

# Technical Data Sheet

Compressor model **GL45ADb**  
 Voltage **115V 60Hz ~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 4,56 cm<sup>3</sup>  
 Diameter 19,09 mm  
 Stroke 15,93 mm  
 Net Weight 8,49 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 245 cm<sup>3</sup>

## MOTOR

Nominal Power 1/8 hp  
 Voltage/Frequency 115V 60Hz  
 Voltage range 98-132 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 12,10 A  
 Max. Cont. Current (MCC) 2,50 A  
 Main W. resist. at 25°C 4,55 Ω  
 Start W. resist. at 25°C 9,07 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	112 kCal/h	95 W
COP	1,05 W/W	0,80 W/W
EER	0,90 kCal/Wh	0,70 kCal/Wh
Input Power	124 W	118 W
Current	1,69 A	1,63 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	115 V 60 Hz	115 V 60 Hz

## ELECTRICAL COMPONENTS

Starting capacitor	150 µF 160 V			
Relay	Option 1	Option 2		
Reference	2014 131.	QLZ-5.3A		
Pick-Up	5,30 A	5.3 A		
Drop-Out	4,50 A	4.5 A		
Protector	Option 1	Option 2		
Reference	T0683	AE11FI		
Current	14,80 A	9,70 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	130,00 / 62,00 °C	135,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	62	91	1,36	0,79	0,68
40	-30	88	103	1,49	0,99	0,85
40	-25	120	117	1,63	1,19	1,02
40	-23,3	132	122	1,67	1,26	1,08
40	-20	157	133	1,77	1,38	1,19
40	-15	201	150	1,90	1,55	1,33
40	-10	250	170	2,03	1,71	1,47

45	-35	56	89	1,33	0,73	0,63
45	-30	82	102	1,48	0,93	0,80
45	-25	113	117	1,63	1,12	0,97
45	-23,3	125	123	1,68	1,19	1,02
45	-20	151	134	1,78	1,30	1,12
45	-15	194	153	1,92	1,47	1,26
45	-10	243	174	2,05	1,62	1,39

50	-35	50	86	1,31	0,67	0,58
50	-30	75	101	1,47	0,87	0,75
50	-25	107	117	1,63	1,06	0,91
50	-23,3	119	123	1,68	1,12	0,96
50	-20	144	136	1,79	1,23	1,06
50	-15	187	156	1,94	1,39	1,20
50	-10	235	178	2,07	1,54	1,32

55	-35	44	84	1,28	0,61	0,52
55	-30	69	100	1,46	0,81	0,69
55	-25	100	118	1,63	0,99	0,85
55	-23,3	112	124	1,69	1,05	0,90
55	-20	137	137	1,80	1,16	1,00
55	-15	180	159	1,96	1,32	1,13
55	-10	228	182	2,09	1,46	1,25

60	-35	38	82	1,25	0,54	0,47
60	-30	63	99	1,44	0,74	0,64
60	-25	94	118	1,63	0,92	0,79
60	-23,3	105	125	1,70	0,98	0,85
60	-20	130	139	1,81	1,09	0,94
60	-15	172	161	1,97	1,24	1,07
60	-10	221	186	2,11	1,38	1,19

65	-35	32	79	1,23	0,47	0,40
65	-30	57	98	1,43	0,67	0,58
65	-25	87	118	1,63	0,86	0,74
65	-23,3	99	125	1,70	0,92	0,79
65	-20	123	140	1,82	1,02	0,88
65	-15	165	164	1,99	1,17	1,01
65	-10	213	190	2,13	1,31	1,12

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	68	91	1,36	0,74	0,64
40	-30	98	103	1,49	0,95	0,82
40	-25	133	117	1,63	1,14	0,98
40	-23,3	146	122	1,67	1,20	1,04
40	-20	174	133	1,77	1,31	1,13
40	-15	220	150	1,90	1,46	1,27
40	-10	272	170	2,03	1,60	1,38

45	-35	59	89	1,33	0,66	0,57
45	-30	87	102	1,48	0,85	0,74
45	-25	120	117	1,63	1,03	0,89
45	-23,3	133	123	1,68	1,08	0,94
45	-20	159	134	1,78	1,19	1,02
45	-15	203	153	1,92	1,33	1,15
45	-10	253	174	2,05	1,45	1,26

50	-35	50	86	1,31	0,58	0,50
50	-30	76	101	1,47	0,75	0,65
50	-25	107	117	1,63	0,92	0,79
50	-23,3	119	123	1,68	0,97	0,84
50	-20	144	136	1,79	1,06	0,92
50	-15	186	156	1,94	1,20	1,03
50	-10	234	178	2,07	1,31	1,14

55	-35	42	84	1,28	0,50	0,43
55	-30	65	100	1,46	0,65	0,57
55	-25	95	118	1,63	0,80	0,70
55	-23,3	106	124	1,69	0,85	0,74
55	-20	129	137	1,80	0,94	0,81
55	-15	169	159	1,96	1,07	0,92
55	-10	215	182	2,09	1,18	1,02

60	-35	33	82	1,25	0,40	0,35
60	-30	55	99	1,44	0,55	0,48
60	-25	82	118	1,63	0,69	0,60
60	-23,3	92	125	1,70	0,74	0,64
60	-20	114	139	1,81	0,83	0,71
60	-15	152	161	1,97	0,94	0,82
60	-10	196	186	2,11	1,05	0,91

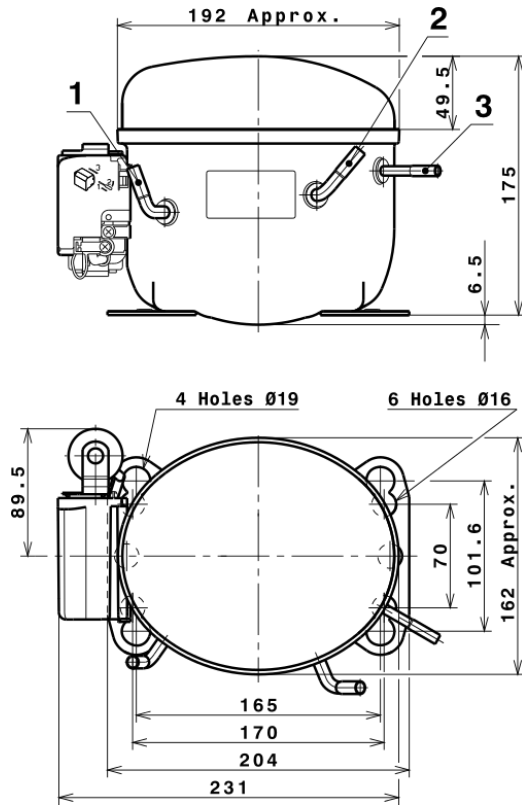
65	-35	24	79	1,23	0,31	0,26
65	-30	44	98	1,43	0,45	0,39
65	-25	69	118	1,63	0,58	0,51
65	-23,3	79	125	1,70	0,63	0,54
65	-20	99	140	1,82	0,71	0,61
65	-15	135	164	1,99	0,83	0,71
65	-10	177	190	2,13	0,93	0,80

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	576,0141180474	166,7102641767	1,9216562920	10,280596492962
2	16,3163660180	2,9327860309	0,0015628063	0,3216791957103
3	-4,7588645780	1,3374442636	0,0079188013	-0,037723800389663
4	0,1064425157	0,0391527017	-0,0002213164	0,0029011841027833
5	-0,0866965046	0,0518327313	0,0003794831	-0,00027486426160321

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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## 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)



# 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

