

# Technical Data Sheet

Compressor model **GPY12AAb**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

Application Low Back Pressure  
 Refrigerant R134a  
 Evaporating Temp. -35,0 °C to -10,0 °C  
 Expansion Capillar  
 Comp. Cooling Static  
 Max. ambient temp. 43,0 °C  
 Compatible refriger. R1234yf

## COMPRESSOR

Displacement 12,10 cm<sup>3</sup>  
 Diameter 27,00 mm  
 Stroke 21,13 mm  
 Net Weight 12,18 Kg  
 Oil type ISO VG 32 ESTER  
 Oil charge 400 cm<sup>3</sup>

## MOTOR

Nominal Power 3/8 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type RSCR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 16,00 A  
 Max. Cont. Current (MCC) 2,30 A  
 Main W. resist. at 25°C 6,25 Ω  
 Start W. resist. at 25°C 15,40 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	280 kCal/h	241 W
COP	1,33 W/W	1,04 W/W
EER	1,15 kCal/Wh	0,89 kCal/Wh
Input Power	244 W	232 W
Current	1,25 A	1,19 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

Run capacitor	6 μF 400 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2		
Reference	4TM424NFBYY	T0377		
Current	14,50 A	12,00 A		
Time check	5-15 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 62,00 °C		

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	155	170	0,90	1,06	0,91
40	-30	212	194	1,01	1,28	1,10
40	-25	283	220	1,13	1,49	1,28
40	-23,3	309	229	1,18	1,57	1,35
40	-20	366	249	1,27	1,71	1,47
40	-15	461	280	1,43	1,92	1,65
40	-10	570	314	1,59	2,11	1,82

45	-35	148	170	0,90	1,01	0,87
45	-30	204	196	1,02	1,21	1,04
45	-25	273	224	1,15	1,42	1,22
45	-23,3	300	234	1,20	1,49	1,28
45	-20	355	255	1,30	1,62	1,39
45	-15	449	288	1,47	1,81	1,56
45	-10	557	324	1,65	2,00	1,72

50	-35	142	170	0,90	0,97	0,83
50	-30	196	198	1,03	1,15	0,99
50	-25	264	228	1,17	1,34	1,16
50	-23,3	290	239	1,23	1,41	1,21
50	-20	344	261	1,33	1,53	1,32
50	-15	437	297	1,51	1,71	1,47
50	-10	543	335	1,70	1,89	1,62

55	-35	135	170	0,90	0,92	0,79
55	-30	188	200	1,04	1,10	0,94
55	-25	255	232	1,19	1,27	1,10
55	-23,3	280	244	1,25	1,33	1,15
55	-20	334	267	1,36	1,45	1,25
55	-15	425	305	1,55	1,62	1,40
55	-10	530	345	1,75	1,79	1,54

60	-35	128	170	0,90	0,88	0,75
60	-30	180	202	1,05	1,04	0,89
60	-25	245	237	1,21	1,21	1,04
60	-23,3	270	249	1,27	1,26	1,09
60	-20	323	274	1,39	1,37	1,18
60	-15	413	313	1,59	1,54	1,32
60	-10	517	355	1,80	1,69	1,45

65	-35	122	170	0,90	0,83	0,72
65	-30	172	204	1,06	0,98	0,84
65	-25	236	241	1,23	1,14	0,98
65	-23,3	260	254	1,30	1,19	1,03
65	-20	312	280	1,42	1,30	1,12
65	-15	401	321	1,63	1,45	1,25
65	-10	503	366	1,86	1,60	1,38

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	169	170	0,90	0,99	0,86
40	-30	235	194	1,01	1,21	1,05
40	-25	314	220	1,13	1,43	1,23
40	-23,3	343	229	1,18	1,49	1,29
40	-20	404	249	1,27	1,62	1,40
40	-15	506	280	1,43	1,81	1,56
40	-10	620	314	1,59	1,98	1,71

45	-35	155	170	0,90	0,91	0,79
45	-30	216	196	1,02	1,10	0,95
45	-25	289	224	1,15	1,29	1,11
45	-23,3	317	234	1,20	1,35	1,17
45	-20	374	255	1,30	1,47	1,27
45	-15	471	288	1,47	1,63	1,41
45	-10	580	324	1,65	1,79	1,55

