

# Technical Data Sheet

ENGINEERING  
TOMORROW



Compressor model **GLY12RAa**  
Voltage **220-240V 50Hz ~1**  
Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High Back Pressure	Displacement	10,70 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	25,40 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-15,0 °C to 10,0 °C	Stroke	21,12 mm	Voltage range	198-255 V
Expansion	Capillar/Valve	Net Weight	10,23 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	345 cm <sup>3</sup>	Locked Rotor Amps (LRA)	14,80 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	3,60 A
				Main W. resist. at 25°C	8,43 Ω
				Start W. resist. at 25°C	31,30 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	900 kCal/h	867 W
COP	2,30 W/W	1,97 W/W
EER	1,98 kCal/Wh	1,70 kCal/Wh
Input Power	455 W	441 W
Current	2,56 A	2,51 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE HBP (D)	CECOMAF HBP (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	Option 2		
Reference	2014 138.	QLZ-6.1A		
Pick-Up	6,10 A	6.10 A		
Drop-Out	5,20 A	5.20 A		
Protector	Option 1	Option 2		
Reference	T0181	AE39FS		
Current	11,10 A	11,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 °C	110,00 / 62,00 °C		



## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	408	263	1,89	1,80	1,55
40	-10	512	293	1,98	2,04	1,75
40	-5	642	322	2,08	2,32	1,99
40	0	797	351	2,18	2,64	2,27
40	5	977	380	2,28	3,00	2,58
40	7,2	1.065	392	2,32	3,16	2,72
40	10	1.184	408	2,38	3,38	2,90

45	-15	382	269	1,90	1,65	1,42
45	-10	480	302	2,01	1,85	1,59
45	-5	603	335	2,12	2,10	1,80
45	0	751	367	2,23	2,38	2,05
45	5	925	399	2,35	2,70	2,32
45	7,2	1.010	413	2,40	2,84	2,45
45	10	1.125	431	2,47	3,04	2,61

50	-15	356	274	1,92	1,51	1,30
50	-10	447	311	2,04	1,67	1,44
50	-5	564	347	2,17	1,89	1,62
50	0	706	383	2,29	2,14	1,84
50	5	873	418	2,42	2,43	2,09
50	7,2	955	434	2,48	2,56	2,20
50	10	1.066	454	2,55	2,73	2,35

55	-15	330	280	1,94	1,37	1,18
55	-10	414	320	2,07	1,51	1,30
55	-5	524	360	2,21	1,70	1,46
55	0	660	399	2,35	1,92	1,65
55	5	821	438	2,49	2,18	1,87
55	7,2	900	455	2,56	2,30	1,98
55	10	1.008	477	2,64	2,46	2,11

60	-15	304	286	1,96	1,24	1,06
60	-10	382	329	2,10	1,35	1,16
60	-5	485	372	2,25	1,52	1,30
60	0	614	415	2,41	1,72	1,48
60	5	769	457	2,57	1,95	1,68
60	7,2	845	476	2,64	2,06	1,78
60	10	949	500	2,73	2,21	1,90

65	-15	278	291	1,98	1,11	0,95
65	-10	349	338	2,13	1,20	1,03
65	-5	446	385	2,30	1,35	1,16
65	0	569	431	2,47	1,53	1,32
65	5	717	477	2,65	1,75	1,50
65	7,2	790	497	2,72	1,85	1,59
65	10	890	522	2,83	1,98	1,70

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	439	264	1,89	1,66	1,44
40	-10	552	294	1,99	1,88	1,62
40	-5	692	324	2,09	2,14	1,85
40	0	859	353	2,19	2,43	2,10
40	5	1.052	382	2,29	2,76	2,38
40	7,2	1.146	395	2,33	2,91	2,51
40	10	1.273	410	2,39	3,10	2,68

45	-15	409	270	1,91	1,52	1,31
45	-10	514	303	2,02	1,70	1,46
45	-5	646	336	2,13	1,92	1,66
45	0	805	369	2,24	2,18	1,88
45	5	991	402	2,36	2,47	2,13
45	7,2	1.081	416	2,41	2,60	2,25
45	10	1.203	434	2,48	2,78	2,40

50	-15	379	276	1,93	1,37	1,19
50	-10	476	313	2,05	1,52	1,32
50	-5	600	349	2,17	1,72	1,49
50	0	751	385	2,30	1,95	1,68
50	5	929	421	2,43	2,21	1,91
50	7,2	1.016	437	2,49	2,33	2,01
50	10	1.134	457	2,57	2,48	2,14

55	-15	349	282	1,94	1,24	1,07
55	-10	438	322	2,08	1,36	1,18
55	-5	555	362	2,22	1,53	1,32
55	0	698	401	2,36	1,74	1,50
55	5	867	441	2,51	1,97	1,70
55	7,2	951	458	2,57	2,08	1,79
55	10	1.064	480	2,66	2,22	1,92

60	-15	319	287	1,96	1,11	0,96
60	-10	400	331	2,11	1,21	1,05
60	-5	509	374	2,26	1,36	1,17
60	0	644	418	2,42	1,54	1,33
60	5	806	460	2,58	1,75	1,51
60	7,2	885	479	2,65	1,85	1,60
60	10	994	503	2,75	1,98	1,71

