

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
20	13,55	16,65	20,30	24,60	29,60	35,40			
25	12,80	15,80	19,30	23,40	28,10	33,50	39,70		
30	12,05	14,90	18,25	22,10	26,60	31,60	37,40	39,90	43,90
35	11,20	13,95	17,10	20,80	24,90	29,70	35,10	37,40	41,20
40	10,30	12,90	15,90	19,35	23,20	27,70	32,70	34,80	38,30
45		11,80	14,65	17,85	21,40	25,50	30,10	32,20	35,30
50			13,25	16,20	19,55	23,30	27,50	29,40	32,30
55			11,75	14,50	17,50	20,90	24,80	26,40	29,10
60				12,60	15,35	18,40	21,90	23,30	25,70
	Power Input kW								
	-25	-20	-15	-10	-5	0	5	7	10
20	4,65	4,77	4,88	4,99	5,08	5,15			
25	5,16	5,27	5,38	5,49	5,59	5,67	5,71		
30	5,74	5,84	5,94	6,05	6,15	6,24	6,29	6,31	6,32
35	6,42	6,50	6,59	6,69	6,79	6,87	6,93	6,95	6,97
40	7,20	7,26	7,33	7,42	7,50	7,58	7,64	7,66	7,68
45		8,13	8,18	8,25	8,32	8,39	8,44	8,46	8,47
50			9,15	9,19	9,24	9,29	9,33	9,35	9,36
55			10,25	10,25	10,30	10,30	10,35	10,35	10,35
60				11,50	11,45	11,45	11,45	11,45	11,45
	Current 400V, A								
	-25	-20	-15	-10	-5	0	5	7	10
20	11,14	11,29	11,43	11,55	11,64	11,69			
25	11,62	11,77	11,91	12,04	12,14	12,21	12,24		
30	12,22	12,36	12,49	12,62	12,74	12,82	12,87	12,87	12,86
35	12,97	13,08	13,21	13,33	13,45	13,54	13,61	13,62	13,62
40	13,89	13,97	14,07	14,19	14,30	14,39	14,47	14,49	14,50
45		15,04	15,12	15,21	15,31	15,40	15,48	15,50	15,52
50			16,37	16,43	16,51	16,59	16,66	16,68	16,71
55			17,84	17,87	17,92	17,98	18,04	18,05	18,08
60				19,54	19,56	19,59	19,63	19,64	19,66
	Mass Flow g/s								
	-25	-20	-15	-10	-5	0	5	7	10
20	83,00	102,50	126,00	154,00	187,00	225,00			
25	82,50	102,00	125,50	153,00	186,00	225,00	269,00		
30	81,50	101,50	125,00	153,00	185,00	223,00	268,00	288,00	320,00
35	80,00	100,50	124,00	152,00	184,00	222,00	266,00	286,00	318,00
40	78,00	99,00	122,50	150,00	183,00	220,00	264,00	284,00	316,00
45		96,50	120,50	148,50	181,00	218,00	262,00	282,00	314,00
50			118,00	146,00	178,00	216,00	259,00	279,00	311,00
55			114,00	142,50	175,00	212,00	256,00	276,00	308,00
60				137,50	170,00	208,00	253,00	273,00	306,00

**Copeland Scroll - Compressor - Refrigeration - Digital**
**COMPRESSOR MECHANICAL AND PHYSICAL DATA**

Displacement @ 50 Hz, cu.m/h	28.8
Length/Width, mm	293/285
Height, mm	533
Net Weight, kg	61.7
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
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	20.4
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Solenoid valve	Standard
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**ACCESSORIES OPTIONAL**

Crankcase Heater	90 W External
Discharge Temperature Protection	External Thermostat
Mounting Grommets	Standard
Mounting Grommets	Hard Mounts for Paralleling
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Valve Coil	220 V
Valve Coil	24 V AC
Digital Control Kit	EC2-552
Digital Control Kit	EC3-652
Digital Driver	EC3-D13

