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**GACO SARL**

28, Rue Bencharif Madani

25000 BELLEVUE/CONSTANTINE - ALGERIE

Tel. : 031 92 54 56 / 031 93 22 23 - Fax : 031 92 13 45

Email : gacosarl@gmail.com / benkobbi\_fares@yahoo.fr

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**Type: Semi-hermetic piston compressors****Producer: Copeland****Series: S****Model: D8SK-700 X****Technical data**

Cylinder count:	8
Displacement [m <sup>3</sup> /h]:	210
Weight [kg]:	376
Oil charge [dm <sup>3</sup> ]:	7,7
Max. operating current [A]:	130
Locked rotor current [A]:	600
Power supply [V/~/Hz]:	400V/3/50Hz

**Connections**

	<u>milimeters</u>	<u>inches</u>
Suction line:		3 1/8"
Discharge line:		2 1/8"

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R22

**Cooling capacity [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	75.94	95.84	119.77	148.21	181.69	220.70	-	-
<b>15</b>	70.71	89.70	112.55	139.74	171.79	209.21	-	-
<b>20</b>	65.75	83.84	105.61	131.56	162.19	198.02	239.54	-
<b>25</b>	61.04	78.24	98.94	123.65	152.88	187.12	226.89	272.69
<b>30</b>	56.56	72.88	92.53	116.01	143.83	176.51	214.53	258.41
<b>35</b>	52.31	67.75	86.35	108.61	135.05	166.15	202.44	244.42
<b>40</b>	48.28	62.84	80.40	101.45	126.50	156.05	190.61	230.69
<b>45</b>	44.43	58.14	74.67	94.51	118.18	146.19	179.03	217.21
<b>50</b>	40.77	53.63	69.13	87.78	110.08	136.55	167.68	203.97
<b>55</b>	-	-	63.77	81.24	102.18	127.11	156.54	190.96
<b>60</b>	-	-	-	74.88	94.47	117.88	145.61	178.17

**Power input [kW]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	22.71	24.03	24.78	24.83	24.04	22.26	-	-
<b>15</b>	24.17	26.00	27.34	28.06	28.02	27.07	-	-
<b>20</b>	25.50	27.81	29.70	31.06	31.74	31.59	30.49	-
<b>25</b>	26.73	29.47	31.89	33.85	35.21	35.84	35.59	34.33
<b>30</b>	27.87	31.01	33.92	36.45	38.47	39.83	40.39	40.03
<b>35</b>	28.92	32.44	35.80	38.87	41.51	43.57	44.92	45.42
<b>40</b>	29.90	33.76	37.55	41.13	44.35	47.08	49.18	50.51
<b>45</b>	30.83	35.00	39.18	43.22	47.00	50.36	53.18	55.32
<b>50</b>	31.72	36.17	40.70	45.19	49.48	53.45	56.95	59.85
<b>55</b>	-	-	42.13	47.02	51.80	56.34	60.50	64.13
<b>60</b>	-	-	-	48.74	53.98	59.06	63.83	68.17

**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>10</b>	67.68	68.92	69.64	69.59	68.55	66.28	-	-
<b>15</b>	68.66	70.43	71.79	72.50	72.34	71.07	-	-
<b>20</b>	69.70	71.98	73.96	75.42	76.13	75.85	74.36	-
<b>25</b>	70.77	73.55	76.14	78.34	79.90	80.59	80.20	78.48
<b>30</b>	71.85	75.11	78.31	81.22	83.62	85.28	85.96	85.44
<b>35</b>	72.92	76.64	80.43	84.05	87.28	89.88	91.63	92.29
<b>40</b>	73.95	78.13	82.49	86.81	90.84	94.38	97.17	99.01
<b>45</b>	74.93	79.55	84.47	89.46	94.30	98.75	102.58	105.58
<b>50</b>	75.82	80.87	86.34	91.99	97.62	102.97	107.83	111.97
<b>55</b>	-	-	88.07	94.38	100.78	107.02	112.89	118.16
<b>60</b>	-	-	-	96.61	103.76	110.88	117.75	124.13

