

# Technical Data Sheet

Compressor model **GLY90RAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	9,09 cm <sup>3</sup>	Nominal Power	1/4 hp
Refrigerant	R134a	Diameter	24,29 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	19,62 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	10,74 Kg	Type	CSIR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	300 cm <sup>3</sup>	Locked Rotor Amps (LRA)	10,50 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,50 A
				Main W. resist. at 25°C	8,31 Ω
				Start W. resist. at 25°C	18,90 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	770 kCal/h	748 W
COP	2,37 W/W	2,05 W/W
EER	2,04 kCal/Wh	1,77 kCal/Wh
Input Power	378 W	365 W
Current	2,20 A	2,15 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °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 135.			
Pick-Up	5,80 A			
Drop-Out	4,95 A			
Protector	Option 1	Option 2		
Reference	MRP36AMK	T0171		
Current	10,30 A	10,30 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 61,00 °C		

## ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-25	205	175	1,52	1,36	1,17
40	-20	275	195	1,57	1,64	1,41
40	-15	360	215	1,62	1,95	1,67
40	-10	461	237	1,69	2,26	1,94
40	-5	577	260	1,76	2,58	2,22
40	0	709	284	1,84	2,90	2,49
40	5	856	310	1,93	3,21	2,76
40	7,2	925	321	1,97	3,35	2,88
40	10	1.018	336	2,03	3,52	3,03

45	-25	190	177	1,52	1,25	1,07
45	-20	254	199	1,58	1,48	1,28
45	-15	334	223	1,64	1,75	1,50
45	-10	429	247	1,72	2,02	1,74
45	-5	540	273	1,80	2,30	1,98
45	0	665	300	1,89	2,58	2,22
45	5	806	327	1,99	2,86	2,46
45	7,2	873	340	2,04	2,99	2,57
45	10	963	356	2,11	3,14	2,70

50	-25	175	179	1,52	1,14	0,98
50	-20	234	204	1,59	1,33	1,15
50	-15	308	230	1,66	1,56	1,34
50	-10	397	257	1,75	1,80	1,54
50	-5	502	285	1,84	2,05	1,76
50	0	622	315	1,95	2,30	1,98
50	5	757	345	2,06	2,55	2,19
50	7,2	822	359	2,12	2,66	2,29
50	10	908	377	2,20	2,80	2,41

55	-25	160	181	1,53	1,03	0,88
55	-20	213	209	1,60	1,19	1,02
55	-15	281	237	1,69	1,38	1,19
55	-10	365	267	1,78	1,59	1,37
55	-5	464	298	1,89	1,81	1,56
55	0	578	330	2,00	2,04	1,75
55	5	708	363	2,14	2,27	1,95
55	7,2	770	378	2,20	2,37	2,04
55	10	853	397	2,28	2,50	2,15

60	-25	145	183	1,54	0,92	0,79
60	-20	192	213	1,62	1,05	0,90
60	-15	255	244	1,71	1,21	1,04
60	-10	333	277	1,81	1,40	1,20
60	-5	426	310	1,93	1,60	1,37
60	0	535	345	2,06	1,80	1,55
60	5	659	381	2,21	2,01	1,73
60	7,2	718	397	2,28	2,10	1,81
60	10	798	418	2,38	2,22	1,91

65	-25	130	185	1,54	0,82	0,70
65	-20	172	218	1,63	0,92	0,79
65	-15	229	252	1,73	1,06	0,91
65	-10	301	287	1,85	1,22	1,05
65	-5	388	323	1,98	1,40	1,20
65	0	491	360	2,13	1,59	1,36
65	5	610	399	2,29	1,78	1,53
65	7,2	667	416	2,37	1,86	1,60
65	10	743	438	2,47	1,97	1,70

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-25	221	176	1,52	1,26	1,08
40	-20	297	196	1,57	1,52	1,31
40	-15	390	217	1,63	1,80	1,56
40	-10	498	239	1,69	2,09	1,81
40	-5	623	262	1,76	2,38	2,06
40	0	764	286	1,84	2,67	2,31
40	5	921	312	1,94	2,96	2,56
40	7,2	995	323	1,98	3,08	2,66
40	10	1.094	338	2,04	3,24	2,80

