

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 50Hz
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	120 cm ³	Locked Rotor Amps (LRA)	11,10 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	312 kCal/h	302 W
COP	2,59 W/W	2,21 W/W
EER	2,23 kCal/Wh	1,91 kCal/Wh
Input Power	140 W	137 W
Current	2,05 A	2,03 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 50 Hz	100 V 50 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	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-25	81	74	1,67	1,27	1,09
40	-20	110	81	1,70	1,58	1,36
40	-15	145	87	1,73	1,93	1,66
40	-10	187	94	1,76	2,32	1,99
40	-5	235	100	1,79	2,73	2,35
40	0	290	106	1,83	3,17	2,73
40	5	351	112	1,86	3,63	3,12
40	7,2	380	115	1,88	3,84	3,30
40	10	419	118	1,90	4,12	3,54

45	-25	74	75	1,67	1,15	0,99
45	-20	100	83	1,71	1,41	1,21
45	-15	133	91	1,74	1,71	1,47
45	-10	173	98	1,78	2,04	1,76
45	-5	218	106	1,82	2,40	2,07
45	0	271	113	1,87	2,79	2,40
45	5	329	120	1,91	3,19	2,74
45	7,2	357	123	1,93	3,37	2,90
45	10	395	127	1,96	3,61	3,10

50	-25	67	76	1,68	1,03	0,88
50	-20	91	85	1,72	1,24	1,07
50	-15	121	94	1,76	1,50	1,29
50	-10	158	103	1,80	1,79	1,54
50	-5	202	111	1,85	2,11	1,81
50	0	252	120	1,91	2,44	2,10
50	5	308	128	1,96	2,80	2,40
50	7,2	335	132	1,99	2,96	2,54
50	10	371	136	2,02	3,16	2,72

55	-25	60	77	1,68	0,91	0,78
55	-20	82	87	1,73	1,09	0,94
55	-15	110	97	1,78	1,31	1,13
55	-10	144	107	1,83	1,57	1,35
55	-5	185	117	1,89	1,84	1,58
55	0	232	126	1,95	2,14	1,84
55	5	286	136	2,02	2,45	2,11
55	7,2	312	140	2,05	2,59	2,23
55	10	347	145	2,09	2,78	2,39

60	-25	53	78	1,68	0,79	0,68
60	-20	72	89	1,74	0,94	0,81
60	-15	98	100	1,79	1,13	0,97
60	-10	130	111	1,86	1,35	1,16
60	-5	168	122	1,92	1,60	1,38
60	0	213	133	2,00	1,86	1,60
60	5	265	144	2,08	2,14	1,84
60	7,2	289	148	2,11	2,27	1,95
60	10	323	154	2,16	2,43	2,09

65	-25	46	79	1,69	0,68	0,58
65	-20	63	91	1,75	0,80	0,69
65	-15	86	104	1,81	0,96	0,83
65	-10	115	116	1,88	1,16	1,00
65	-5	151	128	1,96	1,38	1,18
65	0	194	140	2,05	1,61	1,39
65	5	243	152	2,14	1,87	1,60
65	7,2	267	157	2,18	1,98	1,70
65	10	299	163	2,24	2,13	1,83

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-25	87	74	1,67	1,17	1,01
40	-20	119	81	1,70	1,46	1,26
40	-15	157	88	1,73	1,79	1,54
40	-10	202	94	1,76	2,14	1,85
40	-5	254	101	1,79	2,52	2,18
40	0	313	107	1,83	2,92	2,53
40	5	378	113	1,87	3,34	2,89
40	7,2	409	116	1,88	3,53	3,05
40	10	450	119	1,90	3,78	3,27

45	-25	79	75	1,67	1,05	0,91
45	-20	108	83	1,71	1,30	1,12
45	-15	143	91	1,74	1,57	1,36
45	-10	185	99	1,78	1,88	1,62
45	-5	234	106	1,83	2,21	1,91
45	0	290	114	1,87	2,55	2,21
45	5	353	121	1,92	2,92	2,52
45	7,2	382	124	1,94	3,08	2,66
45	10	422	128	1,96	3,29	2,85

