

Technical Data Sheet

ENGINEERING
TOMORROW



Compressor model **B43GL**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

COMPRESSOR

MOTOR

Application	High Back Pressure	Displacement	4,30 cm ³	Nominal Power	1/6 hp
Refrigerant	R134a	Diameter	19,00 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	15,20 mm	Voltage range	187-255 V
Expansion	Capillar/Valve	Net Weight	5,50 Kg	Type	RSIR
Comp. Cooling	Fan cooled	Oil type	POE 32	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	120 cm ³	Locked Rotor Amps (LRA)	7,15 A
Compatible refriger.	R1234yf			Main W. resist. at 25°C	14,50 Ω
				Start W. resist. at 25°C	9,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	360 kCal/h	348 W
COP	2,06 W/W	1,75 W/W
EER	1,77 kCal/Wh	1,51 kCal/Wh
Input Power	203 W	198 W
Current	1,49 A	1,48 A

APPROVALS



TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	220 V 50 Hz	220 V 50 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	DRB243S61A2 (043)	BT68-135 (043)		
Current	6,80 A			
Time check	7-16 seg			
Disc temp. (Open/Close)	135,00 / 61,00 °C	135,00 / 61,00 °C		



ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	151	144	1,37	1,22	1,05
40	-10	196	152	1,38	1,50	1,29
40	-5	249	160	1,39	1,80	1,55
40	0	308	169	1,40	2,12	1,82
40	5	374	178	1,42	2,44	2,10
40	7,2	405	182	1,43	2,58	2,22
40	10	447	188	1,44	2,77	2,38

45	-15	139	145	1,38	1,11	0,96
45	-10	184	155	1,38	1,38	1,19
45	-5	235	164	1,39	1,67	1,43
45	0	294	174	1,41	1,96	1,69
45	5	359	184	1,44	2,26	1,95
45	7,2	390	189	1,45	2,40	2,06
45	10	431	195	1,47	2,57	2,21

50	-15	127	147	1,38	1,01	0,87
50	-10	171	157	1,38	1,27	1,09
50	-5	222	168	1,40	1,54	1,32
50	0	280	179	1,42	1,81	1,56
50	5	344	191	1,45	2,10	1,80
50	7,2	375	196	1,47	2,22	1,91
50	10	416	203	1,49	2,38	2,05

55	-15	115	148	1,38	0,90	0,78
55	-10	159	160	1,39	1,15	0,99
55	-5	209	172	1,41	1,41	1,21
55	0	266	184	1,44	1,67	1,44
55	5	329	197	1,47	1,94	1,67
55	7,2	360	203	1,49	2,06	1,77
55	10	400	210	1,52	2,21	1,90

60	-15	104	150	1,38	0,80	0,69
60	-10	146	163	1,39	1,04	0,90
60	-5	195	176	1,41	1,29	1,11
60	0	251	190	1,45	1,54	1,33
60	5	315	204	1,50	1,80	1,54
60	7,2	345	210	1,52	1,91	1,64
60	10	385	218	1,56	2,05	1,76

65	-15	92	151	1,38	0,70	0,61
65	-10	133	165	1,40	0,94	0,81
65	-5	182	180	1,42	1,18	1,01
65	0	237	195	1,47	1,42	1,22
65	5	300	210	1,52	1,66	1,43
65	7,2	329	217	1,55	1,77	1,52
65	10	369	226	1,59	1,90	1,64

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	163	145	1,38	1,12	0,97
40	-10	212	153	1,38	1,39	1,20
40	-5	268	161	1,39	1,66	1,44
40	0	332	170	1,40	1,95	1,69
40	5	402	179	1,42	2,25	1,94
40	7,2	436	183	1,43	2,38	2,05
40	10	480	189	1,45	2,54	2,20

45	-15	149	146	1,38	1,02	0,88
45	-10	197	155	1,38	1,27	1,10
45	-5	252	165	1,39	1,53	1,32
45	0	315	175	1,41	1,80	1,55
45	5	384	186	1,44	2,07	1,79
45	7,2	417	190	1,45	2,19	1,89
45	10	461	197	1,47	2,35	2,03