45	-25	204	178	1,52	1,14	0,99
45	-20	273	200	1,58	1,36	1,18
45	-15	359	224	1,65	1,60	1,39
45	-10	461	249	1,72	1,85	1,60
45	-5	579	274	1,80	2,11	1,82
45	0	713	301	1,90	2,37	2,04
45	5	863	329	2,00	2,62	2,26
45	7,2	935	342	2,05	2,73	2,36
45	10	1.030	359	2,12	2,87	2,48

50	-25	186	180	1,53	1,04	0,90
50	-20	249	205	1,59	1,22	1,05
50	-15	328	231	1,67	1,42	1,23
50	-10	423	259	1,75	1,64	1,42
50	-5	535	287	1,85	1,86	1,61
50	0	662	317	1,95	2,09	1,81
50	5	806	347	2,07	2,32	2,00
50	7,2	874	361	2,13	2,42	2,09
50	10	965	379	2,21	2,54	2,20

55	-25	169	182	1,53	0,93	0,80
55	-20	225	210	1,61	1,08	0,93
55	-15	298	239	1,69	1,25	1,08
55	-10	386	269	1,78	1,44	1,24
55	-5	491	300	1,89	1,64	1,41
55	0	611	332	2,01	1,84	1,59
55	5	748	365	2,15	2,05	1,77
55	7,2	813	380	2,21	2,14	1,85
55	10	901	400	2,30	2,25	1,95

60	-25	152	184	1,54	0,83	0,71
60	-20	201	214	1,62	0,94	0,81
60	-15	267	246	1,71	1,09	0,94
60	-10	349	278	1,82	1,25	1,08
60	-5	446	312	1,94	1,43	1,23
60	0	560	347	2,07	1,61	1,39
60	5	690	383	2,22	1,80	1,56
60	7,2	753	400	2,29	1,88	1,63
60	10	836	421	2,39	1,99	1,72

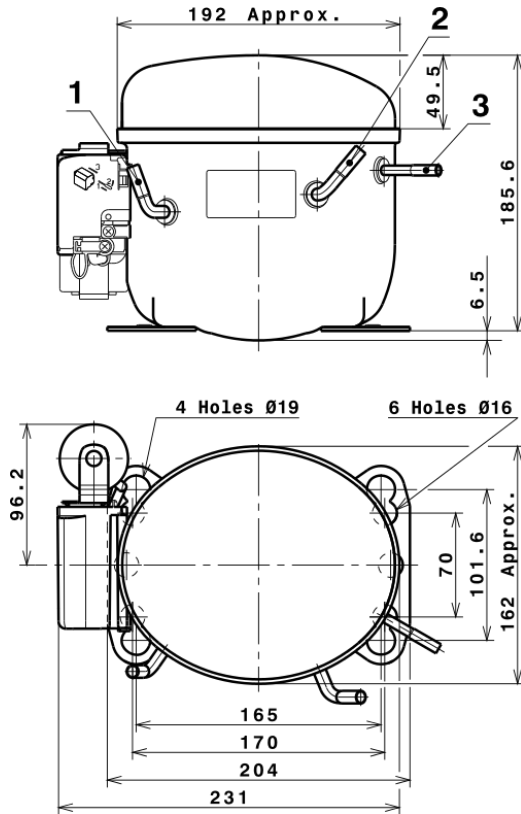
65	-25	135	186	1,54	0,73	0,63
65	-20	178	219	1,63	0,81	0,70
65	-15	236	253	1,74	0,93	0,81
65	-10	311	288	1,85	1,08	0,93
65	-5	402	325	1,99	1,24	1,07
65	0	509	363	2,13	1,40	1,21
65	5	632	401	2,30	1,58	1,36
65	7,2	692	419	2,38	1,65	1,43
65	10	772	441	2,49	1,75	1,51

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.176,2197514215	167,6970761359	1,3424812905	19,625403740377
2	40,7274851609	0,8108323280	0,0009676207	0,76381377995693
3	-10,5447873236	3,1445324250	0,0128470229	-0,070851410440816
4	0,3171924209	0,0255620846	0,0002672213	0,0091486419894375
5	-0,2825596190	0,1093382710	0,0004720930	-0,00135691534328

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)



### AMERICAN FEET

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



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R134a HMBP

