

Technical Data Sheet

Compressor model **GL99AAb**
Voltage **220-240V 50Hz ~1**
Refrigerant **R134a**

APPLICATION

Application Low Back Pressure
Refrigerant R134a
Evaporating Temp. -35,0 °C to -10,0 °C
Expansion Capillar/Valve
Comp. Cooling Static
Max. ambient temp. 43,0 °C
Compatible refriger. R1234yf

COMPRESSOR

Displacement 9,95 cm³
Diameter 25,40 mm
Stroke 19,62 mm
Net Weight 9,79 Kg
Oil type ISO VG 32 ESTER
Oil charge 300 cm³

MOTOR

Nominal Power 1/4 hp
Voltage/Frequency 220-240V 50Hz
Voltage range 187-255 V
Type CSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 10,00 A
Max. Cont. Current (MCC) 1,80 A
Main W. resist. at 25°C 9,96 Ω
Start W. resist. at 25°C 20,39 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	205 kCal/h	175 W
COP	1,19 W/W	0,92 W/W
EER	1,03 kCal/Wh	0,80 kCal/Wh
Input Power	200 W	189 W
Current	1,35 A	1,32 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

Starting capacitor	64- 77 µF 330 V			
Relay	Option 1			
Reference	2014 131.			
Pick-Up	5,30 A			
Drop-Out	4,50 A			
Protector	Option 1	Option 2		
Reference	MRP304AMN	T0071		
Current	7,70 A	7,70 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 69,00 °C	120,00 / 62,00 °C		

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	108	131	1,16	0,96	0,82
40	-30	154	154	1,22	1,16	1,00
40	-25	209	180	1,29	1,35	1,16
40	-23,3	230	189	1,31	1,41	1,22
40	-20	273	207	1,37	1,53	1,32
40	-15	347	237	1,48	1,71	1,47
40	-10	430	268	1,61	1,87	1,60

45	-35	101	130	1,16	0,90	0,78
45	-30	146	156	1,22	1,09	0,94
45	-25	201	183	1,30	1,28	1,10
45	-23,3	221	193	1,33	1,34	1,15
45	-20	265	212	1,39	1,45	1,25
45	-15	338	243	1,51	1,61	1,39
45	-10	420	277	1,65	1,77	1,52

50	-35	95	130	1,16	0,85	0,73
50	-30	139	157	1,22	1,03	0,89
50	-25	193	186	1,31	1,21	1,04
50	-23,3	213	196	1,34	1,26	1,09
50	-20	256	217	1,41	1,37	1,18
50	-15	328	250	1,53	1,53	1,31
50	-10	410	285	1,69	1,67	1,44

55	-35	88	129	1,16	0,79	0,68
55	-30	132	158	1,23	0,97	0,83
55	-25	185	189	1,32	1,14	0,98
55	-23,3	205	200	1,35	1,19	1,03
55	-20	247	222	1,43	1,30	1,11
55	-15	319	257	1,56	1,44	1,24
55	-10	400	294	1,73	1,58	1,36

60	-35	81	128	1,16	0,74	0,63
60	-30	124	159	1,23	0,91	0,78
60	-25	177	192	1,32	1,07	0,92
60	-23,3	197	204	1,36	1,12	0,97
60	-20	239	227	1,44	1,22	1,05
60	-15	310	264	1,59	1,37	1,17
60	-10	390	303	1,77	1,50	1,29

65	-35	75	128	1,16	0,68	0,58
65	-30	117	160	1,23	0,85	0,73
65	-25	169	195	1,33	1,01	0,87
65	-23,3	189	207	1,37	1,06	0,91
65	-20	230	232	1,46	1,15	0,99
65	-15	300	271	1,62	1,29	1,11
65	-10	380	311	1,82	1,42	1,22

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	118	131	1,16	0,90	0,78
40	-30	170	154	1,22	1,10	0,95
40	-25	232	180	1,29	1,29	1,11
40	-23,3	255	189	1,31	1,35	1,16
40	-20	302	207	1,37	1,46	1,26
40	-15	381	237	1,48	1,61	1,39
40	-10	468	268	1,61	1,75	1,51

45	-35	106	130	1,16	0,81	0,70
45	-30	155	156	1,22	1,00	0,86
45	-25	213	183	1,30	1,16	1,00
45	-23,3	234	193	1,33	1,22	1,05
45	-20	279	212	1,39	1,32	1,14
45	-15	354	243	1,51	1,45	1,26
45	-10	438	277	1,65	1,58	1,37