50	-25	71	76	1,68	0,93	0,81
50	-20	97	85	1,72	1,14	0,98
50	-15	130	94	1,76	1,37	1,19
50	-10	169	103	1,81	1,64	1,41
50	-5	215	112	1,86	1,92	1,66
50	0	268	120	1,91	2,22	1,92
50	5	328	129	1,97	2,54	2,20
50	7,2	356	133	2,00	2,69	2,32
50	10	394	137	2,03	2,87	2,48

55	-25	63	77	1,68	0,82	0,71
55	-20	86	88	1,73	0,99	0,85
55	-15	116	98	1,78	1,19	1,03
55	-10	152	108	1,83	1,42	1,22
55	-5	196	117	1,89	1,66	1,44
55	0	246	127	1,96	1,93	1,67
55	5	302	137	2,03	2,21	1,91
55	7,2	330	141	2,06	2,34	2,02
55	10	366	146	2,10	2,50	2,16

60	-25	56	78	1,69	0,71	0,61
60	-20	75	90	1,74	0,84	0,73
60	-15	102	101	1,80	1,01	0,87
60	-10	136	112	1,86	1,21	1,05
60	-5	176	123	1,93	1,43	1,24
60	0	223	134	2,00	1,67	1,44
60	5	277	145	2,09	1,92	1,66
60	7,2	303	149	2,12	2,03	1,75
60	10	338	155	2,17	2,18	1,88

65	-25	48	79	1,69	0,60	0,52
65	-20	65	92	1,75	0,70	0,61
65	-15	89	104	1,81	0,85	0,73
65	-10	119	116	1,89	1,02	0,88
65	-5	157	129	1,97	1,22	1,05
65	0	201	141	2,05	1,43	1,23
65	5	252	152	2,15	1,65	1,43
65	7,2	277	158	2,19	1,75	1,52
65	10	310	164	2,25	1,89	1,63

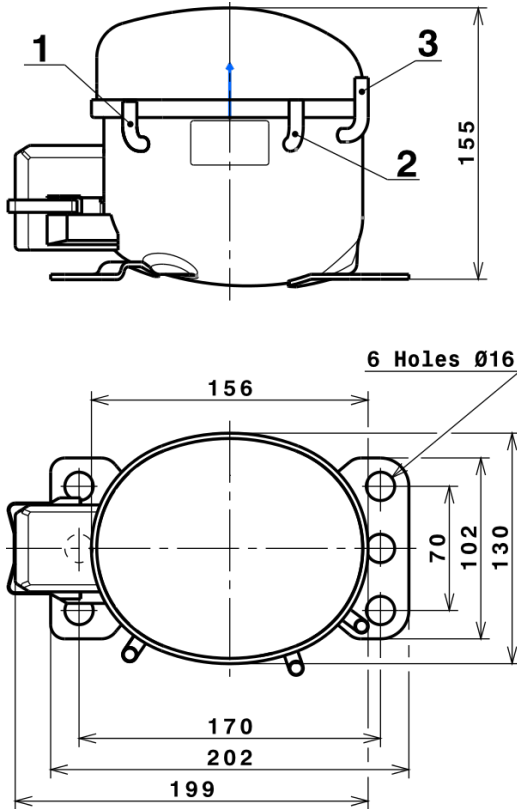


EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	492,5388078403	54,3012454137	1,4457550583	8,3211749824295
2	17,0613554998	-0,5837901223	-0,0053162280	0,32121827630472
3	-4,5999599864	1,3848249474	0,0097170799	-0,036394159204593
4	0,1337808757	-0,0017096260	0,0001000376	0,0038468167845499
5	-0,1201400754	0,0471714849	0,0003538438	-0,00064584327742102

