

Technical Data Sheet

Compressor model **HPY12AGa**
 Voltage **200-220/220-230V 50/60Hz ~1**
 Refrigerant **R600a**

APPLICATION

Application Low Back Pressure
 Refrigerant R600a
 Evaporating Temp. -35,0 °C to -10,0 °C
 Expansion Capillar
 Comp. Cooling Static
 Max. ambient temp. 43,0 °C

COMPRESSOR

Displacement 12,10 cm³
 Diameter 27,00 mm
 Stroke 21,13 mm
 Net Weight 10,90 Kg
 Oil type ISO VG 10 MINER
 Oil charge 300 cm³

MOTOR

Nominal Power 1/4 hp
 Voltage/Frequency 200-220V 50Hz
 Voltage range 170-242 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 13,50 A
 Max. Cont. Current (MCC) 1,30 A
 Main W. resist. at 25°C 11,32 Ω
 Start W. resist. at 25°C 10,30 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	165 kCal/h	144 W
COP	1,40 W/W	1,10 W/W
EER	1,20 kCal/Wh	0,95 kCal/Wh
Input Power	137 W	131 W
Current	1,03 A	1,01 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T _e)	-23,3 °C	-25,0 °C
Condensing temp. (T _c)	55,0 °C	55,0 °C
Liquid temp. (T _{liq.})	32,0 °C	55,0 °C
Ambient temp. (T _{amb.})	32,0 °C	32,0 °C
Suction temp. (T _{suction})	32,0 °C	32,0 °C
Voltage/Frequency	200 V 50 Hz	200 V 50 Hz

ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2	Option 3	
Reference	MSP348LZ	4TM276NFBYY	T0502	
Current	7,40 A	9,00 A	9,00 A	
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C	130,00 / 62,00 °C	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

ASHRAE

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-35	100	99	0,91	1,17	1,01
40	-30	134	112	0,95	1,38	1,19
40	-25	175	127	0,99	1,60	1,38
40	-23,3	191	132	1,01	1,68	1,45
40	-20	225	143	1,05	1,83	1,57
40	-15	284	161	1,12	2,05	1,76
40	-10	350	180	1,20	2,26	1,94

45	-35	94	98	0,90	1,11	0,96
45	-30	126	113	0,95	1,31	1,12
45	-25	167	128	1,00	1,51	1,30
45	-23,3	183	134	1,02	1,59	1,36
45	-20	216	145	1,06	1,73	1,48
45	-15	273	164	1,14	1,93	1,66
45	-10	338	184	1,22	2,14	1,84

50	-35	88	98	0,90	1,05	0,90
50	-30	119	113	0,95	1,23	1,06
50	-25	159	130	1,00	1,42	1,22
50	-23,3	174	135	1,02	1,49	1,28
50	-20	206	148	1,07	1,62	1,40
50	-15	262	167	1,15	1,82	1,57
50	-10	326	188	1,24	2,02	1,73

55	-35	82	97	0,90	0,98	0,85
55	-30	112	113	0,95	1,15	0,99
55	-25	150	131	1,01	1,34	1,15
55	-23,3	165	137	1,03	1,40	1,20
55	-20	197	150	1,08	1,53	1,31
55	-15	251	170	1,16	1,72	1,48
55	-10	314	192	1,26	1,90	1,64

60	-35	76	96	0,90	0,92	0,79
60	-30	105	113	0,95	1,07	0,92
60	-25	142	132	1,01	1,25	1,07
60	-23,3	156	139	1,04	1,31	1,13
60	-20	187	152	1,09	1,43	1,23
60	-15	240	173	1,17	1,61	1,39
60	-10	302	196	1,28	1,79	1,54

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	109	99	0,91	1,10	0,95
40	-30	148	112	0,95	1,32	1,14
40	-25	195	127	0,99	1,54	1,33
40	-23,3	213	132	1,01	1,61	1,39
40	-20	250	143	1,05	1,74	1,51
40	-15	312	161	1,12	1,94	1,68
40	-10	383	180	1,20	2,13	1,84

45	-35	99	98	0,90	1,01	0,87
45	-30	135	113	0,95	1,20	1,03
45	-25	178	128	1,00	1,39	1,20
45	-23,3	195	134	1,02	1,45	1,25
45	-20	229	145	1,06	1,58	1,36
45	-15	288	164	1,14	1,76	1,52
45	-10	355	184	1,22	1,93	1,67

50	-35	89	98	0,90	0,91	0,79
50	-30	121	113	0,95	1,07	0,93
50	-25	161	130	1,00	1,24	1,07
50	-23,3	176	135	1,02	1,30	1,12
50	-20	209	148	1,07	1,41	1,22
50	-15	264	167	1,15	1,58	1,37
50	-10	328	188	1,24	1,74	1,51

55	-35	79	97	0,90	0,81	0,70
55	-30	107	113	0,95	0,95	0,82
55	-25	144	131	1,01	1,10	0,95
55	-23,3	158	137	1,03	1,15	1,00
55	-20	188	150	1,08	1,26	1,09
55	-15	240	170	1,16	1,41	1,22
55	-10	301	192	1,26	1,57	1,35

60	-35	68	96	0,90	0,71	0,61
60	-30	94	113	0,95	0,83	0,71
60	-25	127	132	1,01	0,96	0,83
60	-23,3	140	139	1,04	1,01	0,87
60	-20	168	152	1,09	1,10	0,95
60	-15	217	173	1,17	1,25	1,08
60	-10	273	196	1,28	1,39	1,20

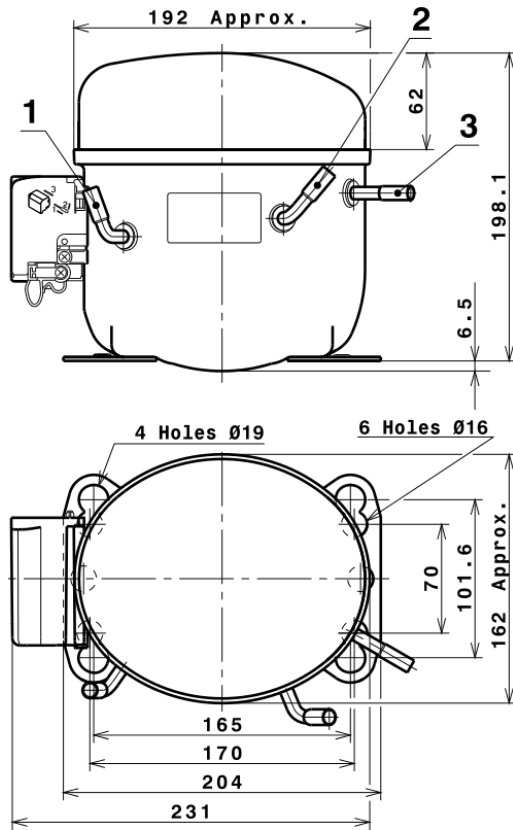
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	810,9189674710	179,6175837440	1,2173922874	8,1944880536462
2	23,0966246402	3,1253657642	0,0173580442	0,25650888571689
3	-6,9297102303	1,1996414315	0,0055248033	-0,037839949912592
4	0,1519368674	0,0296374017	0,0002594944	0,0022084603565255
5	-0,1394503777	0,0381654046	0,0001692018	-0,00063588096500096

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

RSIR CONNECTION (PTC) (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 R600a LBP