50	-35	95	130	1,16	0,73	0,63
50	-30	140	157	1,22	0,89	0,77
50	-25	194	186	1,31	1,04	0,90
50	-23,3	214	196	1,34	1,09	0,94
50	-20	256	217	1,41	1,18	1,02
50	-15	327	250	1,53	1,31	1,13
50	-10	407	285	1,69	1,43	1,23

55	-35	83	129	1,16	0,65	0,56
55	-30	125	158	1,23	0,79	0,68
55	-25	175	189	1,32	0,92	0,80
55	-23,3	194	200	1,35	0,97	0,84
55	-20	233	222	1,43	1,05	0,91
55	-15	301	257	1,56	1,17	1,01
55	-10	377	294	1,73	1,28	1,11

60	-35	72	128	1,16	0,56	0,48
60	-30	109	159	1,23	0,69	0,59
60	-25	156	192	1,32	0,81	0,70
60	-23,3	173	204	1,36	0,85	0,74
60	-20	211	227	1,44	0,93	0,80
60	-15	274	264	1,59	1,04	0,90
60	-10	347	303	1,77	1,15	0,99

65	-35	60	128	1,16	0,47	0,41
65	-30	94	160	1,23	0,59	0,51
65	-25	137	195	1,33	0,70	0,60
65	-23,3	153	207	1,37	0,74	0,64
65	-20	188	232	1,46	0,81	0,70
65	-15	248	271	1,62	0,92	0,79
65	-10	316	311	1,82	1,02	0,88

EN12900

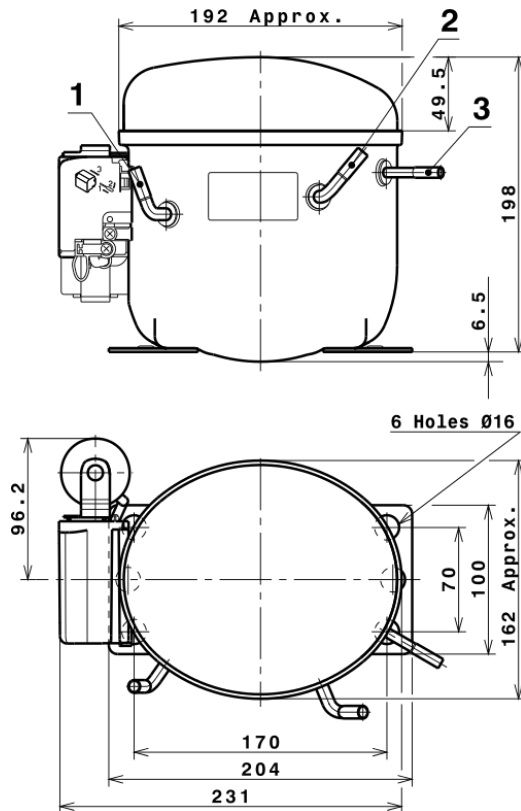
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	969,3957185791	243,7374704077	1,5351999532	17,13336231468
2	27,7235146995	4,4513075003	0,0283517965	0,54492387381756
3	-7,7765651871	2,5391349033	0,0118371427	-0,05429933684508
4	0,1704551644	0,0418964741	0,0005216989	0,0046668859417697
5	-0,1562618297	0,0764381510	0,0003465742	-0,00065904478913139

