

Minimum evaporating temp. with:  
 ——— 10K Suction Superheat  
 - - - 20°C Suction Gas Return

Suction Return Temperature 20,0°C

**Evaporating Temperature °C**

Liquid subcooling 0,0K

Cond °C	Capacity kW								
	-25	-20	-15	-10	-5	0	5	7	10
10	12,60	15,55	19,00	23,10					
20	11,50	14,20	17,40	21,10	25,40	30,30			
30	10,25	12,70	15,55	18,85	22,70	27,10	32,00	34,20	37,60
35	9,59	11,90	14,55	17,65	21,20	25,30	29,90	32,00	35,20
40	8,88	11,05	13,55	16,40	19,70	23,50	27,80	29,70	32,60
45	8,12	10,15	12,45	15,10	18,15	21,60	25,50	27,30	30,00
50		9,16	11,30	13,70	16,45	19,60	23,20	24,80	27,30
55			10,05	12,25	14,70	17,55	20,80	22,20	24,50
60				10,70	12,90	15,40	18,30	19,55	21,60
	Power Input kW								
	-25	-20	-15	-10	-5	0	5	7	10
10	3,31	3,36	3,42	3,50					
20	4,09	4,15	4,20	4,27	4,36	4,51			
30	5,02	5,09	5,14	5,18	5,25	5,35	5,50	5,58	5,73
35	5,58	5,65	5,70	5,73	5,78	5,85	5,98	6,05	6,17
40	6,22	6,29	6,33	6,36	6,39	6,44	6,53	6,58	6,68
45	6,95	7,03	7,06	7,08	7,09	7,11	7,17	7,21	7,29
50		7,87	7,90	7,90	7,89	7,89	7,92	7,94	7,99
55			8,85	8,84	8,81	8,78	8,78	8,79	8,81
60				9,91	9,86	9,81	9,77	9,76	9,76
	Current 400V, A								
	-25	-20	-15	-10	-5	0	5	7	10
10	9,57	9,60	9,64	9,71					
20	10,20	10,26	10,31	10,37	10,47	10,62			
30	11,08	11,15	11,21	11,26	11,33	11,43	11,60	11,68	11,83
35	11,68	11,75	11,80	11,84	11,90	11,98	12,11	12,18	12,31
40	12,41	12,48	12,53	12,56	12,59	12,64	12,74	12,79	12,90
45	13,29	13,37	13,41	13,42	13,43	13,45	13,51	13,55	13,63
50		14,44	14,46	14,45	14,44	14,43	14,45	14,47	14,52
55			15,72	15,69	15,64	15,60	15,58	15,58	15,60
60				17,15	17,07	16,99	16,93	16,91	16,90
	Mass Flow g/s								
	-25	-20	-15	-10	-5	0	5	7	10
10	70,90	88,00	108,00	132,50					
20	70,40	87,50	108,00	132,00	160,00	193,00			
30	69,40	86,50	106,50	130,50	158,00	191,00	229,00	246,00	274,00
35	68,50	85,50	105,50	129,00	157,00	189,00	227,00	244,00	272,00
40	67,40	84,50	104,50	127,50	155,00	187,00	225,00	242,00	269,00
45	65,90	83,00	102,50	125,50	153,00	185,00	222,00	239,00	266,00
50		81,00	100,50	123,00	150,00	182,00	219,00	236,00	263,00
55			97,50	120,00	147,00	178,00	215,00	232,00	260,00
60				117,00	143,00	174,00	212,00	229,00	257,00

**Copeland Scroll - Compressor - Refrigeration - MT Standard**
**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, cu.m/h	24.9
Length/Width, mm	264/284
Height, mm	533
Net Weight, kg	59.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.25
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	66
Sound Power (MT), dBA	77
Sound Power with Sound Shell (MT), dBA	67
PED Category	2
Internal Free Volume, l	13.3
High Side PS, bar(g)	32
Low Side PS, bar(g)	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-35

**COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)**

Maximum Operating Current, A	17.5
Locked Rotor Current, A	111
Winding Resistance, ohm	1.36
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

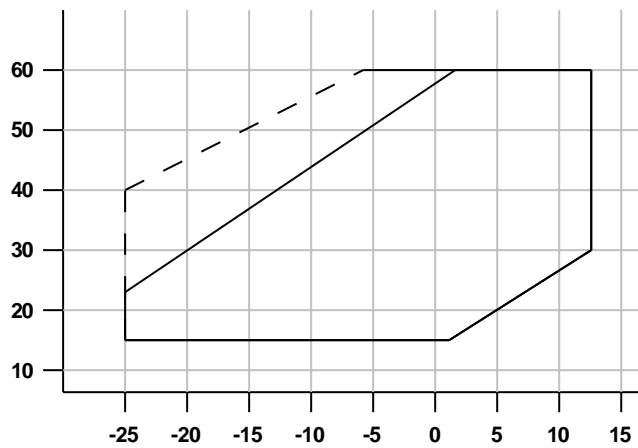
Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	90 W External
Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

