

# Technical Data Sheet

Compressor model **GL80AAb**  
 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 8,10 cm<sup>3</sup>  
 Diameter 24,29 mm  
 Stroke 17,47 mm  
 Net Weight 9,13 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 295 cm<sup>3</sup>

## MOTOR

Nominal Power 1/5 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 7,00 A  
 Max. Cont. Current (MCC) 1,60 A  
 Main W. resist. at 25°C 13,58 Ω  
 Start W. resist. at 25°C 23,01 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	170 kCal/h	144 W
COP	1,15 W/W	0,89 W/W
EER	0,99 kCal/Wh	0,77 kCal/Wh
Input Power	172 W	162 W
Current	1,11 A	1,08 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V		
Relay	Option 1		
Reference	2014 118.		
Pick-Up	3.75 A		
Drop-Out	3.20 A		
Protector	Option 1	Option 2	
Reference	MRP63AMK	T0069	
Current	7,10 A	7,10 A	
Time check	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 62,00 °C	

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	95	117	0,95	0,94	0,81
40	-30	132	136	1,00	1,12	0,97
40	-25	178	158	1,06	1,31	1,13
40	-23,3	196	165	1,09	1,38	1,18
40	-20	234	182	1,14	1,50	1,29
40	-15	300	208	1,24	1,67	1,44
40	-10	375	237	1,35	1,84	1,58

45	-35	87	115	0,94	0,89	0,76
45	-30	124	136	1,00	1,06	0,91
45	-25	169	159	1,07	1,24	1,06
45	-23,3	187	168	1,10	1,30	1,12
45	-20	225	185	1,15	1,41	1,22
45	-15	290	213	1,26	1,58	1,36
45	-10	365	244	1,39	1,74	1,50

50	-35	80	112	0,94	0,82	0,71
50	-30	115	135	1,00	0,99	0,85
50	-25	161	161	1,07	1,17	1,00
50	-23,3	179	170	1,10	1,22	1,05
50	-20	216	188	1,17	1,33	1,15
50	-15	281	219	1,28	1,49	1,28
50	-10	356	252	1,42	1,64	1,41

55	-35	72	110	0,93	0,76	0,65
55	-30	107	135	1,00	0,93	0,80
55	-25	152	162	1,08	1,09	0,94
55	-23,3	170	172	1,11	1,15	0,99
55	-20	207	192	1,18	1,26	1,08
55	-15	272	224	1,30	1,41	1,21
55	-10	346	259	1,45	1,55	1,34

60	-35	64	108	0,92	0,69	0,60
60	-30	99	134	0,99	0,86	0,74
60	-25	144	164	1,08	1,02	0,88
60	-23,3	161	174	1,12	1,08	0,93
60	-20	198	195	1,19	1,18	1,02
60	-15	263	230	1,32	1,33	1,14
60	-10	336	266	1,48	1,47	1,26

65	-35	57	105	0,92	0,63	0,54
65	-30	91	134	0,99	0,79	0,68
65	-25	136	165	1,09	0,95	0,82
65	-23,3	153	176	1,12	1,01	0,87
65	-20	190	199	1,20	1,11	0,95
65	-15	253	235	1,35	1,25	1,08
65	-10	327	274	1,52	1,39	1,19

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	103	117	0,95	0,88	0,76
40	-30	146	136	1,00	1,08	0,93
40	-25	198	158	1,06	1,26	1,09
40	-23,3	218	165	1,09	1,32	1,14
40	-20	259	182	1,14	1,43	1,23
40	-15	329	208	1,24	1,58	1,37
40	-10	408	237	1,35	1,72	1,49

45	-35	92	115	0,94	0,80	0,69
45	-30	131	136	1,00	0,97	0,84
45	-25	180	159	1,07	1,13	0,98
45	-23,3	199	168	1,10	1,19	1,02
45	-20	238	185	1,15	1,29	1,11
45	-15	305	213	1,26	1,43	1,23
45	-10	381	244	1,39	1,56	1,35

50	-35	80	112	0,94	0,71	0,61
50	-30	116	135	1,00	0,86	0,74
50	-25	162	161	1,07	1,01	0,87
50	-23,3	180	170	1,10	1,06	0,91
50	-20	217	188	1,17	1,15	0,99
50	-15	281	219	1,28	1,28	1,11
50	-10	354	252	1,42	1,40	1,21

