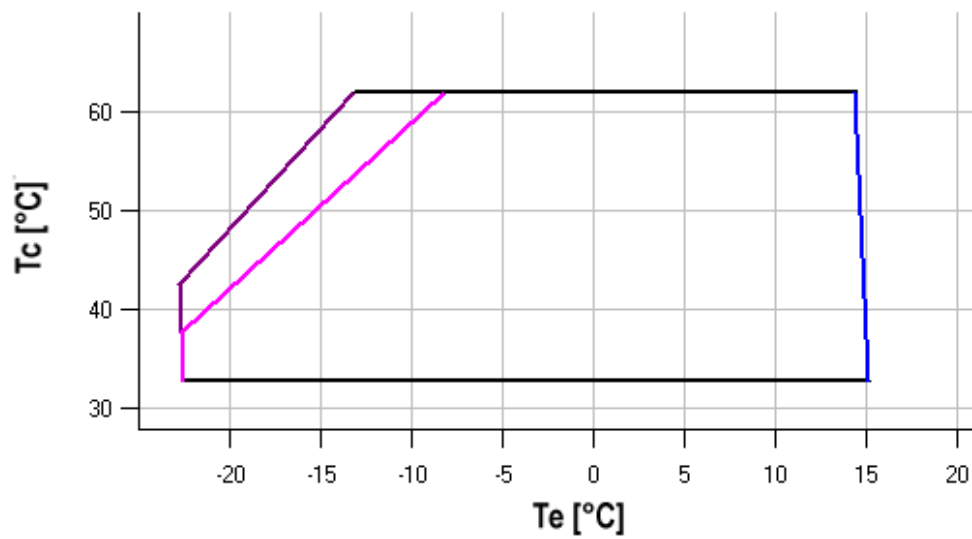
**Mass flow [kg/s]**

$t_c \setminus t_e$	<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>35</b>	322.35	409.37	515.55	643.98	797.75	979.96	1 193.68	-
<b>40</b>	314.50	398.43	501.40	626.50	776.81	955.44	1 165.47	-
<b>45</b>	307.14	388.07	487.92	609.78	756.73	931.87	1 138.29	-
<b>50</b>	-	378.32	475.15	593.85	737.54	909.28	1 112.19	-
<b>55</b>	-	369.23	463.12	578.77	719.27	887.72	1 087.20	-
<b>60</b>	-	-	451.88	564.57	701.98	867.22	1 063.37	-

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

$t_c \setminus t_e$	-20	-15	-10	-5	0	5	10	15
<b>35</b>	2.41	2.79	3.25	3.80	4.48	5.32	6.41	-
<b>40</b>	2.13	2.45	2.83	3.28	3.81	4.46	5.27	-
<b>45</b>	1.88	2.16	2.47	2.84	3.27	3.78	4.40	-
<b>50</b>	-	1.90	2.17	2.47	2.82	3.23	3.72	-
<b>55</b>	-	1.67	1.90	2.15	2.44	2.77	3.16	-
<b>60</b>	-	-	1.66	1.87	2.11	2.38	2.70	-

**Application range**

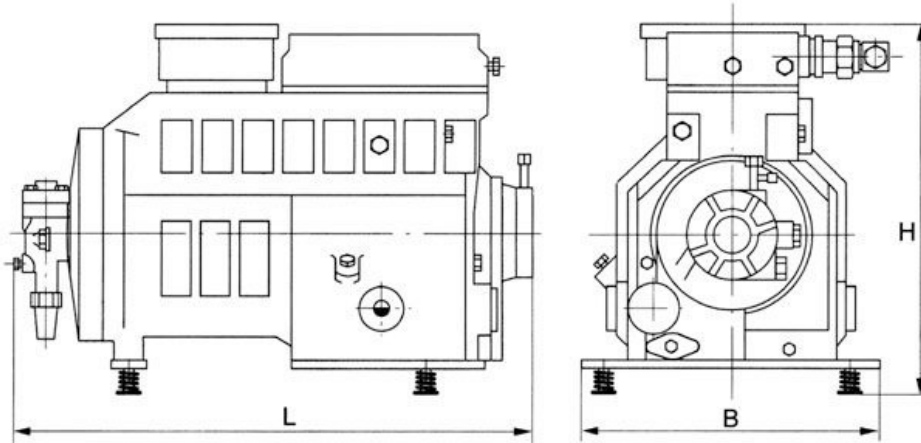


- Maximum evaporating temperature
- 25°C suction gas return
- 20K suction superheat