**MOTOR OPTIONS**

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380-420 V/3~/50H	400	TFD		Y	1,00
200-220 V/3~/50H	200	TF5		Y	2,09
200-230 V/3~/60H	230	TF5		Y	2,09
575 V/3~/60Hz	575	TFE		Y	0,80
380 V/3~/60Hz	380	TF7		Y	1,26
460 V/3~/60Hz	460	TFD		Y	1,04



Minimum evaporating temp. with:  
 ——— 25°C Suction Gas Return  
 - - - 10K Suction Superheat

Suction Return Temperature 20,0°C

Evaporating Temperature °C

Liquid subcooling 0,0K

Cond °C	Capacity kW										
	-25	-20	-15	-10	-5	0	5	7	10	12,5	
15	9,95	12,35	15,20	18,60	22,50	27,10					
20	9,47	11,85	14,60	17,90	21,70	26,10	31,10				
30		10,80	13,45	16,55	20,10	24,20	28,80	30,90	34,10	37,00	
35			12,85	15,85	19,25	23,20	27,70	29,60	32,70	35,50	
40				15,10	18,40	22,20	26,50	28,40	31,30	34,00	
45					17,50	21,10	25,20	27,00	29,90	32,50	
50					16,55	20,00	23,90	25,70	28,40	30,80	
55						18,80	22,60	24,20	26,80	29,10	
60							21,10	22,60	25,10	27,30	
	Power Input kW										
	-25	-20	-15	-10	-5	0	5	7	10	12,5	
15	2,72	2,78	2,82	2,85	2,90	2,97					
20	3,17	3,25	3,30	3,34	3,40	3,48	3,59				
30		4,17	4,24	4,30	4,36	4,43	4,54	4,60	4,69	4,79	
35			4,74	4,80	4,86	4,93	5,03	5,08	5,17	5,26	
40				5,36	5,41	5,47	5,55	5,60	5,68	5,76	
45					6,03	6,07	6,14	6,18	6,25	6,32	
50					6,74	6,77	6,82	6,84	6,89	6,95	
55						7,57	7,60	7,61	7,65	7,69	
60							8,51	8,51	8,53	8,55	
	Current 400V, A										
	-25	-20	-15	-10	-5	0	5	7	10	12,5	
15	6,85	6,87	6,92	6,98	7,08	7,22					
20	7,47	7,49	7,54	7,61	7,71	7,84	8,01				
30		8,68	8,72	8,78	8,87	8,99	9,14	9,21	9,33	9,45	
35			9,36	9,41	9,49	9,59	9,73	9,79	9,90	10,01	
40				10,12	10,18	10,27	10,38	10,44	10,53	10,63	
45					10,99	11,05	11,15	11,19	11,27	11,35	
50					11,96	11,99	12,05	12,09	12,15	12,21	
55						13,12	13,15	13,17	13,21	13,25	
60							14,47	14,48	14,49	14,51	
	Mass Flow g/s										
	-25	-20	-15	-10	-5	0	5	7	10	12,5	
15	48,10	59,90	74,10	91,00	110,50	134,00					
20	47,10	59,10	73,30	90,00	110,00	133,00	160,00				
30		57,60	72,00	89,00	108,50	131,50	158,00	170,00	189,00	207,00	
35			71,30	88,50	108,00	131,00	158,00	169,00	189,00	206,00	
40				87,50	107,00	130,00	157,00	169,00	188,00	205,00	
45					106,00	129,00	156,00	167,00	186,00	204,00	
50					104,50	127,50	154,00	166,00	185,00	202,00	
55						125,50	152,00	164,00	183,00	200,00	
60							149,50	161,00	180,00	197,00	

**Copeland Scroll - Compressor - Refrigeration - MT Standard**
**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, cu.m/h	24.9
Length/Width, mm	264/284
Height, mm	533
Net Weight, kg	59.9
Rotalock Suction, inch	1 3/4
Rotalock Discharge, inch	1 1/4
Oil Quantity, l	3.25
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	66
Sound Power (MT), dBA	77
Sound Power with Sound Shell (MT), dBA	67
PED Category	2
Internal Free Volume, l	13.3
High Side PS, bar(g)	32
Low Side PS, bar(g)	22.6
Low Side TS Max., °C	50
Low Side TS Min., °C	-35

**COMPRESSOR ELECTRICAL DATA (380/420V - 3~ - 50Hz)**

Maximum Operating Current, A	17.5
Locked Rotor Current, A	111
Winding Resistance, ohm	1.36
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermistor
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	90 W External
Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