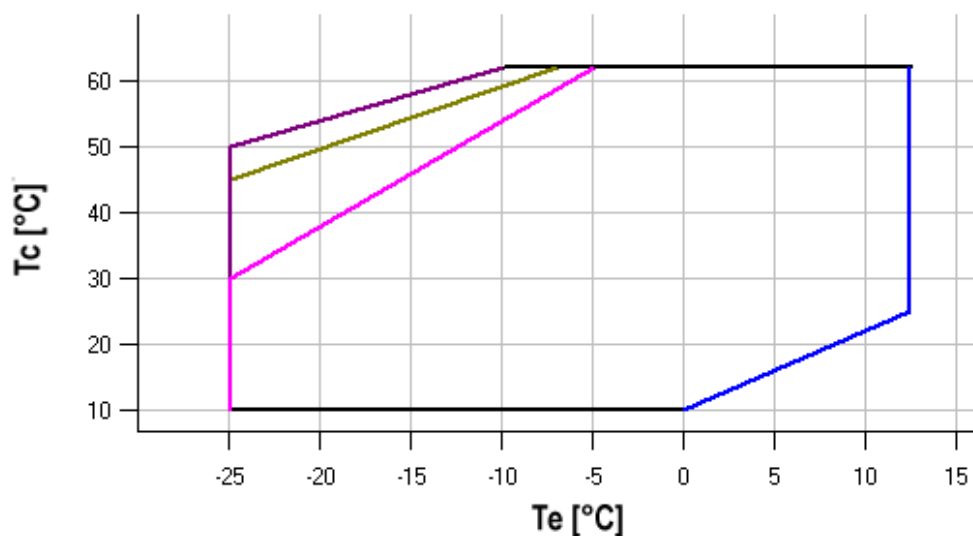
**Mass flow [kg/s]**

<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>10</b>	1 404.39	1 777.73	2 211.30	2 713.58	3 293.04	3 958.16	-	-
<b>15</b>	1 358.98	1 722.84	2 147.20	2 640.54	3 211.32	3 868.04	-	-
<b>20</b>	1 314.46	1 668.92	2 084.15	2 568.63	3 130.82	3 779.22	4 522.28	-
<b>25</b>	1 270.98	1 616.13	2 022.31	2 498.00	3 051.68	3 691.83	4 426.92	5 265.44
<b>30</b>	1 228.70	1 564.60	1 961.81	2 428.80	2 974.05	3 606.03	4 333.23	5 164.12
<b>35</b>	1 187.75	1 514.49	1 902.81	2 361.17	2 898.07	3 521.97	4 241.35	5 064.70
<b>40</b>	1 148.28	1 465.94	1 845.44	2 295.27	2 823.89	3 439.79	4 151.44	4 967.31
<b>45</b>	1 110.44	1 419.10	1 789.87	2 231.24	2 751.67	3 359.64	4 063.63	4 872.12
<b>50</b>	1 074.39	1 374.12	1 736.24	2 169.22	2 681.54	3 281.66	3 978.08	4 779.26
<b>55</b>	-	-	1 684.70	2 109.37	2 613.65	3 206.01	3 894.93	4 688.89
<b>60</b>	-	-	-	2 051.83	2 548.16	3 132.83	3 814.33	4 601.14

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	3.34	3.99	4.83	5.97	7.56	9.91	-	-
<b>15</b>	2.93	3.45	4.12	4.98	6.13	7.73	-	-
<b>20</b>	2.58	3.02	3.56	4.24	5.11	6.27	7.86	-
<b>25</b>	2.28	2.65	3.10	3.65	4.34	5.22	6.38	7.94
<b>30</b>	2.03	2.35	2.73	3.18	3.74	4.43	5.31	6.46
<b>35</b>	1.81	2.09	2.41	2.79	3.25	3.81	4.51	5.38
<b>40</b>	1.61	1.86	2.14	2.47	2.85	3.31	3.88	4.57
<b>45</b>	1.44	1.66	1.91	2.19	2.51	2.90	3.37	3.93
<b>50</b>	1.29	1.48	1.70	1.94	2.22	2.55	2.94	3.41
<b>55</b>	-	-	1.51	1.73	1.97	2.26	2.59	2.98
<b>60</b>	-	-	-	1.54	1.75	2.00	2.28	2.61

### Application range



Maximum evaporating temperature  
 25°C suction gas temperature

10K suction gas return + additional cooling  
 20K 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]