55	-35	68	110	0,93	0,62	0,53
55	-30	102	135	1,00	0,75	0,65
55	-25	144	162	1,08	0,89	0,77
55	-23,3	161	172	1,11	0,93	0,81
55	-20	196	192	1,18	1,02	0,88
55	-15	256	224	1,30	1,14	0,99
55	-10	326	259	1,45	1,26	1,09

60	-35	56	108	0,92	0,52	0,45
60	-30	87	134	0,99	0,64	0,56
60	-25	126	164	1,08	0,77	0,67
60	-23,3	142	174	1,12	0,81	0,70
60	-20	175	195	1,19	0,89	0,77
60	-15	232	230	1,32	1,01	0,87
60	-10	299	266	1,48	1,12	0,97

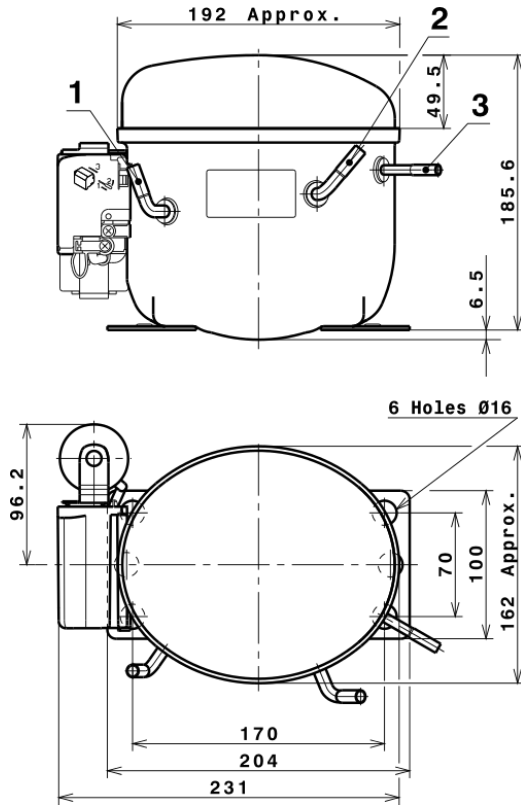
65	-35	44	105	0,92	0,42	0,36
65	-30	72	134	0,99	0,53	0,46
65	-25	108	165	1,09	0,65	0,56
65	-23,3	122	176	1,12	0,69	0,60
65	-20	153	199	1,20	0,77	0,67
65	-15	208	235	1,35	0,88	0,76
65	-10	272	274	1,52	0,99	0,86

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	859,3903967516	218,3002184369	1,3064541738	15,308786739059
2	25,1723742473	4,0877119471	0,0236891872	0,50135313241795
3	-6,8854991891	2,2930807063	0,0097950383	-0,050191027109402
4	0,1777703630	0,0517172135	0,0004292572	0,0048158038357466
5	-0,1292609230	0,0791366296	0,0003147969	-0,00040795059677713