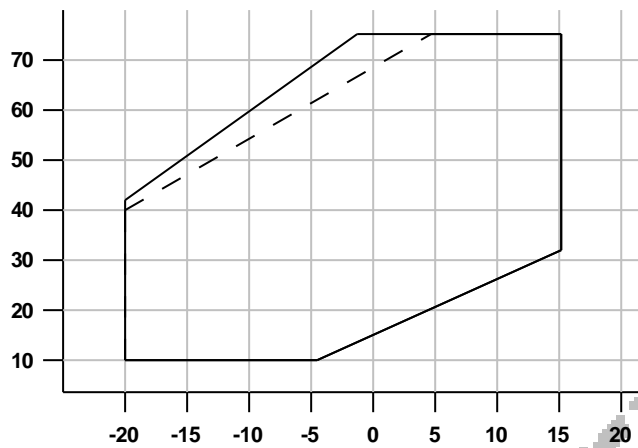
**MOTOR OPTIONS**

Power Supply	Nominal Voltage	Motor Code	Start Connection	DOL Connection	Amps Factor
380-420 V/3~/50H	400	TFD		Y	1,00
200-220 V/3~/50H	200	TF5		Y	2,09
200-230 V/3~/60H	230	TF5		Y	2,09
575 V/3~/60Hz	575	TFE		Y	0,80
380 V/3~/60Hz	380	TF7		Y	1,26
460 V/3~/60Hz	460	TFD		Y	1,04

50Hz

ZB66KCE-TFD

R134a



Minimum evaporating temp. with:  
 ——— 10K Suction Superheat  
 - - - 20°C Suction Gas Return

Suction Superheat 10,0K

Evaporating Temperature °C

Liquid subcooling 0,0K

Cond °C	Capacity kW									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	7,95	9,92	12,30	15,15	17,15					
20	7,20	9,06	11,35	14,05	17,15					
30	6,42	8,15	10,25	12,80	15,75	19,15	20,60	23,00	25,10	
40	5,66	7,21	9,13	11,45	14,20	17,35	18,70	20,90	22,90	25,00
50		6,26	7,96	10,05	12,50	15,40	16,65	18,70	20,50	22,40
60				8,57	10,75	13,30	14,45	16,30	17,90	19,70
65				7,83	9,84	12,25	13,30	15,05	16,60	18,25
70					8,93	11,15	12,15	13,75	15,20	16,75
75					8,00	10,05	10,95	12,45	13,80	15,25
	Power Input kW									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	1,89	1,88	1,93	2,05						
20	2,41	2,38	2,41	2,48	2,59					
30	3,04	3,00	3,02	3,08	3,15	3,21	3,23	3,25	3,26	
40	3,75	3,74	3,77	3,82	3,88	3,92	3,93	3,92	3,91	3,87
50		4,58	4,64	4,71	4,77	4,81	4,81	4,80	4,77	4,72
60				5,74	5,83	5,87	5,88	5,87	5,83	5,78
65				6,30	6,41	6,47	6,48	6,47	6,44	6,39
70					7,03	7,11	7,13	7,12	7,10	7,05
75					7,68	7,79	7,81	7,82	7,80	7,76
	Current 400V, A									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	8,17	8,31	8,45	8,58						
20	8,58	8,68	8,77	8,85	8,91					
30	9,05	9,15	9,22	9,27	9,29	9,29	9,28	9,26	9,23	
40	9,62	9,74	9,82	9,87	9,88	9,86	9,84	9,80	9,76	9,70
50		10,47	10,60	10,68	10,71	10,70	10,68	10,64	10,59	10,54
60				11,72	11,81	11,84	11,83	11,81	11,77	11,72
65				12,34	12,47	12,53	12,53	12,52	12,50	12,46
70					13,20	13,30	13,32	13,33	13,32	13,29
75					14,01	14,15	14,19	14,23	14,24	14,23
	Mass Flow g/s									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	44,00	53,90	65,70	79,50						
20	43,20	53,30	65,40	79,50	95,50					
30	42,20	52,40	64,60	79,00	95,50	113,50	121,50	134,00	145,00	
40	41,20	51,20	63,40	78,00	94,00	113,00	121,00	133,50	144,50	156,00
50		50,00	61,90	76,00	92,50	111,00	119,50	132,00	143,50	155,00
60				73,90	90,00	109,00	117,00	130,00	141,00	153,00
65				72,70	89,00	107,50	115,50	128,50	139,50	152,00
70					87,00	105,50	113,50	126,50	138,00	150,00
75					85,50	104,00	112,00	125,00	136,50	148,50

Preliminary Data

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Low Side TS Min., °C	-35

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Locked Rotor Current, A	111
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Mounting Grommets	Standard

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Enclosure Class	IP66 With Molded Plug
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

**MOTOR OPTIONS**

<b>Power Supply</b>	<b>Nominal Voltage</b>	<b>Motor Code</b>	<b>Start Connection</b>	<b>DOL Connection</b>	<b>Amps Factor</b>
380-420 V/3~/50H	400	TFD		Y	1,00
200-220 V/3~/50H	200	TF5		Y	2,09
200-230 V/3~/60H	230	TF5		Y	2,09
575 V/3~/60Hz	575	TFE		Y	0,80
380 V/3~/60Hz	380	TF7		Y	1,26
460 V/3~/60Hz	460	TFD		Y	1,04