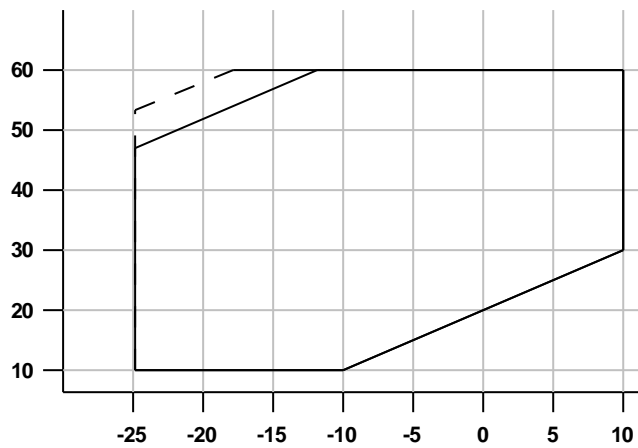


50Hz

ZB38KCE-TFD

R404A Dew Point



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
10	7,38	9,11	11,15	13,50					
20	6,68	8,24	10,05	12,20	14,60	17,40			
30	5,91	7,29	8,91	10,80	12,95	15,45	18,25	19,45	21,40
35	5,50	6,79	8,30	10,05	12,10	14,40	17,05	18,20	20,00
40	5,08	6,27	7,68	9,31	11,20	13,35	15,80	16,90	18,60
45	4,64	5,74	7,03	8,53	10,25	12,30	14,55	15,55	17,15
50		5,19	6,36	7,74	9,33	11,20	13,30	14,20	15,70
55			5,68	6,92	8,37	10,05	12,00	12,85	14,20
60				6,09	7,39	8,90	10,65	11,45	12,70
	Power Input kW								
	-25	-20	-15	-10	-5	0	5	7	10
10	1,85	1,84	1,82	1,79					
20	2,37	2,37	2,36	2,34	2,32	2,28			
30	2,99	3,00	3,00	2,99	2,97	2,95	2,92	2,90	2,87
35	3,35	3,36	3,36	3,36	3,35	3,33	3,30	3,28	3,26
40	3,75	3,76	3,76	3,76	3,76	3,74	3,71	3,70	3,68
45	4,18	4,19	4,20	4,20	4,20	4,19	4,16	4,15	4,13
50		4,67	4,68	4,68	4,68	4,67	4,65	4,64	4,63
55			5,20	5,20	5,20	5,20	5,18	5,17	5,16
60				5,77	5,77	5,77	5,76	5,75	5,74
	Current 400V, A								
	-25	-20	-15	-10	-5	0	5	7	10
10	6,37	6,36	6,35	6,35					
20	6,88	6,89	6,89	6,89	6,89	6,89			
30	7,60	7,62	7,63	7,63	7,62	7,61	7,60	7,59	7,58
35	8,08	8,10	8,11	8,11	8,10	8,08	8,06	8,05	8,03
40	8,65	8,68	8,69	8,68	8,67	8,64	8,61	8,59	8,57
45	9,33	9,36	9,37	9,36	9,34	9,31	9,26	9,24	9,21
50		10,16	10,17	10,16	10,13	10,09	10,03	10,00	9,96
55			11,10	11,09	11,06	11,00	10,93	10,90	10,85
60				12,17	12,12	12,06	11,98	11,94	11,87
	Mass Flow g/s								
	-25	-20	-15	-10	-5	0	5	7	10
10	41,50	51,50	63,30	77,00					
20	40,90	50,80	62,50	76,00	92,00	111,00			
30	40,00	49,60	61,10	74,60	90,50	109,00	130,50	140,00	156,00
35	39,30	48,90	60,20	73,60	89,50	107,50	129,50	139,00	155,00
40	38,50	48,00	59,10	72,40	88,00	106,50	128,00	137,50	154,00
45	37,60	46,90	57,90	71,10	86,50	105,00	126,50	136,50	152,00
50		45,70	56,60	69,60	85,00	103,50	125,50	135,00	151,00
55			55,20	68,00	83,50	102,00	124,00	134,00	151,00
60				66,50	82,00	100,50	123,50	133,50	151,00

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

Displacement @ 50 Hz, cu.m/h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.4
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	61
Sound Power (MT), dBA	72
Sound Power with Sound Shell (MT), dBA	62
PED Category	1
Internal Free Volume, l	4.3
High Side PS, bar(g)	32
Low Side PS, bar(g)	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.65
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