50	-35	141	170	0,90	0,83	0,72
50	-30	197	198	1,03	1,00	0,86
50	-25	265	228	1,17	1,16	1,00
50	-23,3	291	239	1,23	1,22	1,05
50	-20	345	261	1,33	1,32	1,14
50	-15	436	297	1,51	1,47	1,27
50	-10	540	335	1,70	1,61	1,39

55	-35	128	170	0,90	0,75	0,65
55	-30	178	200	1,04	0,89	0,77
55	-25	241	232	1,19	1,04	0,89
55	-23,3	264	244	1,25	1,08	0,94
55	-20	315	267	1,36	1,18	1,02
55	-15	401	305	1,55	1,32	1,14
55	-10	500	345	1,75	1,45	1,25

60	-35	114	170	0,90	0,67	0,58
60	-30	159	202	1,05	0,79	0,68
60	-25	216	237	1,21	0,91	0,79
60	-23,3	238	249	1,27	0,96	0,83
60	-20	285	274	1,39	1,04	0,90
60	-15	366	313	1,59	1,17	1,01
60	-10	459	355	1,80	1,29	1,12

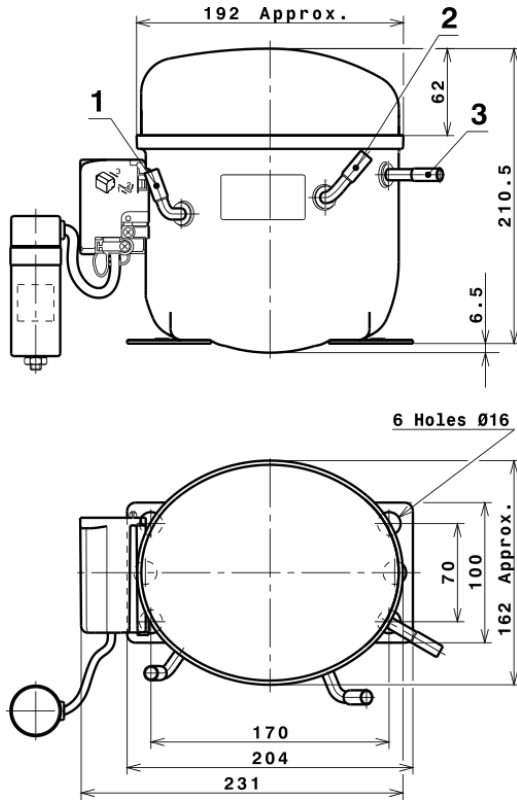
65	-35	100	170	0,90	0,59	0,51
65	-30	140	204	1,06	0,69	0,59
65	-25	192	241	1,23	0,80	0,69
65	-23,3	212	254	1,30	0,84	0,72
65	-20	256	280	1,42	0,91	0,79
65	-15	331	321	1,63	1,03	0,89
65	-10	419	366	1,86	1,15	0,99

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.288,1413169683	280,7149072322	1,4305072542	22,854879624654
2	37,0885611597	4,9159661909	0,0259530119	0,73720870402012
3	-10,4408144434	2,9624729726	0,0149861643	-0,07655950046718
4	0,2342436326	0,0530607299	0,0003222965	0,0063886823602916
5	-0,2189480232	0,0846420849	0,0004281761	-0,0012948228161095

