

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **B38H**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	Low Back Pressure	Displacement	3,80 cm ³	Nominal Power	1/8 hp
Refrigerant	R134a	Diameter	19,00 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-35,0 °C to -15,0 °C	Stroke	6,70 mm	Voltage range	187-255 V
Expansion	Capillar	Net Weight	4,60 Kg	Type	RSIR
Comp. Cooling	Static/Fan cooled	Oil type	ISO VG 15 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	130 cm ³	Locked Rotor Amps (LRA)	3,18 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	37,00 Ω
				Start W. resist. at 25°C	11,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	74 kCal/h	63 W
COP	0,95 W/W	0,72 W/W
EER	0,82 kCal/Wh	0,62 kCal/Wh
Input Power	91 W	88 W
Current	0,63 A	0,63 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

	Option 1	Option 2		
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 (087)	BT35-120 (087)		
Current	3,50 A	3,50 A		
Time check	7-16 seg	7-16 seg		
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C		

Technical Data Sheet

ENGINEERING
TOMORROW



ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	44	63	0,69	0,81	0,70
40	-30	60	70	0,66	1,00	0,86
40	-25	81	78	0,64	1,22	1,05
40	-23,3	90	80	0,63	1,30	1,12
40	-20	109	86	0,63	1,46	1,26
40	-15	142	96	0,63	1,71	1,47
40	-10	180	107	0,66	1,95	1,68

45	-35	41	66	0,68	0,73	0,62
45	-30	56	73	0,65	0,90	0,77
45	-25	77	81	0,63	1,10	0,95
45	-23,3	85	84	0,63	1,18	1,01
45	-20	103	90	0,63	1,32	1,14
45	-15	135	101	0,64	1,55	1,34
45	-10	172	112	0,68	1,78	1,53

50	-35	38	68	0,67	0,65	0,56
50	-30	52	76	0,64	0,80	0,69
50	-25	72	84	0,63	0,99	0,85
50	-23,3	80	87	0,63	1,06	0,91
50	-20	97	94	0,63	1,20	1,03
50	-15	128	105	0,66	1,41	1,22
50	-10	164	117	0,71	1,63	1,40

55	-35	35	70	0,66	0,58	0,50
55	-30	48	78	0,64	0,71	0,61
55	-25	67	88	0,63	0,89	0,76
55	-23,3	74	91	0,63	0,95	0,82
55	-20	91	98	0,64	1,08	0,93
55	-15	121	109	0,67	1,29	1,11
55	-10	156	122	0,74	1,49	1,28

60	-35	32	73	0,65	0,51	0,44
60	-30	44	81	0,63	0,63	0,54
60	-25	62	91	0,63	0,79	0,68
60	-23,3	69	95	0,63	0,85	0,73
60	-20	85	102	0,65	0,97	0,84
60	-15	114	114	0,69	1,17	1,00
60	-10	149	127	0,77	1,36	1,17

65	-35	29	75	0,64	0,45	0,39
65	-30	40	84	0,63	0,55	0,48
65	-25	57	94	0,63	0,70	0,60
65	-23,3	64	98	0,64	0,76	0,65
65	-20	79	106	0,66	0,87	0,75
65	-15	107	118	0,71	1,06	0,91
65	-10	141	132	0,81	1,24	1,07

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	48	63	0,69	0,76	0,65
40	-30	67	70	0,66	0,96	0,83
40	-25	91	78	0,64	1,18	1,02
40	-23,3	101	80	0,63	1,25	1,08
40	-20	121	86	0,63	1,40	1,21
40	-15	156	96	0,63	1,62	1,40
40	-10	196	107	0,66	1,82	1,58

45	-35	43	66	0,68	0,66	0,57
45	-30	60	73	0,65	0,82	0,71
45	-25	82	81	0,63	1,01	0,87
45	-23,3	91	84	0,63	1,08	0,93
45	-20	109	90	0,63	1,21	1,05
45	-15	142	101	0,64	1,41	1,22
45	-10	180	112	0,68	1,60	1,38