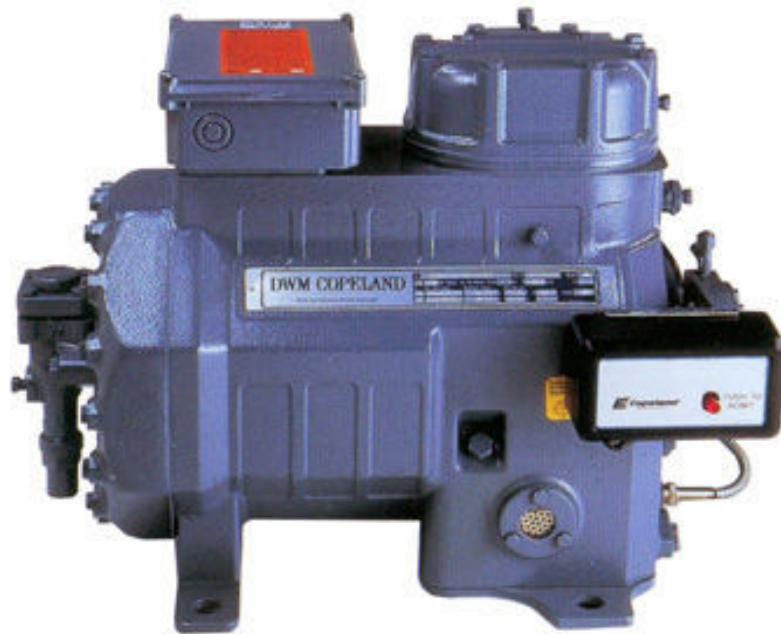
Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]



L	710 mm
B	370 mm
H	490 mm



**Type: Semi-hermetic piston compressors**

**Producer: Copeland**

**Series: DL**

## **Model: DLL-40 X**

### **Technical data**

Cylinder count:	2
Displacement [m <sup>3</sup> /h]:	18,2
Weight [kg]:	93
Oil charge [dm <sup>3</sup> ]:	2,3
Max. operating current [A]:	9,5
Locked rotor current [A]:	68,5
Power supply [V/~/Hz]:	380-420V/3/50Hz

### **Connections**

	<u>milimeters</u>	<u>inches</u>
Suction line:		1 1/8"
Discharge line:		5/8"

R22

**Cooling capacity [kW]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	1.95	2.87	4.05	5.47	7.16	9.11	11.32	13.79	16.54	19.57	22.87
<b>35</b>	1.65	2.51	3.62	4.97	6.56	8.41	10.51	12.87	15.49	18.38	21.53
<b>40</b>	1.38	2.18	3.21	4.48	5.99	7.74	9.73	11.97	14.46	17.21	20.21
<b>45</b>	-	1.87	2.84	4.03	5.44	7.09	8.98	11.10	13.46	16.07	18.93
<b>50</b>	-	-	2.48	3.60	4.93	6.48	8.25	10.26	12.49	14.96	17.67
<b>55</b>	-	-	2.16	3.19	4.44	5.89	7.56	9.44	11.55	13.88	-
<b>60</b>	-	-	1.86	2.82	3.97	5.33	6.89	8.66	10.64	-	-

**Power input [kW]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	1.71	1.98	2.26	2.54	2.80	3.04	3.24	3.39	3.49	3.51	3.44
<b>35</b>	1.71	2.00	2.31	2.62	2.92	3.20	3.45	3.66	3.81	3.90	3.90
<b>40</b>	1.71	2.02	2.35	2.69	3.03	3.35	3.65	3.91	4.12	4.27	4.34
<b>45</b>	-	2.03	2.39	2.76	3.13	3.49	3.84	4.14	4.41	4.62	4.76
<b>50</b>	-	-	2.42	2.82	3.22	3.62	4.01	4.37	4.69	4.96	5.16
<b>55</b>	-	-	2.45	2.87	3.31	3.74	4.17	4.58	4.95	5.28	-
<b>60</b>	-	-	2.48	2.92	3.39	3.86	4.33	4.78	5.21	-	-



