

# Technical Data Sheet

Compressor model **GLM12LAa**  
 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	Fan cooled
Max. ambient temp.	43,0 °C
Compatible refriger.	R1234yf

## COMPRESSOR

Displacement	10,70 cm <sup>3</sup>
Diameter	25,40 mm
Stroke	21,12 mm
Net Weight	10,06 Kg
Oil type	ISO VG 32 ESTER
Oil charge	345 cm <sup>3</sup>

## MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	10,50 A
Max. Cont. Current (MCC)	2,20 A
Main W. resist. at 25°C	10,35 Ω
Start W. resist. at 25°C	11,66 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	235 kCal/h	200 W
COP	1,19 W/W	0,92 W/W
EER	1,02 kCal/Wh	0,79 kCal/Wh
Input Power	230 W	218 W
Current	1,60 A	1,57 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	Option 2		
Reference	2014 135.	QLZ-5.8A		
Pick-Up	5,80 A	5.80 A		
Drop-Out	4,95 A	4.95 A		
Protector	Option 1	Option 2		
Reference	T0138	AE86FHY		
Current	7,70 A	7,70 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 62,00 °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	121	155	1,41	0,91	0,78
40	-30	171	178	1,46	1,12	0,96
40	-25	234	204	1,53	1,34	1,15
40	-23,3	259	214	1,55	1,41	1,21
40	-20	311	233	1,61	1,55	1,33
40	-15	401	266	1,71	1,75	1,51
40	-10	504	302	1,83	1,94	1,67

45	-35	115	155	1,41	0,87	0,74
45	-30	164	180	1,47	1,06	0,91
45	-25	227	209	1,54	1,26	1,09
45	-23,3	251	219	1,57	1,33	1,15
45	-20	302	240	1,63	1,46	1,26
45	-15	391	275	1,74	1,65	1,42
45	-10	493	314	1,87	1,83	1,57

50	-35	110	155	1,41	0,82	0,71
50	-30	158	183	1,47	1,01	0,86
50	-25	219	213	1,55	1,19	1,03
50	-23,3	243	225	1,58	1,26	1,08
50	-20	294	247	1,65	1,38	1,19
50	-15	382	285	1,77	1,56	1,34
50	-10	483	325	1,92	1,73	1,48

55	-35	104	155	1,41	0,78	0,67
55	-30	151	185	1,48	0,95	0,82
55	-25	211	218	1,57	1,13	0,97
55	-23,3	235	230	1,60	1,19	1,02
55	-20	285	254	1,67	1,30	1,12
55	-15	372	294	1,80	1,47	1,26
55	-10	472	337	1,96	1,63	1,40

60	-35	98	155	1,41	0,74	0,63
60	-30	144	187	1,49	0,90	0,77
60	-25	204	223	1,58	1,06	0,92
60	-23,3	227	235	1,62	1,12	0,96
60	-20	276	261	1,69	1,23	1,06
60	-15	362	303	1,84	1,39	1,19
60	-10	461	349	2,01	1,54	1,32

65	-35	93	155	1,41	0,70	0,60
65	-30	138	190	1,49	0,85	0,73
65	-25	196	227	1,59	1,00	0,86
65	-23,3	219	241	1,63	1,06	0,91
65	-20	268	268	1,72	1,16	1,00
65	-15	353	313	1,87	1,31	1,13
65	-10	451	360	2,05	1,45	1,25

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	132	155	1,41	0,85	0,73
40	-30	190	178	1,46	1,07	0,92
40	-25	261	204	1,53	1,28	1,11
40	-23,3	288	214	1,55	1,35	1,17
40	-20	345	233	1,61	1,48	1,28
40	-15	440	266	1,71	1,66	1,43
40	-10	549	302	1,83	1,82	1,57

45	-35	121	155	1,41	0,78	0,67
45	-30	175	180	1,47	0,97	0,84
45	-25	241	209	1,54	1,15	1,00
45	-23,3	266	219	1,57	1,21	1,05
45	-20	319	240	1,63	1,33	1,15
45	-15	411	275	1,74	1,49	1,29
45	-10	514	314	1,87	1,64	1,42

50	-35	109	155	1,41	0,71	0,61
50	-30	159	183	1,47	0,87	0,75
50	-25	220	213	1,55	1,03	0,89
50	-23,3	244	225	1,58	1,09	0,94
50	-20	294	247	1,65	1,19	1,03
50	-15	381	285	1,77	1,34	1,16
50	-10	480	325	1,92	1,47	1,27

55	-35	98	155	1,41	0,63	0,55
55	-30	143	185	1,48	0,77	0,67
55	-25	200	218	1,57	0,92	0,79
55	-23,3	222	230	1,60	0,97	0,83
55	-20	269	254	1,67	1,06	0,91
55	-15	351	294	1,80	1,19	1,03
55	-10	445	337	1,96	1,32	1,14

60	-35	87	155	1,41	0,56	0,49
60	-30	127	187	1,49	0,68	0,59
60	-25	179	223	1,58	0,81	0,70
60	-23,3	200	235	1,62	0,85	0,73
60	-20	244	261	1,69	0,93	0,81
60	-15	321	303	1,84	1,06	0,91
60	-10	410	349	2,01	1,18	1,02

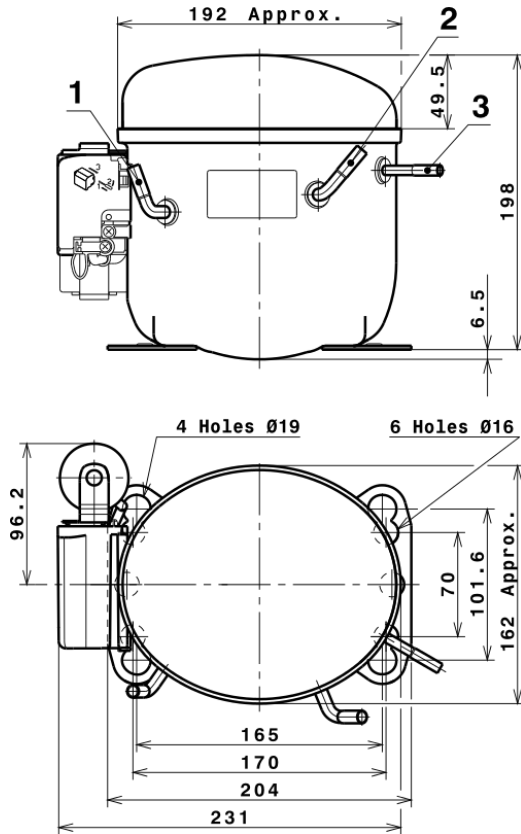
65	-35	76	155	1,41	0,49	0,42
65	-30	111	190	1,49	0,59	0,51
65	-25	159	227	1,59	0,70	0,60
65	-23,3	178	241	1,63	0,74	0,64
65	-20	219	268	1,72	0,82	0,70
65	-15	291	313	1,87	0,93	0,80
65	-10	376	360	2,05	1,04	0,90

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.149,9030039170	259,5871654866	1,6885597044	20,396791030357
2	35,0636673555	5,2735913831	0,0237379268	0,70121950235174
3	-9,0241148587	3,3447275497	0,0125862991	-0,060635197477846
4	0,2424162626	0,0680175305	0,0004568329	0,0065641051168987
5	-0,1934479842	0,0955636443	0,0003596085	-0,00097378329283104

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	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSIR CONNECTION (L, P ranges)



# Technical Data Sheet

## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a LBP