50	-15	136	148	1,38	0,92	0,79
50	-10	182	158	1,39	1,15	1,00
50	-5	236	169	1,40	1,40	1,21
50	0	298	180	1,42	1,65	1,43
50	5	366	192	1,46	1,91	1,65
50	7,2	398	197	1,47	2,02	1,74
50	10	442	204	1,50	2,16	1,87

55	-15	122	149	1,38	0,82	0,71
55	-10	168	161	1,39	1,04	0,90
55	-5	221	173	1,41	1,27	1,10
55	0	281	186	1,44	1,51	1,31
55	5	348	198	1,48	1,75	1,51
55	7,2	380	204	1,50	1,86	1,61
55	10	422	212	1,53	1,99	1,72

60	-15	109	151	1,38	0,72	0,62
60	-10	153	164	1,39	0,94	0,81
60	-5	205	177	1,42	1,16	1,00
60	0	264	191	1,45	1,38	1,19
60	5	330	205	1,50	1,61	1,39
60	7,2	361	211	1,53	1,71	1,48
60	10	403	220	1,56	1,84	1,59

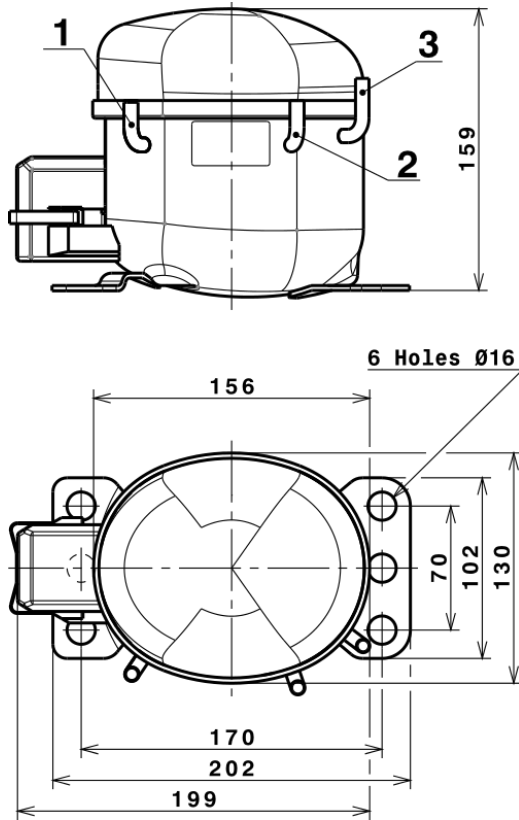
65	-15	95	152	1,38	0,62	0,54
65	-10	138	166	1,40	0,83	0,72
65	-5	189	181	1,43	1,04	0,90
65	0	247	196	1,47	1,26	1,09
65	5	312	211	1,53	1,47	1,27
65	7,2	343	218	1,56	1,57	1,36
65	10	384	227	1,60	1,69	1,46

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	469,5677138698	131,6307286742	1,2617776529	7,5358571361149
2	15,4887680736	-0,1437274445	-0,0037860321	0,24851508961403
3	-3,5617491230	1,0673152331	0,0034526137	-0,0061892939223428
4	0,1433473266	0,0102627286	0,0002216455	0,0044303895086682
5	-0,0549805267	0,0510326648	0,0002161266	0,0016930204337919