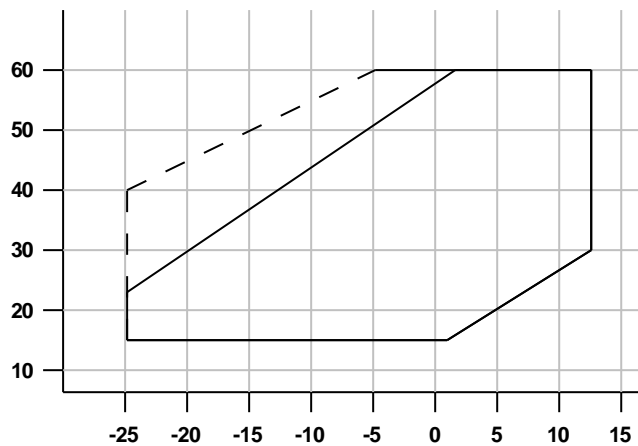
Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

**MOTOR OPTIONS**

<i>Power Supply</i>	<i>Nominal Voltage</i>	<i>Motor Code</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
380-420 V/3~/50H	400	TFD		Y	1,00
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	4,60	5,90	7,55	9,49	11,70	14,20				
20	4,65	5,92	7,53	9,45	11,65	14,10				
30			7,10	8,91	11,00	13,40	16,00	17,10	18,80	20,30
35			6,74	8,49	10,55	12,85	15,35	16,45	18,15	19,60
40				8,01	9,97	12,20	14,65	15,70	17,35	18,75
45					9,38	11,50	13,90	14,90	16,50	17,85
50					8,78	10,80	13,10	14,10	15,60	16,95
55						10,15	12,30	13,25	14,70	16,00
60							11,55	12,45	13,85	15,05
	Power Input kW									
	-25	-20	-15	-10	-5	0	5	7	10	12,5
15	1,56	1,63	1,65	1,65	1,65	1,66				
20	1,81	1,89	1,93	1,95	1,96	1,99				
30			2,47	2,51	2,54	2,59	2,68	2,73	2,82	2,91
35			2,76	2,80	2,83	2,89	2,98	3,03	3,12	3,22
40				3,12	3,15	3,20	3,29	3,34	3,43	3,53
45					3,50	3,55	3,63	3,67	3,76	3,86
50					3,90	3,94	4,01	4,05	4,13	4,22
55						4,39	4,44	4,48	4,55	4,63
60							4,95	4,98	5,04	5,11
	Current 400V, A									
	-25	-20	-15	-10	-5	0	5	7	10	12,5
15	5,52	5,58	5,58	5,55	5,51	5,47				
20	5,65	5,73	5,75	5,75	5,75	5,75				
30			6,15	6,18	6,21	6,27	6,36	6,41	6,52	6,62
35			6,41	6,44	6,48	6,54	6,65	6,71	6,82	6,94
40				6,76	6,79	6,85	6,96	7,03	7,15	7,27
45					7,17	7,22	7,32	7,39	7,51	7,63
50					7,63	7,66	7,75	7,81	7,92	8,04
55						8,20	8,26	8,31	8,41	8,52
60							8,88	8,91	9,00	9,09
	Mass Flow g/s									
	-25	-20	-15	-10	-5	0	5	7	10	12,5
15	22,20	28,60	36,70	46,40	57,60	70,30				
20	23,20	29,60	37,80	47,60	59,00	72,00				
30			38,00	48,00	59,60	72,90	88,00	94,50	104,50	113,00
35			37,40	47,30	59,00	72,50	87,50	94,00	104,50	113,50
40				46,30	58,10	71,60	87,00	93,50	104,00	113,00
45					56,80	70,30	85,50	92,50	103,00	112,00
50					55,50	68,90	84,50	91,00	101,50	111,00
55						67,60	83,00	89,50	100,50	110,00
60							82,00	88,50	99,50	109,00

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

Displacement @ 50 Hz, cu.m/h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.4
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	61
Sound Power (MT), dBA	72
Sound Power with Sound Shell (MT), dBA	62
PED Category	1
Internal Free Volume, l	4.3
High Side PS, bar(g)	32
Low Side PS, bar(g)	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.65
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

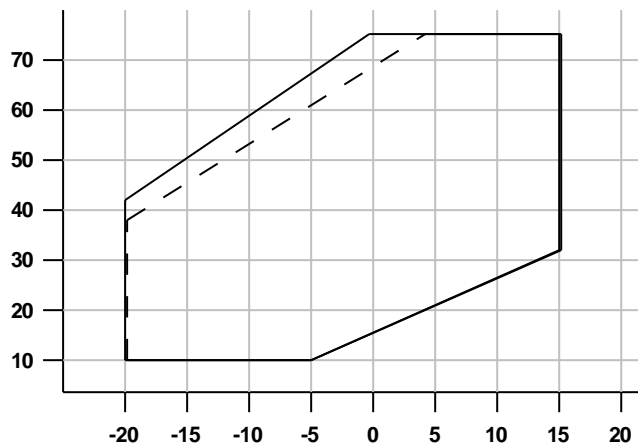
**MOTOR OPTIONS**

<i>Power Supply</i>	<i>Nominal Voltage</i>	<i>Motor Code</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
380-420 V/3~/50H	400	TFD		Y	1,00
460 V/3~/60Hz	460	TFD		Y	1,04

