

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **B35G0**
Voltage **100V 50/60Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High-Medium Back Pressure	Displacement	3,50 cm ³	Nominal Power	1/8 hp
Refrigerant	R134a	Diameter	17,20 mm	Voltage/Frequency	100V 60Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,20 mm	Voltage range	85-110 V
Expansion	Capillar	Net Weight	5,89 Kg	Type	RSIR
Comp. Cooling	Static	Oil type	RL15M	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	130 cm ³	Locked Rotor Amps (LRA)	10,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,00 A
				Main W. resist. at 25°C	3,82 Ω
				Start W. resist. at 25°C	4,90 Ω

NOMINAL PERFORMANCE

APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	364 kCal/h	352 W
COP	2,60 W/W	2,23 W/W
EER	2,23 kCal/Wh	1,93 kCal/Wh
Input Power	163 W	158 W
Current	2,07 A	2,02 A

TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T _e)	7,2 °C	5,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	46,0 °C	55,0 °C
Ambient temp. (T _{amb.})	35,0 °C	32,0 °C
Suction temp. (T _{suction})	35,0 °C	32,0 °C
Voltage/Frequency	100 V 60 Hz	100 V 60 Hz

ELECTRICAL COMPONENTS

	Option 1	Option 2	Option 3	Option 4
Relay				
Reference	JPQII-4.7 (010)	QP2-4.7 (010)	8EA14C1-02 (033) (SM)	QP2-4R7 (010)
Voltage	V	V	V	V
Resistance	Ω	Ω	Ω	Ω
Protector				
Reference	BT66-125 (031)	DRB235P61A2 (031)	5TM757SFBYY (246) (SM)	
Current				
Time check				
Disc temp. (Open/Close)				



ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	98	79	1,38	1,44	1,24
40	-20	130	87	1,43	1,74	1,50
40	-15	170	95	1,49	2,08	1,79
40	-10	218	103	1,55	2,46	2,11
40	-5	275	112	1,62	2,85	2,45
40	0	340	121	1,70	3,26	2,80
40	5	413	131	1,78	3,68	3,16
40	7,2	448	135	1,81	3,86	3,32
40	10	495	141	1,86	4,09	3,52

45	-25	92	80	1,39	1,33	1,15
45	-20	120	89	1,45	1,57	1,35
45	-15	157	98	1,52	1,85	1,59
45	-10	202	108	1,59	2,17	1,86
45	-5	255	118	1,67	2,51	2,16
45	0	317	129	1,76	2,86	2,46
45	5	387	139	1,85	3,22	2,77
45	7,2	420	144	1,90	3,38	2,91
45	10	465	151	1,95	3,59	3,09

50	-25	85	81	1,39	1,23	1,05
50	-20	110	91	1,47	1,41	1,21
50	-15	144	102	1,55	1,64	1,41
50	-10	185	113	1,63	1,91	1,64
50	-5	235	124	1,72	2,20	1,89
50	0	294	136	1,82	2,51	2,16
50	5	360	148	1,93	2,82	2,43
50	7,2	392	154	1,98	2,97	2,55
50	10	435	161	2,05	3,15	2,71

55	-25	79	82	1,40	1,12	0,96
55	-20	101	94	1,48	1,25	1,08
55	-15	131	106	1,57	1,44	1,24
55	-10	169	118	1,67	1,67	1,43
55	-5	216	131	1,78	1,92	1,65
55	0	270	144	1,89	2,19	1,88
55	5	334	157	2,01	2,47	2,12
55	7,2	364	163	2,07	2,60	2,23
55	10	405	171	2,15	2,76	2,37

60	-25	73	83	1,41	1,02	0,88
60	-20	91	96	1,50	1,10	0,95
60	-15	118	109	1,60	1,25	1,08
60	-10	153	123	1,71	1,44	1,24
60	-5	196	137	1,83	1,66	1,43
60	0	247	151	1,96	1,90	1,64
60	5	307	166	2,10	2,15	1,85
60	7,2	336	172	2,16	2,27	1,95
60	10	375	181	2,25	2,41	2,08

65	-25	66	84	1,41	0,92	0,79
65	-20	81	98	1,52	0,96	0,83
65	-15	105	113	1,63	1,08	0,93
65	-10	136	128	1,75	1,24	1,07
65	-5	176	143	1,88	1,43	1,23
65	0	224	159	2,03	1,64	1,41
65	5	281	175	2,18	1,87	1,61
65	7,2	308	182	2,26	1,97	1,70
65	10	345	191	2,35	2,10	1,81