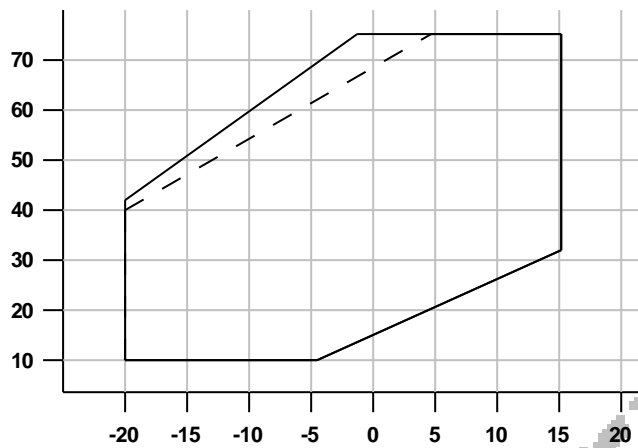
**MOTOR OPTIONS**

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
460 V/3~/60Hz	460	TFD		Y	1,04

50Hz

ZBD76KCE-TFD

R134a



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									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	9,19	11,50	14,30	17,55	19,85					
20	8,41	10,60	13,20	16,30	18,25	22,10	23,70	26,40	28,70	
30	7,62	9,62	12,05	14,95	16,50	20,00	21,50	24,00	26,20	28,40
40	6,86	8,63	10,80	13,45	16,50	20,00	21,50	24,00	26,20	28,40
50			9,56	11,90	14,60	17,80	19,20	21,40	23,40	25,50
60				10,30	12,65	15,45	16,65	18,65	20,40	22,20
65					11,65	14,25	15,35	17,20	18,85	20,60
70						13,00	14,05	15,75	17,25	18,85
75						11,75	12,70	14,25	15,65	17,10
	Power Input kW									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	2,16	2,16	2,24	2,38						
20	2,81	2,78	2,82	2,92	3,03					
30	3,57	3,52	3,54	3,61	3,70	3,77	3,79	3,80	3,79	
40	4,42	4,39	4,42	4,48	4,54	4,59	4,60	4,59	4,56	4,51
50			5,43	5,48	5,57	5,62	5,62	5,60	5,56	5,50
60				6,69	6,79	6,84	6,85	6,83	6,80	6,73
65					7,46	7,54	7,55	7,54	7,50	7,44
70						8,28	8,29	8,29	8,27	8,21
75						9,07	9,09	9,11	9,09	9,04
	Current 400V, A									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	9,53	9,66	9,80	9,95						
20	9,84	9,92	10,00	10,08	10,15					
30	10,34	10,39	10,44	10,48	10,51	10,52	10,51	10,49	10,46	
40	11,01	11,07	11,13	11,17	11,18	11,16	11,14	11,10	11,05	10,99
50			12,05	12,12	12,15	12,14	12,12	12,08	12,03	11,96
60				13,34	13,42	13,45	13,45	13,42	13,39	13,33
65					14,17	14,23	14,24	14,23	14,21	14,16
70						15,09	15,11	15,13	15,12	15,09
75						16,03	16,07	16,11	16,13	16,12
	Mass Flow g/s									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	44,60	56,00	69,80	86,00						
20	43,80	55,30	69,30	86,00	105,50					
30	42,90	54,40	68,40	85,00	105,00	127,50	137,50	154,00	168,00	
40	42,10	53,20	67,10	84,00	103,50	126,50	136,50	153,00	168,00	184,00
50			65,50	82,00	101,50	124,50	135,00	151,00	166,00	182,00
60				79,50	99,00	121,50	132,00	148,50	164,00	180,00
65					97,50	120,00	130,00	147,00	162,00	178,00
70						118,00	128,50	145,00	160,00	176,00
75						116,50	126,50	143,00	158,00	175,00

Preliminary Data

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Net Weight, kg	61.7
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Sound Power, dBA	77
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200-230 V/3~/60H	230	TF5		Y	2,09
575 V/3~/60Hz	575	TFE		Y	0,80
460 V/3~/60Hz	460	TFD		Y	1,04