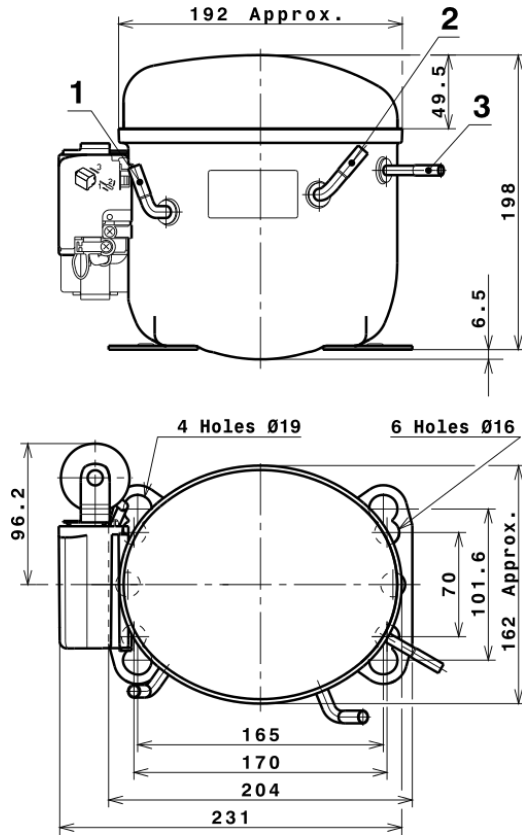
65	-15	289	293	1,98	0,99	0,85
65	-10	362	340	2,14	1,07	0,92
65	-5	463	387	2,31	1,20	1,03
65	0	590	434	2,48	1,36	1,18
65	5	744	480	2,66	1,55	1,34
65	7,2	820	500	2,74	1,64	1,42
65	10	925	526	2,84	1,76	1,52

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.293,8096317008	229,5430318710	1,7179750937	21,36866466094
2	48,9700441985	0,3292808100	-0,0011113183	0,87719174519458
3	-11,1544776051	3,3144506462	0,0123491307	-0,06330327868686
4	0,5283064870	-0,0028255838	0,0001074127	0,015482000001125
5	-0,3337922414	0,1432205060	0,0005716989	-0,00067445432764572

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

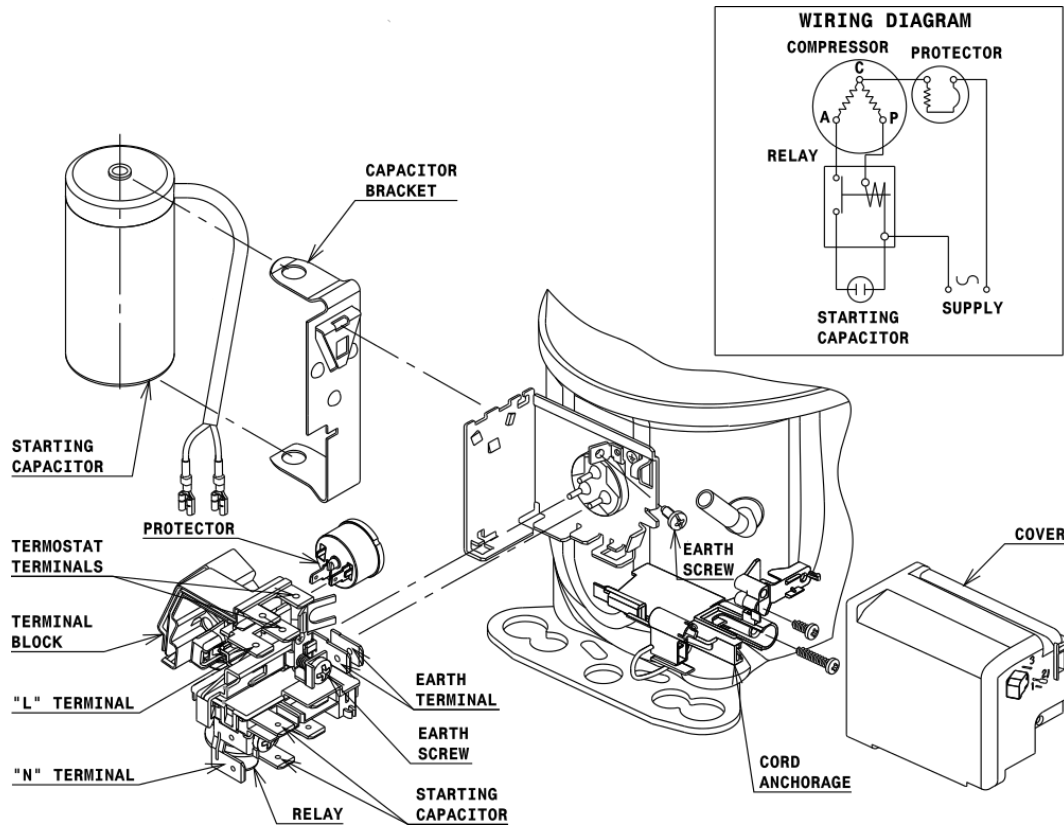


## DESIGNATION INTERNAL DIAM.

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)



## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



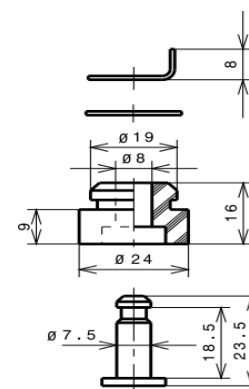
### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a HBP