50Hz

ZB38KCE-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	4,43	5,66	7,10	8,80						
20	3,92	5,08	6,43	8,02	9,88					
30	3,46	4,54	5,80	7,27	8,99	11,00	11,90	13,35	14,65	
40	3,03	4,03	5,18	6,53	8,10	9,94	10,75	12,10	13,30	14,60
50		3,51	4,55	5,77	7,18	8,85	9,59	10,80	11,90	13,05
60				4,96	6,22	7,70	8,36	9,44	10,40	11,50
65				4,54	5,71	7,09	7,71	8,73	9,65	10,65
70					5,18	6,46	7,04	7,99	8,85	9,78
75					4,62	5,80	6,34	7,21	8,01	8,88
	Power Input kW									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	1,01	1,03	1,03	1,01						
20	1,33	1,36	1,38	1,38	1,38					
30	1,67	1,71	1,73	1,75	1,76	1,78	1,79	1,80	1,82	
40	2,07	2,11	2,14	2,16	2,18	2,20	2,22	2,24	2,26	2,28
50		2,62	2,65	2,67	2,69	2,71	2,73	2,75	2,77	2,79
60				3,32	3,34	3,35	3,36	3,38	3,40	3,42
65				3,72	3,73	3,74	3,75	3,76	3,78	3,80
70					4,17	4,17	4,18	4,19	4,20	4,22
75					4,67	4,66	4,67	4,67	4,68	4,70
	Current 400V, A									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	5,77	5,74	5,70	5,66						
20	5,24	5,25	5,24	5,22	5,20					
30	5,05	5,10	5,12	5,13	5,12	5,12	5,12	5,13	5,14	
40	5,18	5,27	5,33	5,36	5,37	5,38	5,38	5,39	5,41	5,43
50		5,75	5,84	5,89	5,92	5,94	5,95	5,96	5,97	5,99
60				6,70	6,75	6,78	6,79	6,81	6,82	6,84
65				7,21	7,27	7,30	7,32	7,33	7,35	7,36
70					7,84	7,89	7,90	7,92	7,93	7,95
75					8,48	8,53	8,54	8,56	8,58	8,59
	Mass Flow g/s									
	-20	-15	-10	-5	0	5	7	10	12,5	15
10	24,50	30,70	37,90	46,20						
20	23,50	29,90	37,10	45,40	55,00					
30	22,70	29,20	36,50	44,90	54,40	65,30	70,10	78,00	84,50	
40	22,00	28,60	36,00	44,30	53,80	64,70	69,50	77,00	84,00	91,50
50		28,00	35,40	43,70	53,20	64,00	68,70	76,50	83,00	90,50
60				42,80	52,20	62,90	67,70	75,00	82,00	89,50
65				42,10	51,50	62,20	66,90	74,50	81,50	88,50
70					50,60	61,30	66,00	73,50	80,50	87,50
75					49,50	60,10	64,80	72,40	79,00	86,50

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

Displacement @ 50 Hz, cu.m/h	14.4
Length/Width, mm	242/242
Height, mm	438
Net Weight, kg	37.4
Rotalock Suction, inch	1 1/4
Rotalock Discharge, inch	1
Oil Quantity, l	1.9
Base mounting (hole dia), mm	190 x 190 (8.5)
Sound Pressure @ 1m (MT), dBA	60
Sound Power (MT), dBA	71
Sound Power with Sound Shell (MT), dBA	61
PED Category	1
Internal Free Volume, l	4.3
High Side PS, bar(g)	32
Low Side PS, bar(g)	21
Low Side TS Max., °C	50
Low Side TS Min., °C	-35

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

Maximum Operating Current, A	12.8
Locked Rotor Current, A	65.5
Winding Resistance, ohm	2.65
Default Enclosure Class	IP 21 (IEC 34)

**ACCESSORIES INCLUDED**

Discharge Temperature Protection	Internal Thermodisk
Mounting Grommets	Standard

**ACCESSORIES OPTIONAL**

Crankcase Heater	70 W External
Oil Control System	ALCO Trax-Oil OM3
Sound Attenuation	Sound Shell (10 dBA)
Rotalock valves	suction and discharge

**MOTOR OPTIONS**

<i>Power Supply</i>	<i>Nominal Voltage</i>	<i>Motor Code</i>	<i>Start Connection</i>	<i>DOL Connection</i>	<i>Amps Factor</i>
380-420 V/3~/50H	400	TFD		Y	1,00
460 V/3~/60Hz	460	TFD		Y	1,04