Technical Data Sheet

Compressor model **B38H**

Voltage **220-240V 60Hz ~1**

Refrigerant **R134a**

APPLICATION

Application	Low Back Pressure
Refrigerant	R134a
Evaporating Temp.	-35,0 ºC to -15,0 ºC
Expansion	Capillar
Comp. Cooling	Static/Fan cooled
Max. ambient temp.	43,0 ºC
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	3,80 cm³
Diameter	19,00 mm
Stroke	6,70 mm
Net Weight	4,60 Kg
Oil type	ISO VG 15 ESTER
Oil charge	130 cm³

MOTOR

Nominal Power	1/7 hp
Voltage/Frequency	220-240V 60Hz
Voltage range	187-255 V
Type	RSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	2,17 A
Main W. resist. at 25ºC	37,00 Ω
Start W. resist. at 25ºC	11,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	83 kCal/h	70 W
COP	1,11 W/W	0,85 W/W
EER	0,95 kCal/Wh	0,74 kCal/Wh
Input Power	87 W	82 W
Current	0,58 A	0,56 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	220 V 60 Hz	220 V 60 Hz

ELECTRICAL COMPONENTS

Relay	Option 1	Option 2		
Reference	QP2-22	JPQII-22		
Voltage	220-240 V	220-240 V		
Resistance	Ω	Ω		
Protector	Option 1	Option 2		
Reference	DRB16N61A1	BT35-120		
Current		3,50 A		
Time check		7-16 seg		
Disc temp. (Open/Close)	120,00 / 61,00 ºC	120,00 / 61,00 ºC		

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	53	61	0,49	1,01	0,87
40	-30	71	67	0,51	1,23	1,06
40	-25	95	76	0,54	1,45	1,25
40	-23,3	105	80	0,56	1,53	1,31
40	-20	126	88	0,59	1,66	1,42
40	-15	163	104	0,64	1,83	1,57
40	-10	207	123	0,71	1,96	1,69
45	-35	47	60	0,49	0,91	0,78
45	-30	64	67	0,52	1,11	0,95
45	-25	88	78	0,55	1,31	1,13
45	-23,3	97	82	0,57	1,38	1,19
45	-20	118	92	0,60	1,50	1,29
45	-15	155	109	0,66	1,66	1,43
45	-10	199	129	0,73	1,79	1,54
50	-35	41	59	0,49	0,81	0,69
50	-30	58	68	0,52	0,99	0,85
50	-25	81	80	0,56	1,18	1,01
50	-23,3	90	85	0,57	1,24	1,07
50	-20	111	95	0,61	1,35	1,16
50	-15	147	113	0,67	1,51	1,30
50	-10	190	135	0,75	1,63	1,40
55	-35	35	58	0,48	0,70	0,60
55	-30	51	68	0,52	0,87	0,75
55	-25	74	82	0,56	1,05	0,90
55	-23,3	83	87	0,58	1,11	0,95
55	-20	103	98	0,62	1,22	1,05
55	-15	139	118	0,69	1,37	1,17
55	-10	181	141	0,77	1,49	1,28
60	-35	29	57	0,48	0,59	0,50
60	-30	44	69	0,52	0,75	0,65
60	-25	67	84	0,57	0,93	0,80
60	-23,3	76	89	0,59	0,98	0,85
60	-20	95	102	0,63	1,09	0,94
60	-15	131	123	0,71	1,24	1,06
60	-10	173	148	0,80	1,36	1,17
65	-35	23	56	0,48	0,47	0,40
65	-30	38	69	0,52	0,64	0,55
65	-25	60	85	0,58	0,81	0,70
65	-23,3	68	92	0,60	0,87	0,75
65	-20	88	105	0,64	0,97	0,84
65	-15	123	128	0,72	1,12	0,96
65	-10	164	154	0,82	1,24	1,07