**Current [A]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	4.34	4.59	4.87	5.18	5.49	5.77	6.02	6.22	6.33	6.36	6.26
<b>35</b>	4.34	4.61	4.93	5.27	5.63	5.97	6.28	6.55	6.75	6.86	6.86
<b>40</b>	4.34	4.63	4.98	5.36	5.76	6.16	6.53	6.87	7.15	7.35	7.45
<b>45</b>	-	4.65	5.02	5.44	5.88	6.33	6.77	7.18	7.53	7.82	8.02
<b>50</b>	-	-	5.05	5.51	6.00	6.50	7.00	7.48	7.91	8.29	8.58
<b>55</b>	-	-	5.09	5.57	6.10	6.66	7.22	7.77	8.28	8.74	-
<b>60</b>	-	-	5.11	5.63	6.21	6.81	7.43	8.05	8.64	-	-

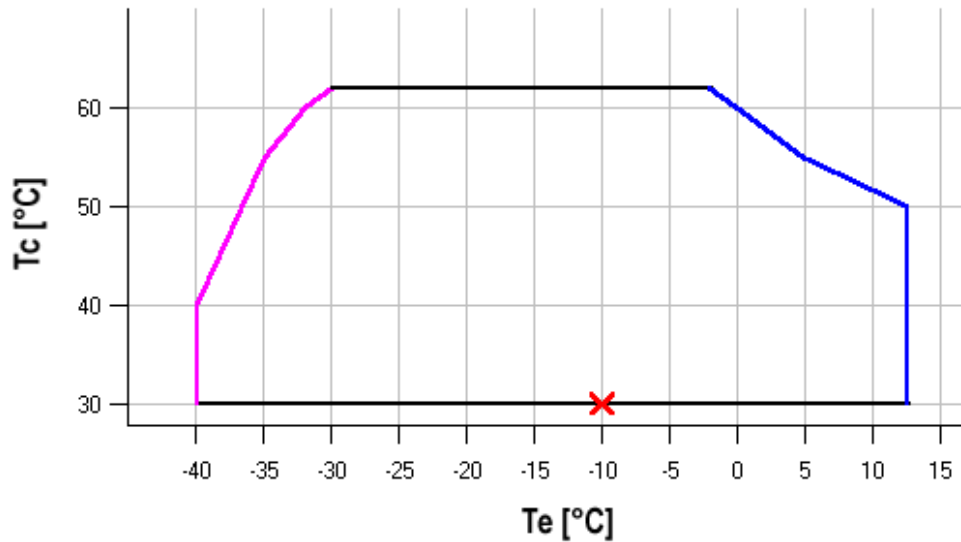
**Mass flow [kg/s]**

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	44.28	64.42	89.41	119.20	153.72	192.93	236.75	285.13	338.02	395.36	457.09
<b>35</b>	39.10	58.77	83.27	112.54	146.52	185.16	228.39	276.16	328.42	385.09	446.13
<b>40</b>	34.00	53.20	77.21	105.96	139.40	177.47	220.11	267.27	318.89	374.90	435.26
<b>45</b>	-	47.77	71.28	99.52	132.41	169.92	211.97	258.52	309.49	364.85	424.52
<b>50</b>	-	-	65.54	93.26	125.62	162.56	204.02	249.95	300.29	354.98	413.97
<b>55</b>	-	-	60.05	87.26	119.07	155.45	196.32	241.64	291.34	345.37	-
<b>60</b>	-	-	54.87	81.55	112.83	148.64	188.92	233.63	282.69	-	-

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

$t_c \setminus t_e$	-40	-35	-30	-25	-20	-15	-10	-5	0	5	10
<b>30</b>	1.14	1.45	1.79	2.16	2.56	2.99	3.49	4.06	4.74	5.58	6.64
<b>35</b>	0.96	1.25	1.57	1.90	2.25	2.62	3.04	3.52	4.06	4.72	5.52
<b>40</b>	0.80	1.08	1.37	1.66	1.98	2.31	2.66	3.06	3.51	4.03	4.66
<b>45</b>	-	0.92	1.19	1.46	1.74	2.03	2.34	2.68	3.05	3.48	3.98
<b>50</b>	-	-	1.03	1.28	1.53	1.79	2.06	2.35	2.67	3.02	3.42
<b>55</b>	-	-	0.88	1.11	1.34	1.57	1.81	2.06	2.33	2.63	-
<b>60</b>	-	-	0.75	0.96	1.17	1.38	1.59	1.81	2.04	-	-

**Application range**



- Maximum evaporating temperature
- 25°C suction gas return + additional cooling

Operating conditions: ISO; subcooling: 0 K, suction superheat: 10 K, return gas temperature: -

$t_c$  - Condensing temperature [°C]

$t_e$  - Evaporating temperature [°C]

