

# Technical Data Sheet

Compressor model **GPY12LAB**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

APPLICATION		COMPRESSOR		MOTOR	
Application	Low Back Pressure	Displacement	12,10 cm <sup>3</sup>	Nominal Power	3/8 hp
Refrigerant	R134a	Diameter	27,00 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-35,0 °C to -10,0 °C	Stroke	21,13 mm	Voltage range	187-264 V
Expansion	Capillar/Valve	Net Weight	12,89 Kg	Type	CSR
Comp. Cooling	Fan cooled	Oil type	ISO VG 32 ESTER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	350 cm <sup>3</sup>	Locked Rotor Amps (LRA)	13,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	2,50 A
				Main W. resist. at 25°C	7,50 Ω
				Start W. resist. at 25°C	12,00 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	265 kCal/h	225 W
COP	1,38 W/W	1,06 W/W
EER	1,19 kCal/Wh	0,92 kCal/Wh
Input Power	223 W	212 W
Current	1,05 A	1,00 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	64- 77 μF 330 V		
Run capacitor	10 μF 420 V		
Relay	Option 1		
Reference	2014 145. + NTC15Ω		
Pick-Up	7,00 A		
Drop-Out	5,90 A		
Protector	Option 1	Option 2	Option 3
Reference	MRP61AMK	T0138	AE86FHY
Current	7,80 A	7,70 A	7,70 A
Time check	7,5-14 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	105,00 / 61,00 °C	105,00 / 62,00 °C	105,00 / 62,00 °C

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## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	140	155	0,75	1,05	0,90
40	-30	195	177	0,84	1,28	1,10
40	-25	266	201	0,95	1,54	1,32
40	-23,3	294	210	0,99	1,63	1,40
40	-20	354	229	1,08	1,80	1,55
40	-15	459	259	1,22	2,06	1,77
40	-10	580	293	1,37	2,30	1,98

45	-35	133	155	0,75	1,00	0,86
45	-30	187	178	0,85	1,22	1,05
45	-25	257	205	0,97	1,46	1,25
45	-23,3	285	215	1,01	1,54	1,33
45	-20	344	234	1,10	1,71	1,47
45	-15	447	267	1,25	1,95	1,68
45	-10	567	302	1,41	2,18	1,88

50	-35	127	155	0,75	0,95	0,82
50	-30	179	180	0,86	1,15	0,99
50	-25	248	209	0,99	1,38	1,19
50	-23,3	275	219	1,03	1,46	1,26
50	-20	333	240	1,13	1,62	1,39
50	-15	435	274	1,28	1,85	1,59
50	-10	553	311	1,46	2,07	1,78

55	-35	120	155	0,75	0,90	0,77
55	-30	171	182	0,87	1,09	0,94
55	-25	238	212	1,00	1,31	1,12
55	-23,3	265	223	1,05	1,38	1,19
55	-20	322	245	1,15	1,53	1,31
55	-15	423	281	1,32	1,75	1,50
55	-10	540	320	1,50	1,96	1,69

60	-35	113	155	0,75	0,85	0,73
60	-30	163	184	0,88	1,03	0,89
60	-25	229	216	1,02	1,23	1,06
60	-23,3	255	227	1,07	1,31	1,12
60	-20	312	251	1,17	1,45	1,24
60	-15	411	288	1,35	1,66	1,43
60	-10	527	329	1,54	1,86	1,60

65	-35	107	155	0,75	0,80	0,69
65	-30	155	186	0,88	0,97	0,83
65	-25	220	219	1,03	1,16	1,00
65	-23,3	245	231	1,09	1,23	1,06
65	-20	301	256	1,20	1,37	1,18
65	-15	399	295	1,38	1,57	1,35
65	-10	513	338	1,59	1,77	1,52

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	153	155	0,75	0,98	0,85
40	-30	217	177	0,84	1,23	1,06
40	-25	297	201	0,95	1,48	1,28
40	-23,3	328	210	0,99	1,56	1,35
40	-20	393	229	1,08	1,72	1,48
40	-15	505	259	1,22	1,94	1,68
40	-10	631	293	1,37	2,15	1,86

45	-35	140	155	0,75	0,90	0,78
45	-30	199	178	0,85	1,11	0,96
45	-25	273	205	0,97	1,33	1,15
45	-23,3	302	215	1,01	1,41	1,22
45	-20	364	234	1,10	1,55	1,34
45	-15	469	267	1,25	1,76	1,52
45	-10	591	302	1,41	1,96	1,69

50	-35	126	155	0,75	0,82	0,71
50	-30	180	180	0,86	1,00	0,86
50	-25	249	209	0,99	1,20	1,03
50	-23,3	276	219	1,03	1,26	1,09
50	-20	334	240	1,13	1,39	1,20
50	-15	434	274	1,28	1,59	1,37
50	-10	550	311	1,46	1,77	1,53

55	-35	113	155	0,75	0,73	0,63
55	-30	162	182	0,87	0,89	0,77
55	-25	225	212	1,00	1,06	0,92
55	-23,3	250	223	1,05	1,12	0,97
55	-20	304	245	1,15	1,24	1,07
55	-15	399	281	1,32	1,42	1,23
55	-10	509	320	1,50	1,59	1,37

60	-35	100	155	0,75	0,65	0,56
60	-30	143	184	0,88	0,78	0,67
60	-25	201	216	1,02	0,93	0,81
60	-23,3	224	227	1,07	0,99	0,85
60	-20	275	251	1,17	1,10	0,95
60	-15	364	288	1,35	1,26	1,09
60	-10	468	329	1,54	1,42	1,23