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

COMPRESSOR DIMENSIONS

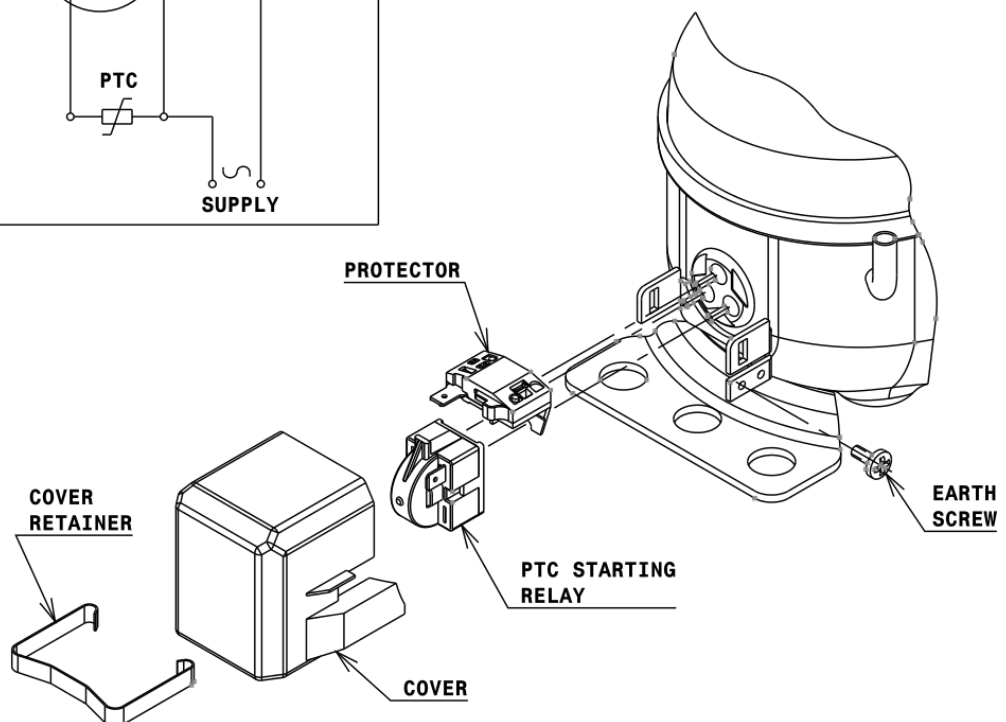
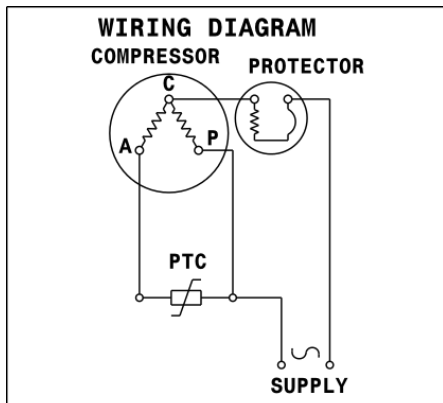


DESIGNATION INTERNAL DIAM.

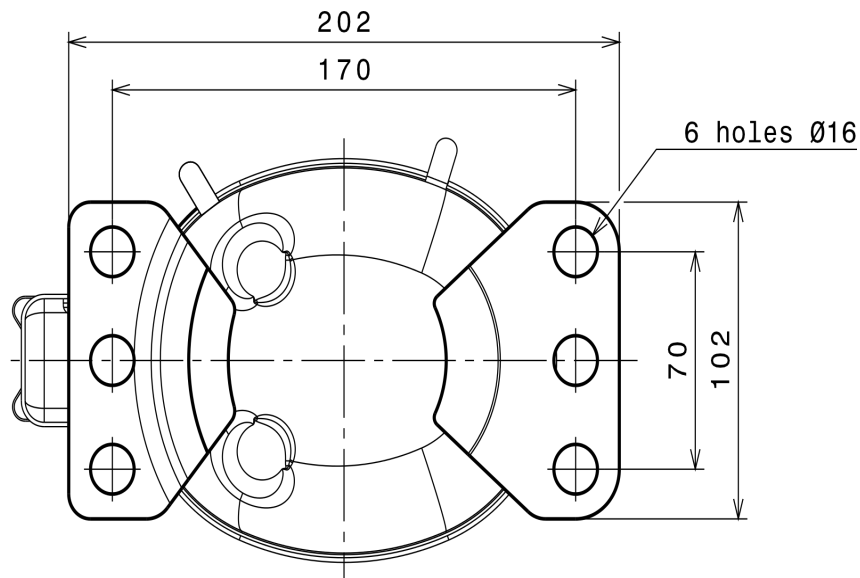
DESIGNATION	INTERNAL DIAM.
1 Suction	6,1 mm
2 Service	6,1 mm
3 Discharge	5,1 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

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



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

STANDARD

Ø16 holes (170x70 net)



SOA

SOA R134a HBP