CECOMAF

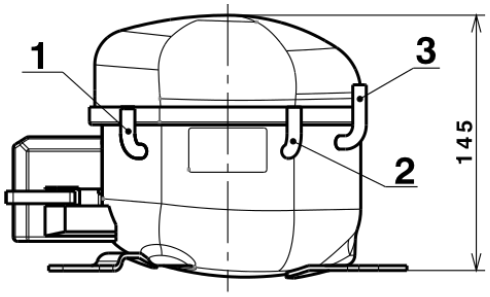
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	58	61	0,49	0,95	0,82
40	-30	79	67	0,51	1,18	1,02
40	-25	106	76	0,54	1,40	1,21
40	-23,3	117	80	0,56	1,47	1,27
40	-20	140	88	0,59	1,58	1,37
40	-15	180	104	0,64	1,73	1,49
40	-10	225	123	0,71	1,84	1,59
45	-35	50	60	0,49	0,83	0,71
45	-30	69	67	0,52	1,02	0,88
45	-25	94	78	0,55	1,21	1,04
45	-23,3	104	82	0,57	1,27	1,09
45	-20	126	92	0,60	1,37	1,18
45	-15	163	109	0,66	1,50	1,30
45	-10	207	129	0,73	1,61	1,39
50	-35	41	59	0,49	0,70	0,60
50	-30	59	68	0,52	0,86	0,75
50	-25	82	80	0,56	1,03	0,89
50	-23,3	91	85	0,57	1,08	0,93
50	-20	111	95	0,61	1,17	1,01
50	-15	147	113	0,67	1,30	1,12
50	-10	189	135	0,75	1,40	1,21
55	-35	33	58	0,48	0,57	0,49
55	-30	48	68	0,52	0,71	0,61
55	-25	70	82	0,56	0,85	0,74
55	-23,3	78	87	0,58	0,90	0,78
55	-20	97	98	0,62	0,99	0,85
55	-15	131	118	0,69	1,11	0,96
55	-10	171	141	0,77	1,21	1,04
60	-35	25	57	0,48	0,43	0,37
60	-30	38	69	0,52	0,55	0,48
60	-25	57	84	0,57	0,69	0,59
60	-23,3	65	89	0,59	0,73	0,63
60	-20	83	102	0,63	0,82	0,71
60	-15	115	123	0,71	0,93	0,81
60	-10	153	148	0,80	1,04	0,89
65	-35	16	56	0,48	0,29	0,25
65	-30	28	69	0,52	0,40	0,34
65	-25	45	85	0,58	0,53	0,46
65	-23,3	52	92	0,60	0,57	0,49
65	-20	69	105	0,64	0,66	0,57
65	-15	99	128	0,72	0,77	0,67
65	-10	135	154	0,82	0,88	0,76

EN12900

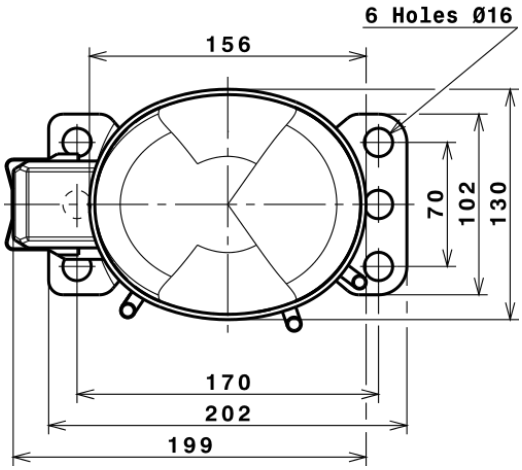
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	509,5300971556	99,8588486315	0,6257031088	9,3641104788694
2	15,2592139231	3,1925949559	0,0115000198	0,3123243711983
3	-4,4867357748	1,8675323389	0,0066302989	-0,045632093320892
4	0,1210291560	0,0673984997	0,0002472275	0,0032390402238893
5	-0,0806436340	0,0591757688	0,0002090905	-0,00048212823539364