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

## COMPRESSOR DIMENSIONS

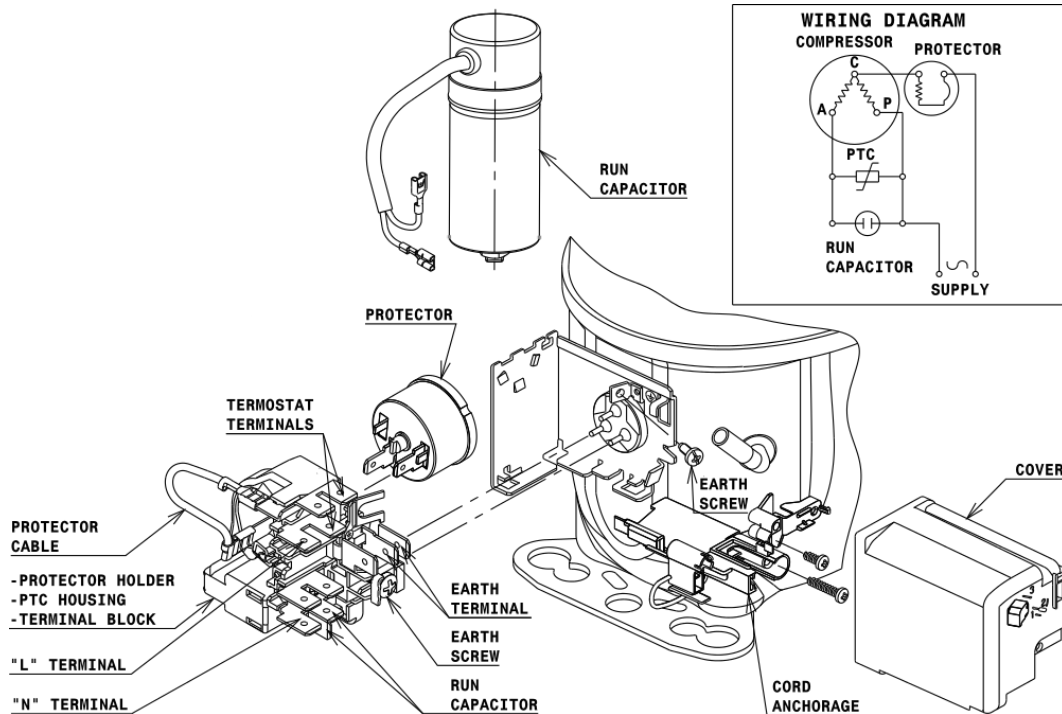


## DESIGNATION INTERNAL DIAM.

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

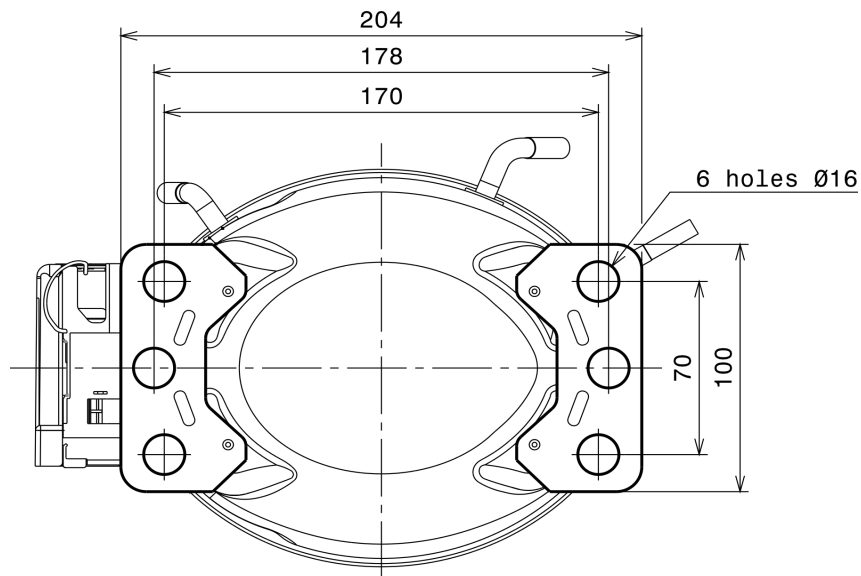
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSCR CONNECTION (L, P ranges)



# Technical Data Sheet

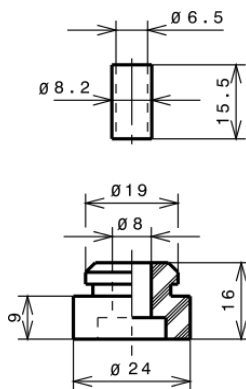
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

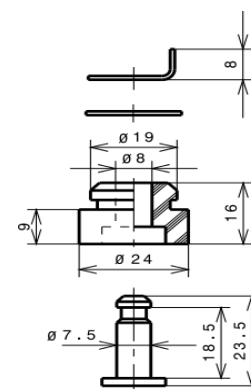
### STANDARD

Ø16 holes (170x70 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R134a LBP