50	-35	38	68	0,67	0,56	0,48
50	-30	53	76	0,64	0,70	0,60
50	-25	72	84	0,63	0,86	0,74
50	-23,3	80	87	0,63	0,92	0,79
50	-20	98	94	0,63	1,04	0,90
50	-15	128	105	0,66	1,22	1,05
50	-10	164	117	0,71	1,40	1,21

55	-35	33	70	0,66	0,47	0,41
55	-30	45	78	0,64	0,58	0,50
55	-25	63	88	0,63	0,72	0,62
55	-23,3	70	91	0,63	0,77	0,67
55	-20	86	98	0,64	0,88	0,76
55	-15	114	109	0,67	1,04	0,90
55	-10	147	122	0,74	1,21	1,05

60	-35	28	73	0,65	0,39	0,34
60	-30	38	81	0,63	0,47	0,41
60	-25	54	91	0,63	0,59	0,51
60	-23,3	60	95	0,63	0,63	0,55
60	-20	74	102	0,65	0,73	0,63
60	-15	100	114	0,69	0,88	0,76
60	-10	131	127	0,77	1,04	0,90

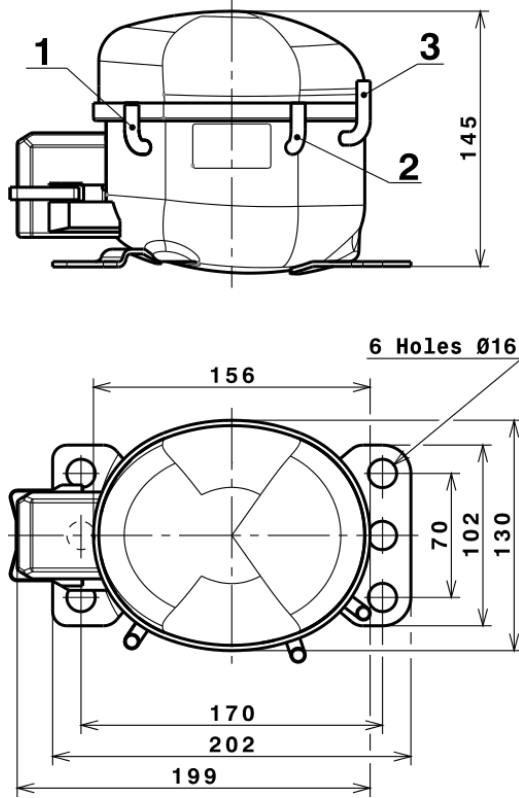
65	-35	23	75	0,64	0,31	0,27
65	-30	31	84	0,63	0,37	0,32
65	-25	44	94	0,63	0,47	0,40
65	-23,3	50	98	0,64	0,51	0,44
65	-20	63	106	0,66	0,59	0,51
65	-15	86	118	0,71	0,73	0,63
65	-10	115	132	0,81	0,88	0,76

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	455,1411287741	89,0271617067	0,4932770661	8,4370233540211
2	14,1527790750	2,0726155866	0,0084440929	0,29256253212432
3	-4,1942959868	1,1840828767	0,0084110539	-0,046935971503649
4	0,1033155401	0,0232052728	0,0004567137	0,0027636048981326
5	-0,0917214249	0,0198412146	0,0002939062	-0,00094483726222378