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$

COMPRESSOR DIMENSIONS

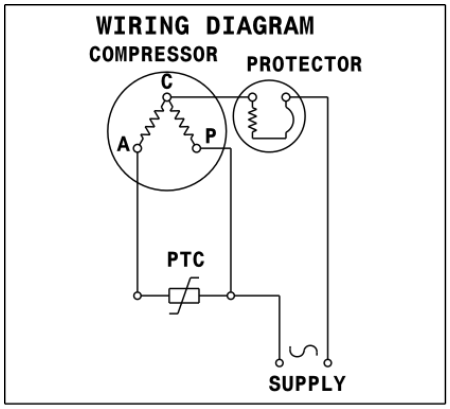


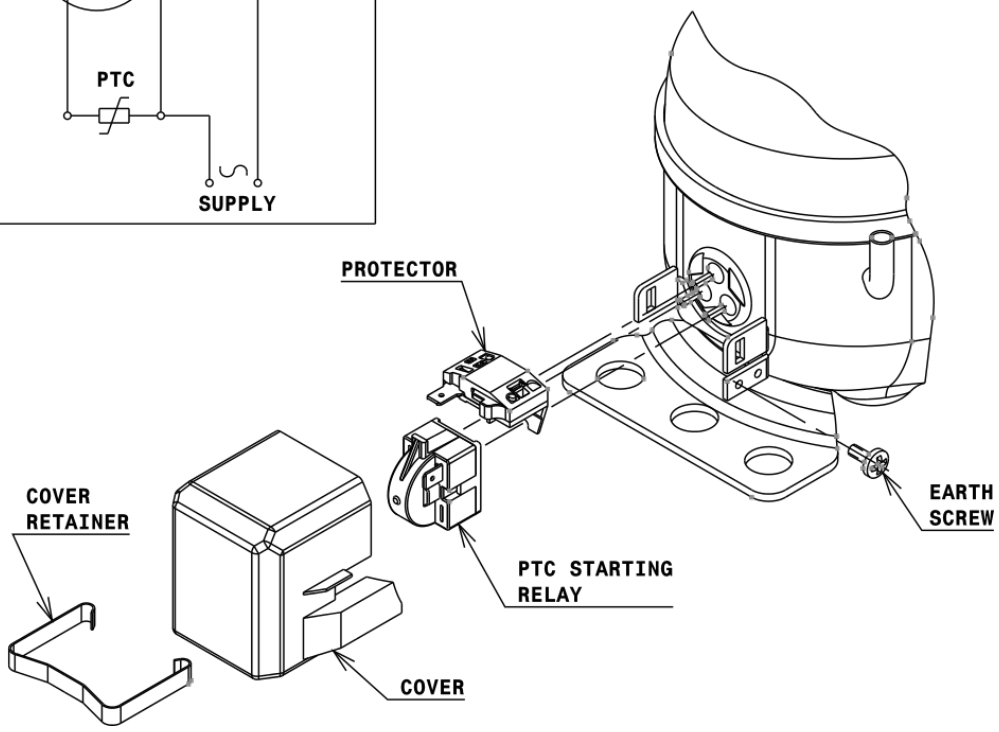
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,1 mm
2	Service	6,1 mm
3	Discharge	5,1 mm



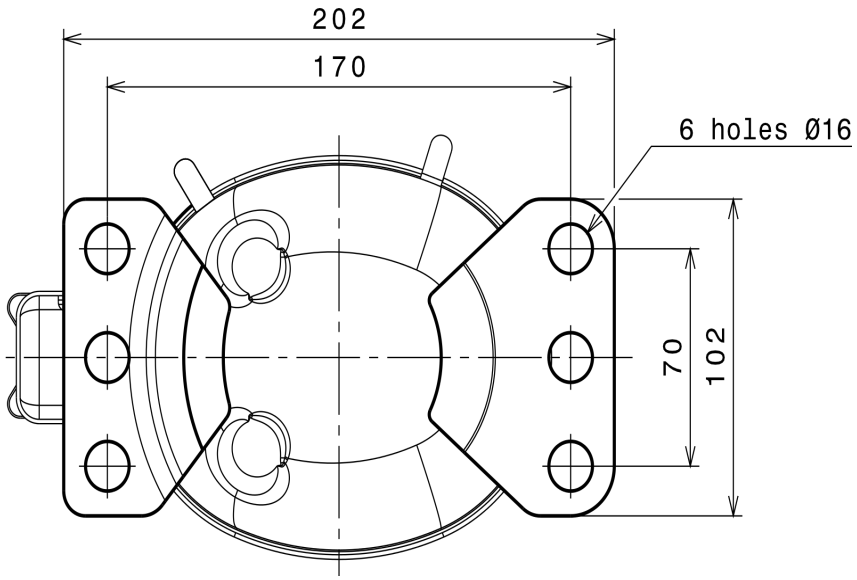
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (B, Small L ranges)





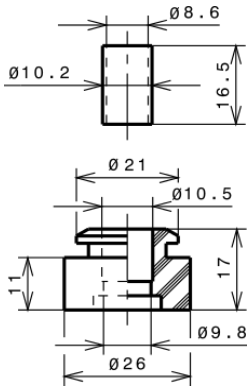
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R134a LBP