65	-35	87	155	0,75	0,56	0,49
65	-30	124	186	0,88	0,67	0,58
65	-25	177	219	1,03	0,81	0,70
65	-23,3	198	231	1,09	0,86	0,74
65	-20	245	256	1,20	0,96	0,83
65	-15	329	295	1,38	1,11	0,96
65	-10	428	338	1,59	1,27	1,09

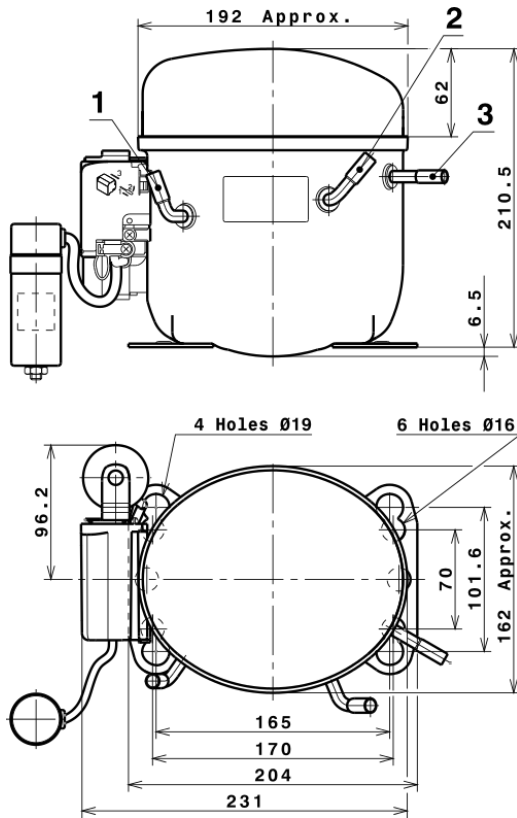
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.341,8406809827	275,0400020562	1,2904691070	23,954115792032
2	41,6709122515	5,4924572372	0,0270237715	0,84116690793878
3	-10,6433430194	2,5802183955	0,0122711097	-0,076562947604989
4	0,3033265636	0,0616562802	0,0003426694	0,0081748032911788
5	-0,2290223882	0,0737205256	0,0003506031	-0,0012949936402098

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## COMPRESSOR DIMENSIONS

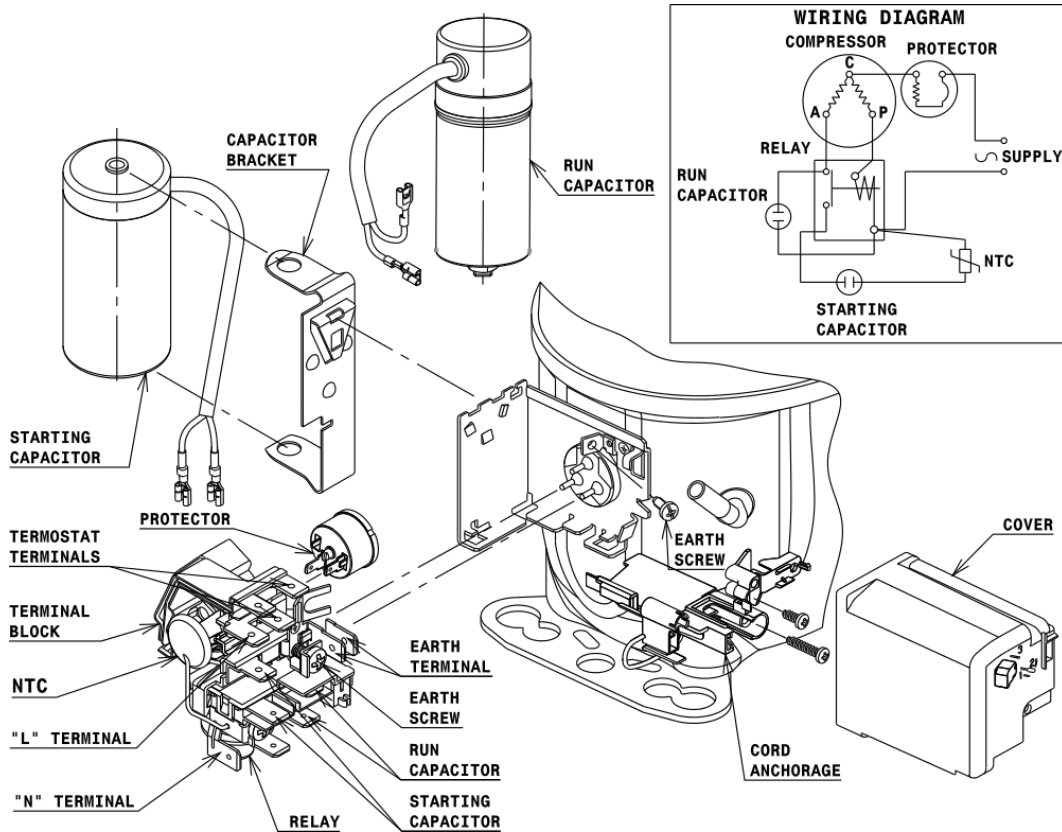


## DESIGNATION INTERNAL DIAM.

DESIGNATION	INTERNAL DIAM.
1	Suction 8,1 mm
2	Service 8,1 mm
3	Discharge 6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### CSR CONNECTION (CURRENT RELAY + NTC) (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