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

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	2.26	3.15	4.26	5.61	7.23	9.15	11.39	13.99	16.97	20.37	24.20
<b>25</b>	1.97	2.82	3.86	5.13	6.66	8.47	10.59	13.06	15.89	19.11	22.76
<b>30</b>	1.69	2.48	3.46	4.66	6.09	7.79	9.79	12.11	14.79	17.84	21.31
<b>35</b>	1.41	2.15	3.07	4.18	5.52	7.11	8.98	11.16	13.68	16.56	19.84
<b>40</b>	1.13	1.82	2.67	3.70	4.94	6.42	8.16	10.20	12.56	15.27	18.36
<b>45</b>	0.86	1.50	2.27	3.22	4.36	5.72	7.34	9.23	11.43	13.97	16.86
<b>50</b>	-	1.17	1.88	2.74	3.78	5.03	6.51	8.25	10.29	12.65	15.36
<b>55</b>	-	0.86	1.49	2.26	3.20	4.33	5.67	7.27	9.15	-	-

**Power input [kW]**

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	1.64	1.88	2.14	2.39	2.63	2.87	3.08	3.27	3.43	3.56	3.64
<b>25</b>	1.60	1.86	2.13	2.41	2.67	2.93	3.17	3.38	3.57	3.72	3.83
<b>30</b>	1.56	1.85	2.15	2.45	2.75	3.04	3.31	3.56	3.77	3.96	4.10
<b>35</b>	1.50	1.83	2.17	2.51	2.84	3.17	3.48	3.77	4.03	4.26	4.45
<b>40</b>	1.40	1.77	2.16	2.55	2.93	3.31	3.67	4.01	4.32	4.60	4.84
<b>45</b>	1.24	1.67	2.11	2.55	2.99	3.42	3.84	4.24	4.61	4.95	5.25
<b>50</b>	-	1.49	1.99	2.49	3.00	3.50	3.98	4.45	4.89	5.30	5.67
<b>55</b>	-	1.21	1.78	2.36	2.94	3.51	4.07	4.62	5.13	-	-

**Current [A]**

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	4.37	4.59	4.85	5.12	5.39	5.63	5.84	5.99	6.06	6.04	5.92
<b>25</b>	4.36	4.60	4.89	5.20	5.51	5.82	6.09	6.31	6.47	6.54	6.52
<b>30</b>	4.34	4.61	4.92	5.27	5.63	5.99	6.32	6.62	6.86	7.03	7.10
<b>35</b>	4.31	4.59	4.94	5.32	5.73	6.14	6.54	6.91	7.24	7.49	7.67
<b>40</b>	4.26	4.56	4.93	5.35	5.80	6.27	6.73	7.18	7.58	7.93	8.21
<b>45</b>	4.18	4.50	4.89	5.35	5.85	6.37	6.90	7.41	7.90	8.34	8.71
<b>50</b>	-	4.40	4.83	5.32	5.86	6.44	7.03	7.62	8.19	8.71	9.19
<b>55</b>	-	4.28	4.73	5.25	5.84	6.47	7.12	7.78	8.43	-	-