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

COMPRESSOR DIMENSIONS

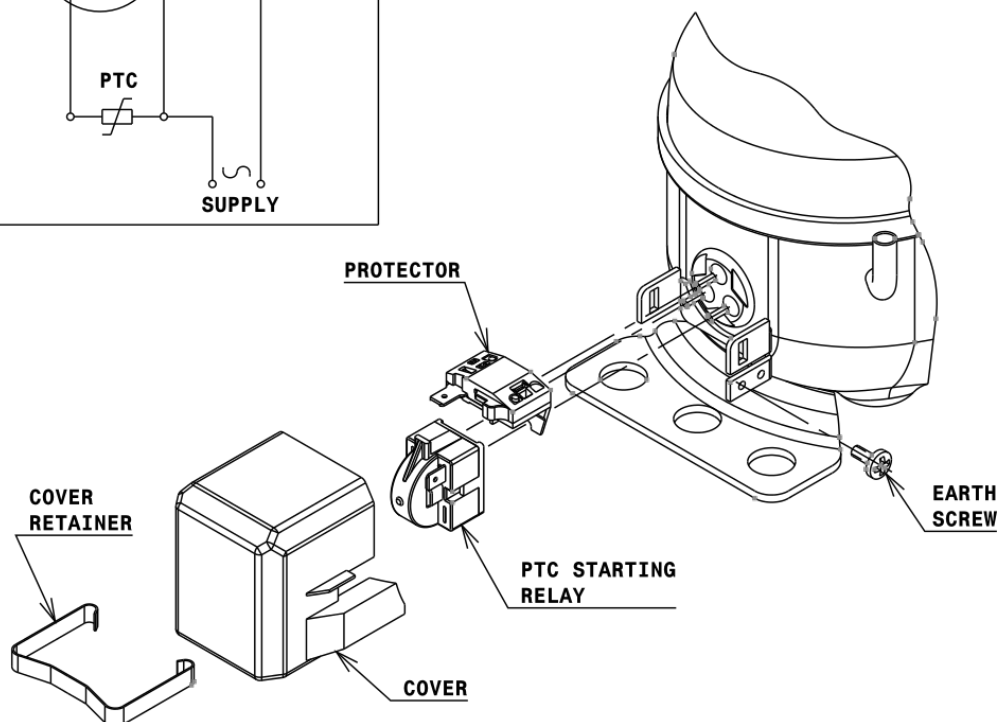
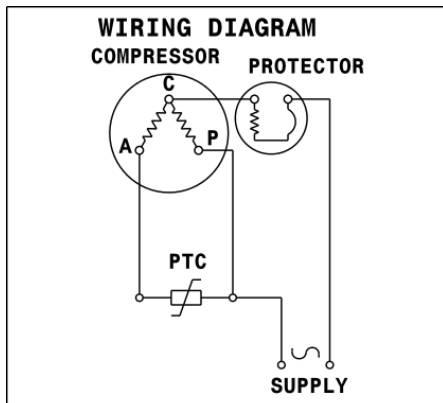


DESIGNATION INTERNAL DIAM.

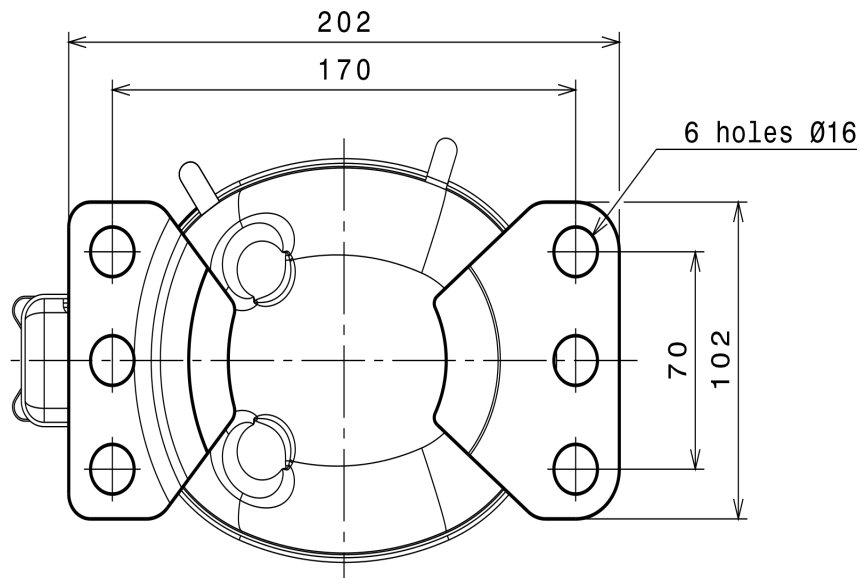
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



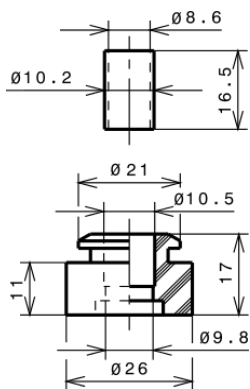
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

$\varnothing 16$ holes (170x70 net)



SOA

SOA R134a HMBP

