

# Technical Data Sheet

Compressor model **GPY14NGa**  
 Voltage **200-220/220-230V 50/60Hz ~1**  
 Refrigerant **R134a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	Low-Medium Back Pressure	Displacement	14,32 cm <sup>3</sup>	Nominal Power	1/3 hp
Refrigerant	R134a	Diameter	29,37 mm	Voltage/Frequency	200-220V 50Hz
Evaporating Temp.	-35,0 °C to 0,0 °C	Stroke	21,13 mm	Voltage range	170-242 V
Expansion	Capillar/Valve	Net Weight	12,59 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	400 cm <sup>3</sup>	Locked Rotor Amps (LRA)	19,00 A
Compatible refriger.	R1234yf			Max. Cont. Current (MCC)	4,40 A
				Main W. resist. at 25°C	3,70 Ω
				Start W. resist. at 25°C	11,80 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	333 kCal/h	284 W
COP	1,20 W/W	0,92 W/W
EER	1,03 kCal/Wh	0,80 kCal/Wh
Input Power	322 W	308 W
Current	2,57 A	2,53 A

## TEST CYCLE CONDITIONS

	ASHRAE LMBP (B)	CECOMAF LMBP (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	72- 88 μF 330 V			
Relay	Option 1			
Reference	2014 158.			
Pick-Up	9,05 A			
Drop-Out	7,70 A			
Protector	Option 1			
Reference	T0266			
Current	11,00 A			
Time check	7,5-14 seg			
Disc temp. (Open/Close)	105,00 / 52,00 °C			

## ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	180	232	2,37	0,90	0,78
40	-30	243	259	2,42	1,09	0,94
40	-25	327	290	2,49	1,31	1,13
40	-23,3	360	301	2,52	1,39	1,20
40	-20	431	323	2,57	1,55	1,34
40	-15	557	360	2,67	1,80	1,55
40	-10	703	400	2,79	2,05	1,76
40	-5	871	443	2,93	2,29	1,97
40	0	1.059	489	3,10	2,52	2,17

45	-35	172	232	2,37	0,86	0,74
45	-30	234	262	2,43	1,04	0,89
45	-25	318	296	2,51	1,25	1,08
45	-23,3	351	308	2,53	1,33	1,14
45	-20	422	332	2,60	1,48	1,27
45	-15	548	372	2,71	1,71	1,47
45	-10	694	415	2,84	1,94	1,67
45	-5	861	461	3,00	2,17	1,87
45	0	1.049	510	3,18	2,39	2,05

50	-35	163	232	2,37	0,82	0,70
50	-30	226	265	2,44	0,99	0,85
50	-25	309	302	2,52	1,19	1,02
50	-23,3	342	315	2,55	1,26	1,09
50	-20	413	341	2,62	1,41	1,21
50	-15	538	384	2,74	1,63	1,40
50	-10	684	430	2,89	1,85	1,59
50	-5	851	479	3,06	2,06	1,77
50	0	1.038	532	3,27	2,27	1,95

55	-35	155	232	2,37	0,78	0,67
55	-30	217	268	2,44	0,94	0,81
55	-25	300	308	2,53	1,13	0,97
55	-23,3	333	322	2,57	1,20	1,03
55	-20	404	351	2,65	1,34	1,15
55	-15	529	396	2,78	1,55	1,33
55	-10	674	445	2,94	1,76	1,51
55	-5	841	498	3,13	1,96	1,69
55	0	1.028	553	3,36	2,16	1,86

60	-35	147	232	2,37	0,74	0,63
60	-30	208	271	2,45	0,89	0,77
60	-25	291	314	2,55	1,08	0,93
60	-23,3	324	329	2,59	1,14	0,98
60	-20	395	360	2,67	1,28	1,10
60	-15	519	409	2,82	1,48	1,27
60	-10	664	461	3,00	1,68	1,44
60	-5	831	516	3,21	1,87	1,61
60	0	1.018	574	3,45	2,06	1,77

65	-35	138	232	2,37	0,69	0,60
65	-30	200	274	2,46	0,85	0,73
65	-25	282	320	2,56	1,03	0,88
65	-23,3	315	336	2,61	1,09	0,94
65	-20	385	369	2,70	1,22	1,05
65	-15	510	421	2,86	1,41	1,21
65	-10	655	476	3,05	1,60	1,38
65	-5	821	534	3,28	1,79	1,54
65	0	1.007	596	3,55	1,97	1,69