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

COMPRESSOR DIMENSIONS

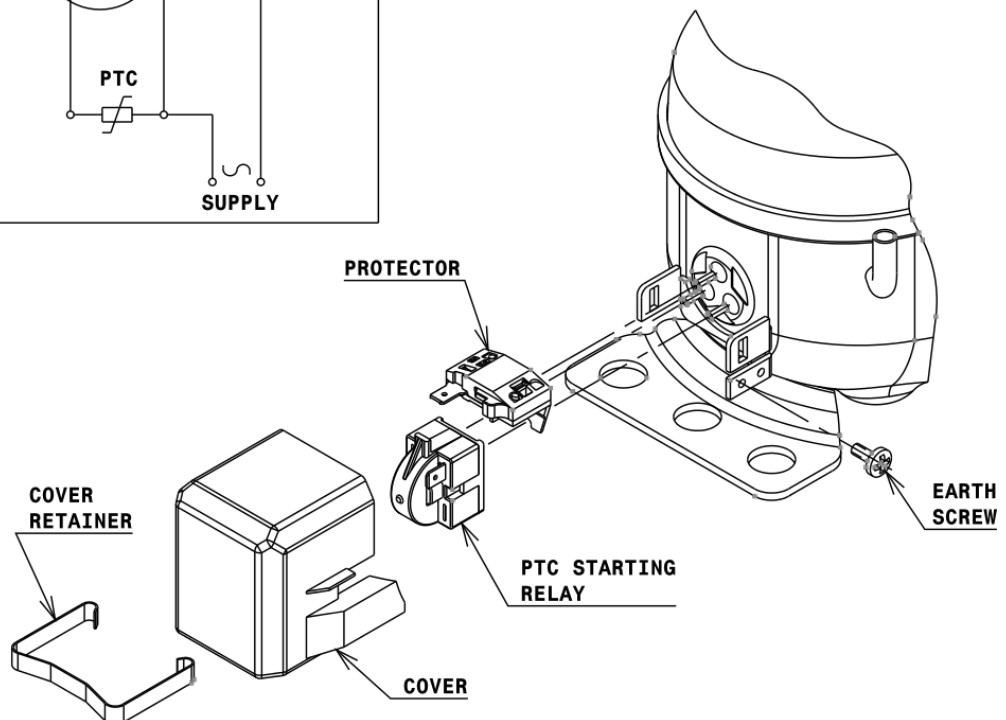
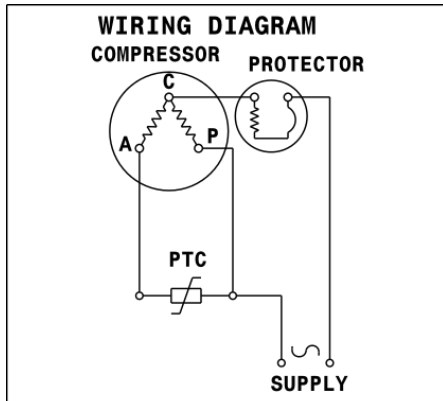


DESIGNATION INTERNAL DIAM.

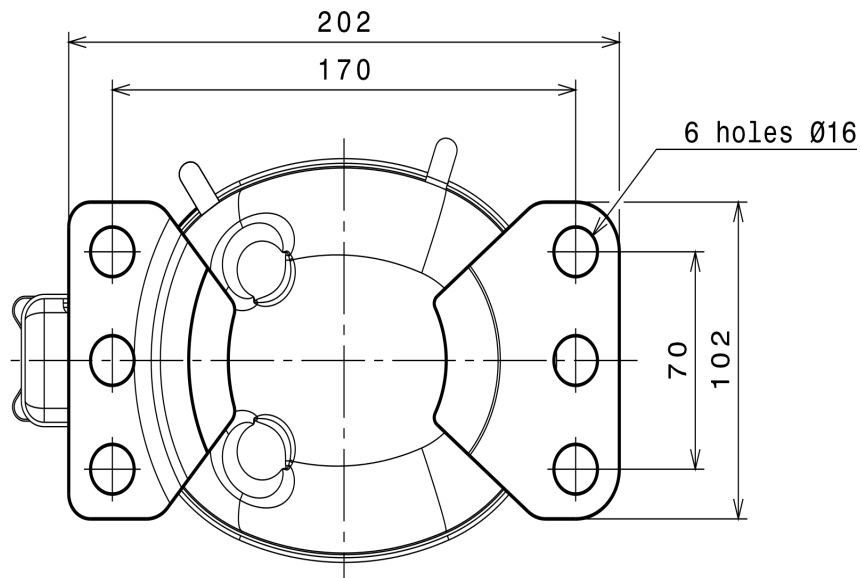
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



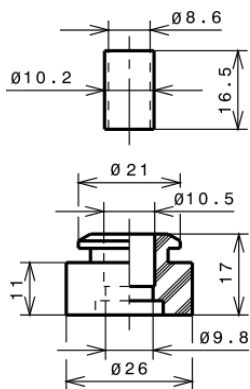
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a LBP