## R407C

**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>10</b>	76.21	96.43	120.72	149.62	183.69	223.47	-	-
<b>15</b>	70.57	90.04	113.35	141.05	173.69	211.83	256.00	-
<b>20</b>	64.90	83.62	105.96	132.46	163.69	200.18	242.49	291.17
<b>25</b>	59.21	77.18	98.55	123.87	153.68	188.54	229.00	275.60
<b>30</b>	53.52	70.75	91.16	115.30	143.70	176.93	215.54	260.06
<b>35</b>	47.84	64.34	83.80	106.75	133.76	165.37	202.13	244.59
<b>40</b>	42.19	57.97	76.48	98.26	123.88	153.87	188.79	229.19
<b>45</b>	36.60	51.65	69.22	89.84	114.06	142.44	175.53	213.88
<b>50</b>	-	45.40	62.03	81.49	104.34	131.11	162.38	198.67
<b>55</b>	-	-	54.94	73.25	94.71	119.89	149.33	183.59
<b>60</b>	-	-	-	65.12	85.22	108.80	136.43	168.64

**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>10</b>	22.08	23.54	24.39	24.47	23.63	21.71	-	-
<b>15</b>	23.04	25.02	26.50	27.30	27.27	26.26	24.09	-
<b>20</b>	23.85	26.34	28.42	29.93	30.70	30.57	29.39	26.99
<b>25</b>	24.51	27.49	30.15	32.34	33.88	34.63	34.42	33.08
<b>30</b>	24.99	28.44	31.67	34.52	36.82	38.42	39.16	38.87
<b>35</b>	25.28	29.19	32.97	36.46	39.50	41.94	43.60	44.34
<b>40</b>	25.37	29.71	34.02	38.14	41.90	45.15	47.73	49.47
<b>45</b>	25.24	30.00	34.82	39.54	44.00	48.05	51.52	54.25
<b>50</b>	-	30.04	35.35	40.65	45.80	50.63	54.97	58.67
<b>55</b>	-	-	35.59	41.47	47.28	52.86	58.06	62.71
<b>60</b>	-	-	-	41.96	48.41	54.74	60.77	66.35

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**Current [A]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	64.63	65.59	66.08	65.86	64.68	62.30	-	-
<b>15</b>	64.89	66.45	67.65	68.23	67.96	66.59	63.86	-
<b>20</b>	65.23	67.40	69.31	70.70	71.34	70.97	69.36	66.25
<b>25</b>	65.58	68.36	70.98	73.18	74.73	75.38	74.88	72.98
<b>30</b>	65.84	69.25	72.58	75.60	78.07	79.73	80.35	79.67
<b>35</b>	65.96	69.98	74.04	77.88	81.27	83.95	85.69	86.23
<b>40</b>	65.85	70.49	75.28	79.95	84.26	87.97	90.83	92.59
<b>45</b>	65.42	70.70	76.22	81.72	86.96	91.69	95.68	98.68
<b>50</b>	-	70.53	76.78	83.11	89.29	95.06	100.18	104.41
<b>55</b>	-	-	76.89	84.06	91.18	97.99	104.25	109.71
<b>60</b>	-	-	-	84.49	92.55	100.40	107.80	114.51