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	196	232	2,37	0,85	0,73
40	-30	274	259	2,42	1,06	0,91
40	-25	372	290	2,49	1,28	1,11
40	-23,3	409	301	2,52	1,36	1,18
40	-20	489	323	2,57	1,51	1,31
40	-15	625	360	2,67	1,74	1,50
40	-10	781	400	2,79	1,95	1,69
40	-5	957	443	2,93	2,16	1,87
40	0	1.152	489	3,10	2,36	2,04

45	-35	180	232	2,37	0,77	0,67
45	-30	251	262	2,43	0,96	0,83
45	-25	342	296	2,51	1,16	1,00
45	-23,3	378	308	2,53	1,23	1,06
45	-20	453	332	2,60	1,36	1,18
45	-15	583	372	2,71	1,57	1,35
45	-10	733	415	2,84	1,77	1,53
45	-5	902	461	3,00	1,96	1,69
45	0	1.090	510	3,18	2,14	1,85

50	-35	163	232	2,37	0,70	0,61
50	-30	228	265	2,44	0,86	0,74
50	-25	313	302	2,52	1,04	0,90
50	-23,3	346	315	2,55	1,10	0,95
50	-20	417	341	2,62	1,22	1,06
50	-15	541	384	2,74	1,41	1,22
50	-10	684	430	2,89	1,59	1,37
50	-5	847	479	3,06	1,77	1,53
50	0	1.029	532	3,27	1,93	1,67

55	-35	147	232	2,37	0,63	0,55
55	-30	205	268	2,44	0,77	0,66
55	-25	284	308	2,53	0,92	0,80
55	-23,3	315	322	2,57	0,98	0,84
55	-20	381	351	2,65	1,09	0,94
55	-15	498	396	2,78	1,26	1,09
55	-10	635	445	2,94	1,43	1,23
55	-5	791	498	3,13	1,59	1,37
55	0	967	553	3,36	1,75	1,51

60	-35	130	232	2,37	0,56	0,48
60	-30	182	271	2,45	0,67	0,58
60	-25	254	314	2,55	0,81	0,70
60	-23,3	283	329	2,59	0,86	0,74
60	-20	345	360	2,67	0,96	0,83
60	-15	456	409	2,82	1,12	0,96
60	-10	586	461	3,00	1,27	1,10
60	-5	736	516	3,21	1,43	1,23
60	0	905	574	3,45	1,58	1,36

65	-35	114	232	2,37	0,49	0,42
65	-30	159	274	2,46	0,58	0,50
65	-25	225	320	2,56	0,70	0,61
65	-23,3	251	336	2,61	0,75	0,65
65	-20	310	369	2,70	0,84	0,73
65	-15	414	421	2,86	0,98	0,85
65	-10	538	476	3,05	1,13	0,98
65	-5	681	534	3,28	1,27	1,10
65	0	844	596	3,55	1,42	1,22

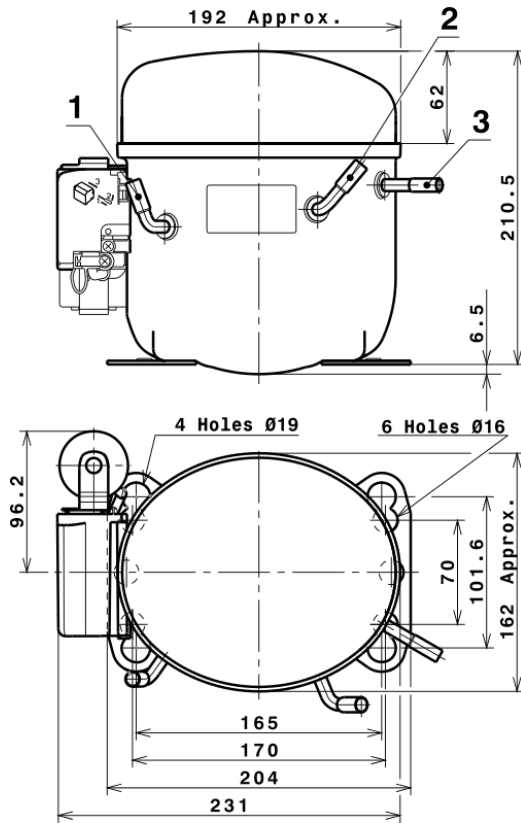
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.648,0464943186	326,5551152289	2,4244802224	27,552681262386
2	51,1296945734	4,8975111007	0,0191810692	0,98974339537199
3	-12,8145014806	4,3768643717	0,0181352078	-0,050045887526085
4	0,3816425859	0,0668134162	0,0005113149	0,010501794756012
5	-0,2708579273	0,1250532678	0,0005181488	-0,0003142094536322

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

### 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 LMBP

