

# Technical Data Sheet

Compressor model **GL99ADb**  
 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 9,95 cm<sup>3</sup>  
 Diameter 25,40 mm  
 Stroke 19,62 mm  
 Net Weight 11,59 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 470 cm<sup>3</sup>

## MOTOR

Nominal Power 1/4 hp  
 Voltage/Frequency 115V 60Hz  
 Voltage range 98-132 V  
 Type CSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 25,00 A  
 Max. Cont. Current (MCC) 5,00 A  
 Main W. resist. at 25°C 1,43 Ω  
 Start W. resist. at 25°C 3,67 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	240 kCal/h	205 W
COP	1,15 W/W	0,89 W/W
EER	0,99 kCal/Wh	0,77 kCal/Wh
Input Power	243 W	231 W
Current	3,67 A	3,59 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	170 µF 160 V		
Relay	Option 1		
Reference	2014 170.		
Pick-Up	12,10 A		
Drop-Out	10,30 A		
Protector	Option 1	Option 2	
Reference	MRA38089	T0216	
Current	39,50 A	25,50 A	
Time check	2,8-5,2 seg	7,5-14 seg	
Disc temp. (Open/Close)	130,00 / 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	-35	131	160	3,20	0,95	0,82
40	-30	181	191	3,36	1,11	0,95
40	-25	243	221	3,53	1,28	1,10
40	-23,3	266	232	3,60	1,34	1,15
40	-20	316	252	3,73	1,46	1,25
40	-15	400	284	3,95	1,64	1,41
40	-10	496	315	4,19	1,83	1,57

45	-35	123	160	3,20	0,90	0,77
45	-30	173	192	3,37	1,05	0,90
45	-25	234	224	3,55	1,21	1,04
45	-23,3	258	236	3,62	1,27	1,09
45	-20	307	257	3,76	1,39	1,19
45	-15	391	290	4,00	1,57	1,35
45	-10	486	323	4,26	1,75	1,50

50	-35	116	160	3,20	0,84	0,72
50	-30	165	194	3,37	0,99	0,85
50	-25	226	228	3,57	1,15	0,99
50	-23,3	249	239	3,65	1,21	1,04
50	-20	298	262	3,80	1,32	1,14
50	-15	381	296	4,05	1,50	1,29
50	-10	476	331	4,32	1,67	1,44

55	-35	108	160	3,20	0,79	0,68
55	-30	157	195	3,38	0,93	0,80
55	-25	217	231	3,59	1,09	0,94
55	-23,3	240	243	3,67	1,15	0,99
55	-20	289	267	3,83	1,26	1,08
55	-15	372	303	4,10	1,43	1,23
55	-10	466	339	4,39	1,60	1,37

60	-35	100	160	3,20	0,73	0,63
60	-30	149	197	3,39	0,88	0,75
60	-25	208	234	3,61	1,04	0,89
60	-23,3	231	247	3,69	1,09	0,94
60	-20	279	271	3,86	1,20	1,03
60	-15	362	309	4,15	1,36	1,17
60	-10	456	347	4,46	1,53	1,31

65	-35	93	160	3,20	0,67	0,58
65	-30	140	199	3,40	0,82	0,71
65	-25	200	237	3,63	0,98	0,84
65	-23,3	222	250	3,72	1,03	0,89
65	-20	270	276	3,90	1,14	0,98
65	-15	352	316	4,20	1,30	1,12
65	-10	446	355	4,53	1,46	1,26

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	143	160	3,20	0,89	0,77
40	-30	201	191	3,36	1,05	0,91
40	-25	270	221	3,53	1,22	1,05
40	-23,3	295	232	3,60	1,27	1,10
40	-20	349	252	3,73	1,38	1,20
40	-15	439	284	3,95	1,55	1,34
40	-10	540	315	4,19	1,71	1,48

45	-35	129	160	3,20	0,81	0,70
45	-30	183	192	3,37	0,95	0,82
45	-25	248	224	3,55	1,10	0,95
45	-23,3	272	236	3,62	1,16	1,00
45	-20	323	257	3,76	1,26	1,09
45	-15	410	290	4,00	1,41	1,22
45	-10	506	323	4,26	1,57	1,35

50	-35	116	160	3,20	0,72	0,62
50	-30	166	194	3,37	0,86	0,74
50	-25	226	228	3,57	0,99	0,86
50	-23,3	250	239	3,65	1,04	0,90
50	-20	298	262	3,80	1,14	0,98
50	-15	380	296	4,05	1,28	1,11
50	-10	473	331	4,32	1,43	1,23

55	-35	102	160	3,20	0,64	0,55
55	-30	148	195	3,38	0,76	0,66
55	-25	205	231	3,59	0,89	0,77
55	-23,3	227	243	3,67	0,93	0,81
55	-20	272	267	3,83	1,02	0,88
55	-15	351	303	4,10	1,16	1,00
55	-10	439	339	4,39	1,30	1,12

60	-35	89	160	3,20	0,55	0,48
60	-30	131	197	3,39	0,66	0,57
60	-25	183	234	3,61	0,78	0,68
60	-23,3	204	247	3,69	0,83	0,71
60	-20	247	271	3,86	0,91	0,79
60	-15	321	309	4,15	1,04	0,90
60	-10	406	347	4,46	1,17	1,01

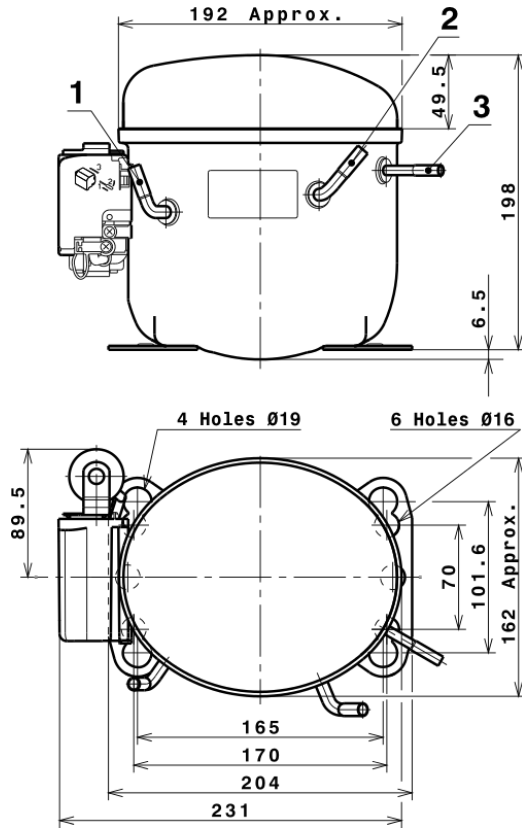
65	-35	75	160	3,20	0,47	0,41
65	-30	113	199	3,40	0,57	0,49
65	-25	162	237	3,63	0,68	0,59
65	-23,3	181	250	3,72	0,72	0,62
65	-20	221	276	3,90	0,80	0,69
65	-15	291	316	4,20	0,92	0,80
65	-10	372	355	4,53	1,05	0,91

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.102,9760193415	296,6017863487	4,1053292182	19,405339551913
2	31,7082127273	4,0226942453	0,0462264791	0,62517383396066
3	-8,5514003859	2,2935274627	0,0192643936	-0,052440979015401
4	0,2088756081	0,0062309946	0,0005953225	0,0056976801882308
5	-0,1665672980	0,0655293561	0,0005504112	-0,0004720613342718

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

## 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)



### AMERICAN FEET

$\varnothing 19$  holes (165x101.6 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a LBP