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

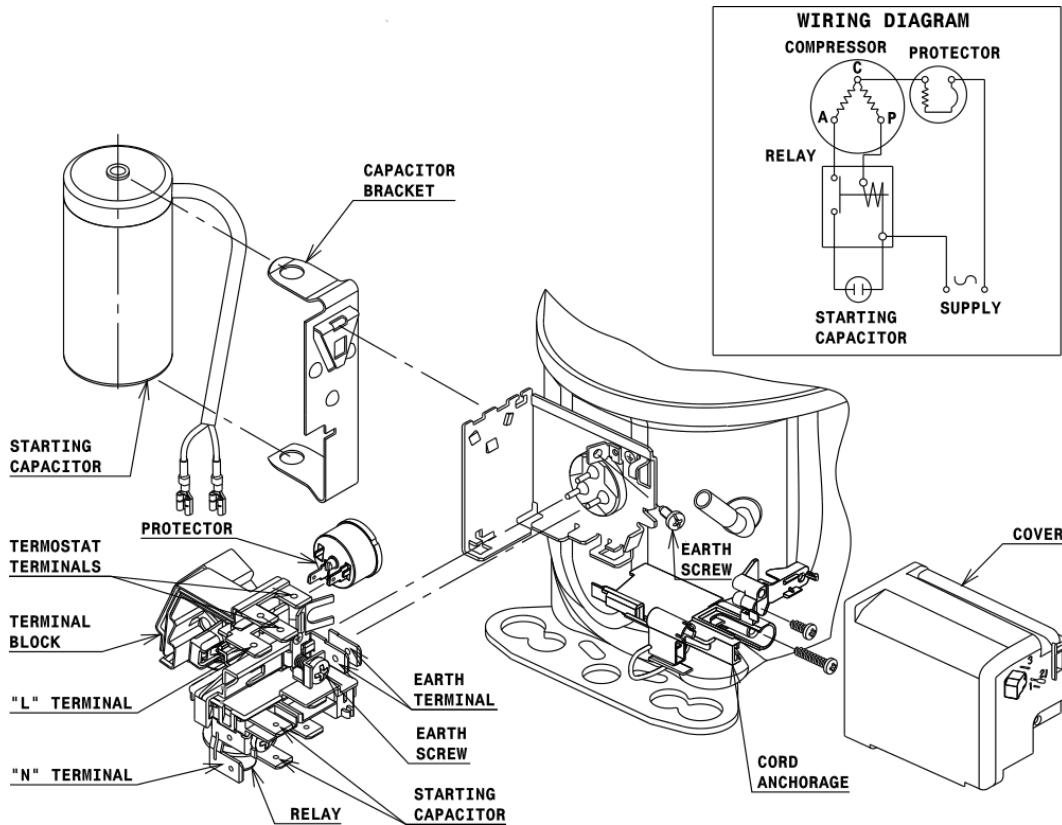


## DESIGNATION INTERNAL DIAM.

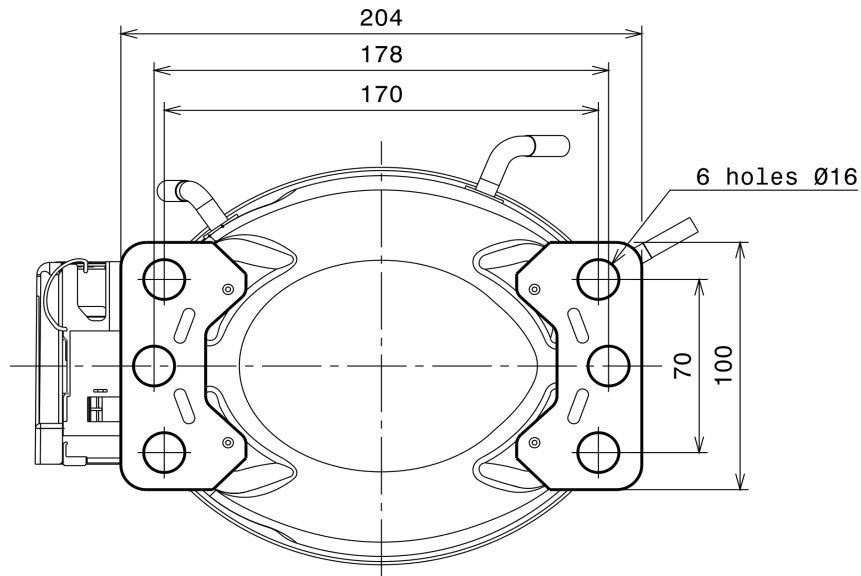
DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



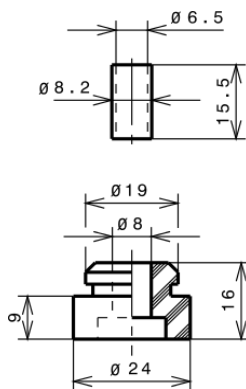
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

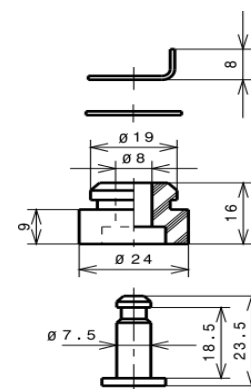
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a LBP