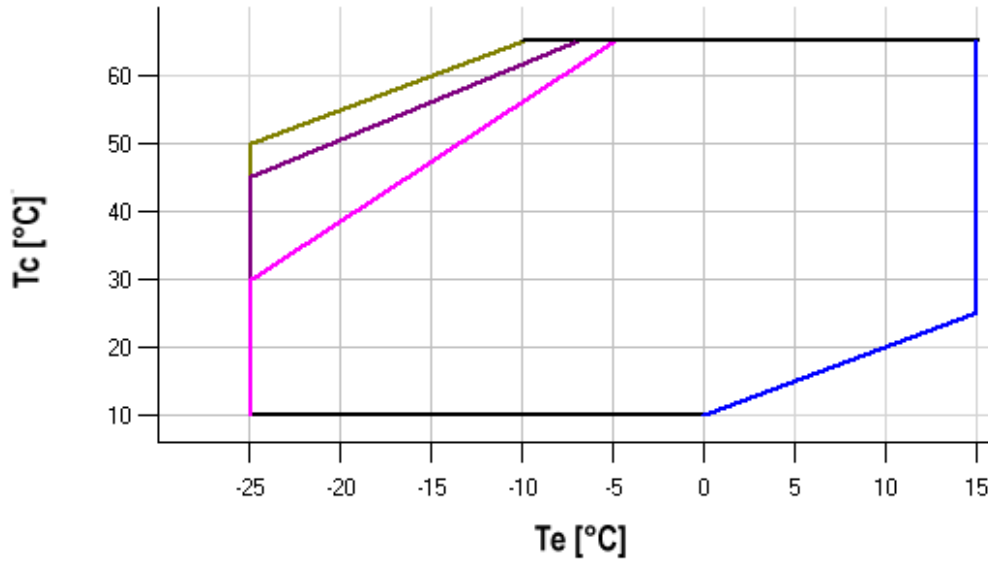
**Mass flow [kg/s]**

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	1 180.33	1 530.26	1 933.30	2 406.44	2 966.67	3 630.98	-	-
<b>15</b>	1 141.63	1 483.72	1 879.41	2 345.69	2 899.55	3 557.98	4 337.97	-
<b>20</b>	1 096.05	1 431.03	1 820.11	2 280.27	2 828.51	3 481.81	4 257.16	5 171.56
<b>25</b>	1 043.93	1 372.56	1 755.77	2 210.56	2 753.92	3 402.84	4 174.30	5 085.30
<b>30</b>	985.65	1 308.66	1 686.76	2 136.93	2 676.16	3 321.43	4 089.75	4 998.09
<b>35</b>	921.57	1 239.72	1 613.44	2 059.73	2 595.57	3 237.95	4 003.87	4 910.31
<b>40</b>	852.06	1 166.09	1 536.18	1 979.33	2 512.53	3 152.77	3 917.03	4 822.31
<b>45</b>	777.49	1 088.13	1 455.35	1 896.11	2 427.41	3 066.24	3 829.60	4 734.45
<b>50</b>	-	1 006.22	1 371.30	1 810.42	2 340.57	2 978.74	3 741.93	4 647.12
<b>55</b>	-	-	1 284.41	1 722.62	2 252.37	2 890.63	3 654.40	4 560.66
<b>60</b>	-	-	-	1 633.10	2 163.18	2 802.28	3 567.37	4 475.46

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

$t_c \setminus t_e$	-25	-20	-15	-10	-5	0	5	10
<b>10</b>	3.45	4.10	4.95	6.11	7.77	10.30	-	-
<b>15</b>	3.06	3.60	4.28	5.17	6.37	8.07	10.63	-
<b>20</b>	2.72	3.17	3.73	4.43	5.33	6.55	8.25	10.79
<b>25</b>	2.42	2.81	3.27	3.83	4.54	5.44	6.65	8.33
<b>30</b>	2.14	2.49	2.88	3.34	3.90	4.60	5.50	6.69
<b>35</b>	1.89	2.20	2.54	2.93	3.39	3.94	4.64	5.52
<b>40</b>	1.66	1.95	2.25	2.58	2.96	3.41	3.96	4.63
<b>45</b>	1.45	1.72	1.99	2.27	2.59	2.96	3.41	3.94
<b>50</b>	-	1.51	1.75	2.00	2.28	2.59	2.95	3.39
<b>55</b>	-	-	1.54	1.77	2.00	2.27	2.57	2.93
<b>60</b>	-	-	-	1.55	1.76	1.99	2.24	2.54

**Application range**



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

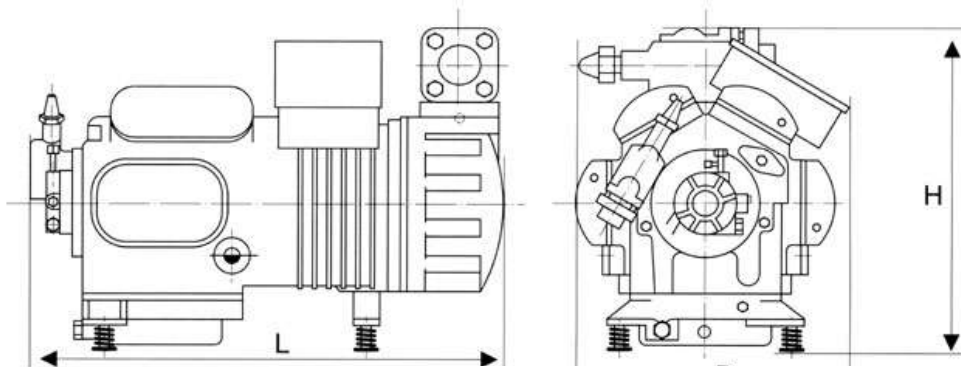
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L	904 mm
B	541 mm
H	610 mm

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