Equation

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

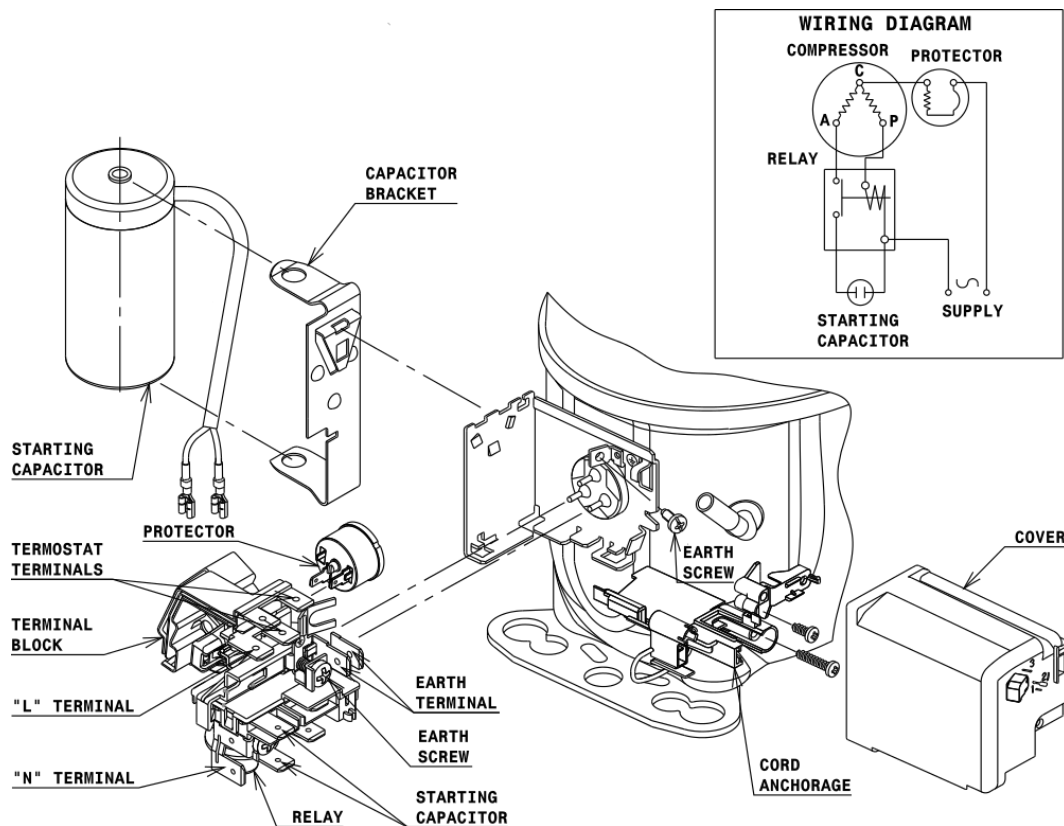


DESIGNATION INTERNAL DIAM.

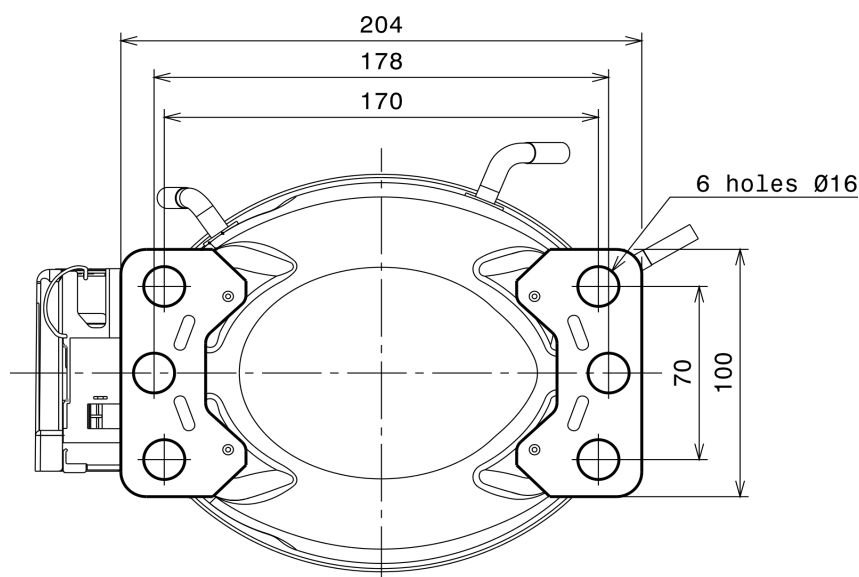
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



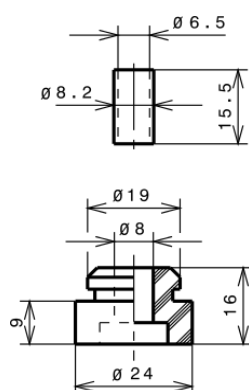
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

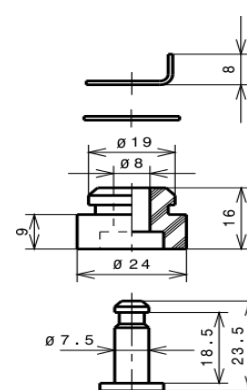
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a LBP