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	106	79	1,38	1,33	1,15
40	-20	140	87	1,44	1,61	1,39
40	-15	184	95	1,50	1,93	1,66
40	-10	236	104	1,56	2,27	1,96
40	-5	297	113	1,63	2,63	2,27
40	0	367	122	1,70	3,00	2,60
40	5	445	132	1,78	3,38	2,92
40	7,2	482	136	1,82	3,55	3,07
40	10	532	141	1,87	3,76	3,25

45	-25	98	80	1,39	1,22	1,06
45	-20	129	90	1,45	1,44	1,25
45	-15	169	99	1,52	1,70	1,47
45	-10	217	109	1,60	1,99	1,72
45	-5	274	119	1,68	2,30	1,99
45	0	340	130	1,77	2,62	2,27
45	5	414	140	1,86	2,95	2,55
45	7,2	450	145	1,90	3,09	2,67
45	10	497	152	1,96	3,28	2,83

50	-25	91	81	1,40	1,12	0,96
50	-20	118	92	1,47	1,28	1,11
50	-15	153	103	1,55	1,50	1,29
50	-10	198	114	1,64	1,74	1,50
50	-5	251	125	1,73	2,00	1,73
50	0	313	137	1,83	2,28	1,97
50	5	383	149	1,94	2,57	2,22
50	7,2	417	155	1,99	2,70	2,33
50	10	462	162	2,06	2,86	2,47

55	-25	84	82	1,40	1,01	0,88
55	-20	107	94	1,49	1,13	0,98
55	-15	138	106	1,58	1,30	1,12
55	-10	179	119	1,68	1,51	1,30
55	-5	228	131	1,78	1,73	1,50
55	0	286	145	1,90	1,98	1,71
55	5	352	158	2,02	2,23	1,93
55	7,2	384	164	2,08	2,34	2,02
55	10	428	172	2,16	2,49	2,15

60	-25	76	83	1,41	0,91	0,79
60	-20	95	96	1,50	0,99	0,85
60	-15	123	110	1,60	1,12	0,97
60	-10	160	124	1,72	1,29	1,12
60	-5	205	138	1,84	1,49	1,29
60	0	259	152	1,97	1,70	1,47
60	5	322	167	2,11	1,93	1,67
60	7,2	352	173	2,17	2,03	1,75
60	10	393	182	2,26	2,16	1,87

65	-25	69	84	1,42	0,82	0,71
65	-20	84	99	1,52	0,85	0,74
65	-15	108	113	1,63	0,95	0,82
65	-10	141	128	1,76	1,09	0,95
65	-5	182	144	1,89	1,26	1,09
65	0	232	160	2,04	1,45	1,26
65	5	291	176	2,20	1,65	1,43
65	7,2	319	183	2,27	1,75	1,51
65	10	358	192	2,37	1,86	1,61

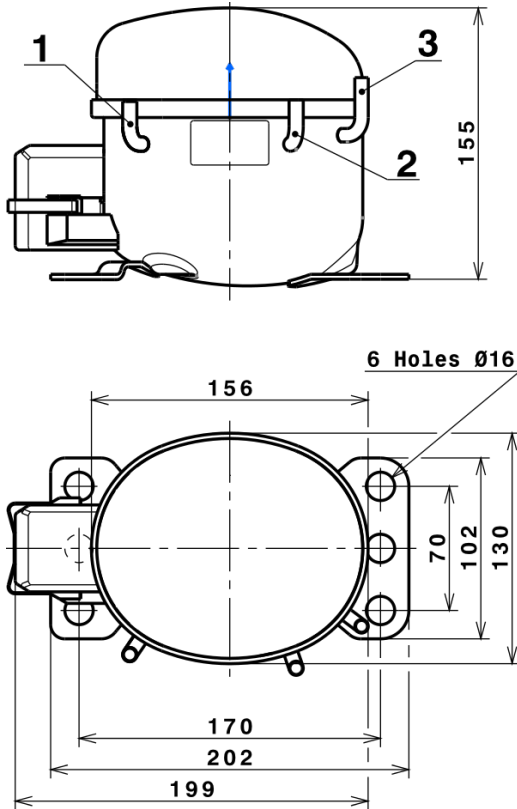


EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	583,5159181323	63,3439771583	1,1442055613	9,884968357333
2	21,0859786445	-0,1851084062	-0,0031403181	0,40487540777532
3	-5,5402663489	1,5454888889	0,0143494256	-0,045980767455967
4	0,1712802688	0,0079907849	0,0001838613	0,0048754973164514
5	-0,1619526150	0,0535980426	0,0005171852	-0,0013096461136232