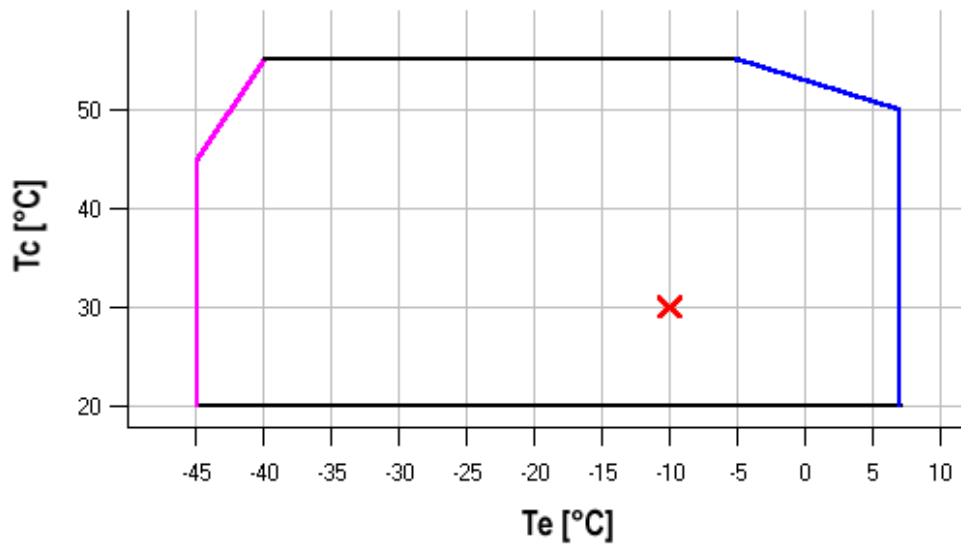
**Mass flow [kg/s]**

$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	47.04	69.43	95.10	125.27	161.17	204.00	254.99	315.37	386.35	469.16	565.01
<b>25</b>	43.56	65.13	90.11	119.70	155.14	197.65	248.43	308.72	379.73	462.69	558.82
<b>30</b>	39.75	60.52	84.81	113.84	148.84	191.01	241.60	301.80	372.86	455.98	552.38
<b>35</b>	35.53	55.50	79.11	107.58	142.14	184.00	234.39	294.53	365.63	448.91	545.61
<b>40</b>	30.80	49.97	72.91	100.84	134.96	176.52	226.72	286.79	357.94	441.40	538.39
<b>45</b>	25.45	43.84	66.12	93.50	127.20	168.46	218.48	278.49	349.70	433.35	530.64
<b>50</b>	-	37.01	58.63	85.47	118.76	159.72	209.57	269.53	340.82	424.65	522.26
<b>55</b>	-	29.37	50.34	76.66	109.55	150.22	199.90	259.82	331.18	-	-

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

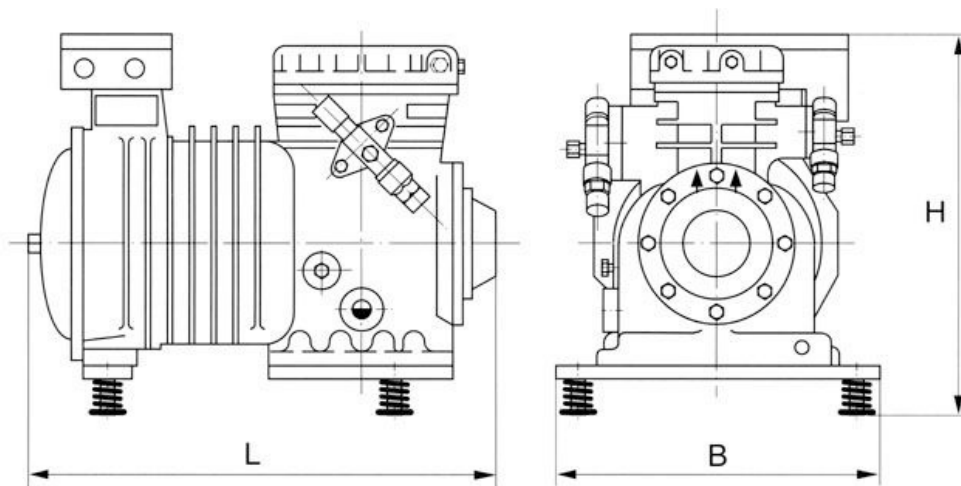
$t_c \setminus t_e$	-45	-40	-35	-30	-25	-20	-15	-10	-5	0	5
<b>20</b>	1.38	1.67	1.99	2.35	2.75	3.19	3.70	4.28	4.94	5.72	6.65
<b>25</b>	1.24	1.51	1.81	2.13	2.49	2.89	3.35	3.86	4.45	5.14	5.95
<b>30</b>	1.08	1.34	1.61	1.90	2.21	2.57	2.96	3.41	3.92	4.51	5.19
<b>35</b>	0.94	1.18	1.42	1.67	1.94	2.24	2.58	2.96	3.39	3.89	4.46
<b>40</b>	0.81	1.03	1.24	1.45	1.69	1.94	2.23	2.55	2.91	3.32	3.79
<b>45</b>	0.69	0.90	1.08	1.26	1.46	1.67	1.91	2.18	2.48	2.82	3.21
<b>50</b>	-	0.79	0.95	1.10	1.26	1.44	1.63	1.85	2.10	2.39	2.71
<b>55</b>	-	0.71	0.84	0.96	1.09	1.23	1.39	1.58	1.78	-	-

**Application range**



- Maximum evaporating temperature
- 25°C suction gas return + additional cooling

Operating conditions: ISO; subcooling: 0 K, suction superheat: - K, return gas temperature: 20  
 $t_c$  - Condensing temperature [°C]  
 $t_e$  - Evaporating temperature [°C]



L	470 mm
B	330 mm
H	385 mm