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

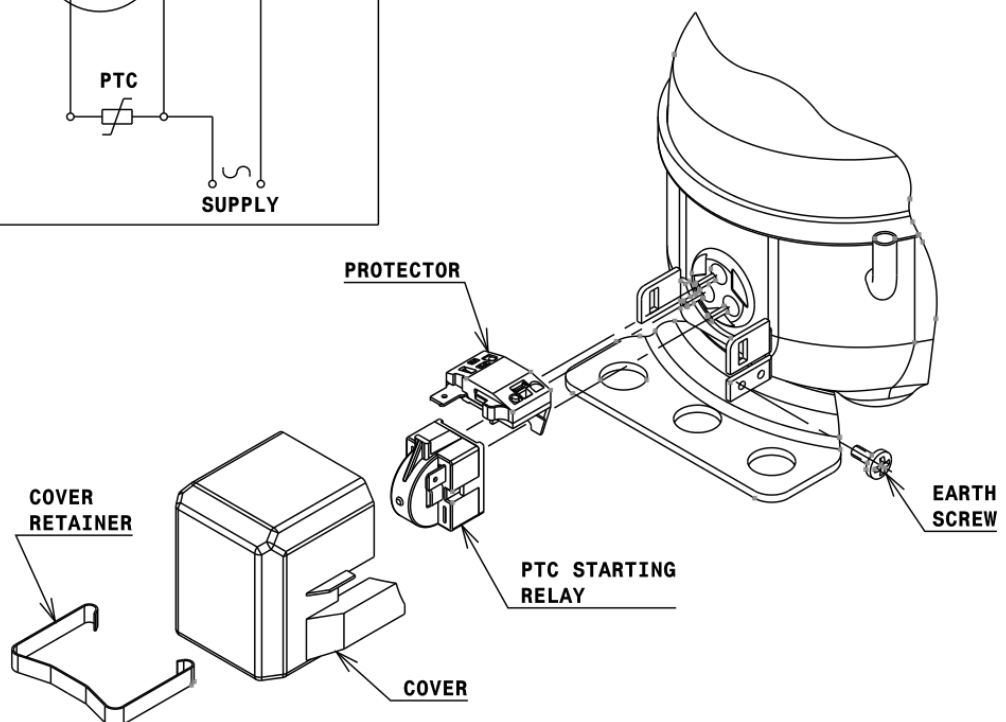
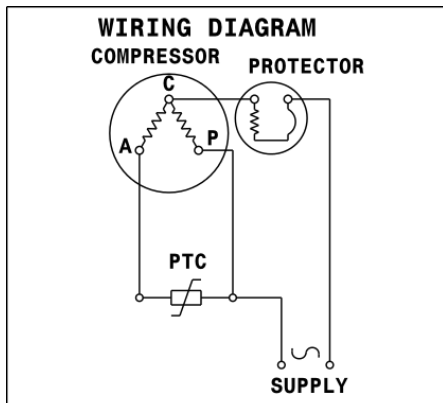


DESIGNATION INTERNAL DIAM.

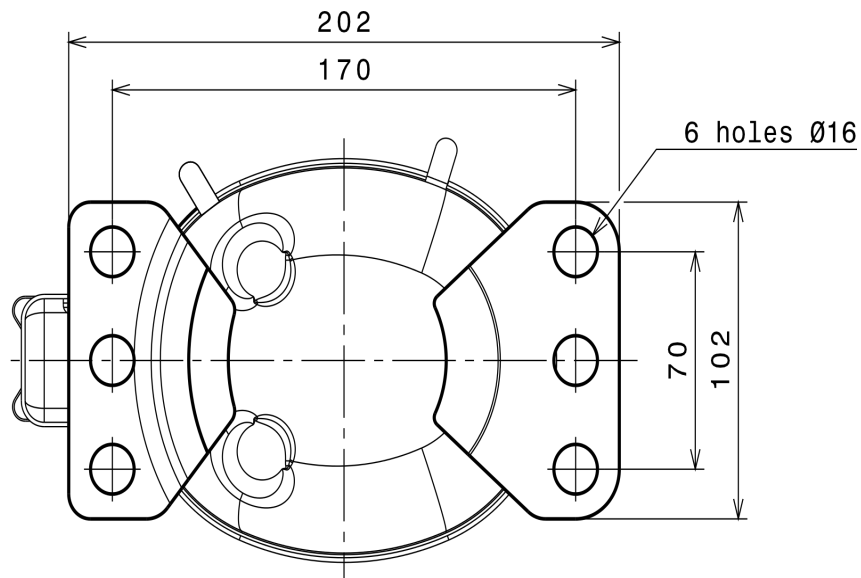
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



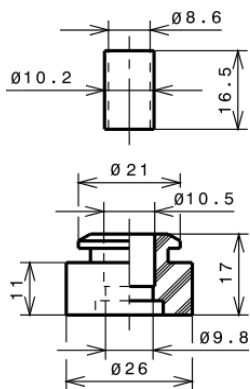
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HMBP

