

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 220-230V 60Hz
Voltage range 187-253 V
Type RSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 14,10 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	193 kCal/h	168 W
COP	1,37 W/W	1,08 W/W
EER	1,18 kCal/Wh	0,93 kCal/Wh
Input Power	164 W	156 W
Current	1,00 A	0,98 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	230 V 60 Hz	230 V 60 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 °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	117	119	0,91	1,14	0,98
40	-30	156	134	0,93	1,36	1,17
40	-25	205	152	0,97	1,57	1,35
40	-23,3	224	159	0,99	1,65	1,41
40	-20	264	172	1,02	1,78	1,53
40	-15	332	196	1,08	1,97	1,70
40	-10	410	222	1,15	2,15	1,85

45	-35	110	118	0,90	1,08	0,93
45	-30	148	134	0,94	1,28	1,10
45	-25	196	153	0,98	1,48	1,28
45	-23,3	214	160	0,99	1,55	1,33
45	-20	253	175	1,03	1,68	1,44
45	-15	319	200	1,09	1,86	1,60
45	-10	396	227	1,17	2,03	1,74

50	-35	103	117	0,90	1,02	0,88
50	-30	139	134	0,94	1,21	1,04
50	-25	186	155	0,98	1,40	1,20
50	-23,3	203	162	1,00	1,46	1,25
50	-20	241	178	1,03	1,58	1,36
50	-15	306	203	1,10	1,75	1,51
50	-10	381	232	1,18	1,91	1,64

55	-35	96	116	0,90	0,96	0,83
55	-30	131	135	0,94	1,13	0,97
55	-25	176	156	0,98	1,31	1,13
55	-23,3	193	164	1,00	1,37	1,18
55	-20	230	180	1,04	1,48	1,27
55	-15	294	207	1,11	1,65	1,42
55	-10	367	237	1,20	1,80	1,55

60	-35	89	115	0,90	0,90	0,77
60	-30	123	135	0,94	1,06	0,91
60	-25	166	157	0,98	1,22	1,05
60	-23,3	183	166	1,00	1,28	1,10
60	-20	218	183	1,05	1,39	1,19
60	-15	281	211	1,12	1,55	1,33
60	-10	353	242	1,22	1,69	1,46

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	128	119	0,91	1,08	0,93
40	-30	174	134	0,93	1,30	1,12
40	-25	229	152	0,97	1,51	1,30
40	-23,3	249	159	0,99	1,57	1,36
40	-20	293	172	1,02	1,70	1,47
40	-15	366	196	1,08	1,87	1,61
40	-10	448	222	1,15	2,02	1,74

45	-35	116	118	0,90	0,98	0,85
45	-30	158	134	0,94	1,17	1,01
45	-25	208	153	0,98	1,36	1,18
45	-23,3	228	160	0,99	1,42	1,23
45	-20	268	175	1,03	1,53	1,32
45	-15	338	200	1,09	1,69	1,46
45	-10	416	227	1,17	1,83	1,58

50	-35	104	117	0,90	0,89	0,77
50	-30	142	134	0,94	1,05	0,91
50	-25	188	155	0,98	1,22	1,05
50	-23,3	206	162	1,00	1,27	1,10
50	-20	244	178	1,03	1,37	1,19
50	-15	309	203	1,10	1,52	1,31
50	-10	384	232	1,18	1,65	1,43

55	-35	92	116	0,90	0,79	0,69
55	-30	126	135	0,94	0,93	0,81
55	-25	168	156	0,98	1,08	0,93
55	-23,3	185	164	1,00	1,13	0,97
55	-20	220	180	1,04	1,22	1,06
55	-15	281	207	1,11	1,36	1,17
55	-10	351	237	1,20	1,48	1,28

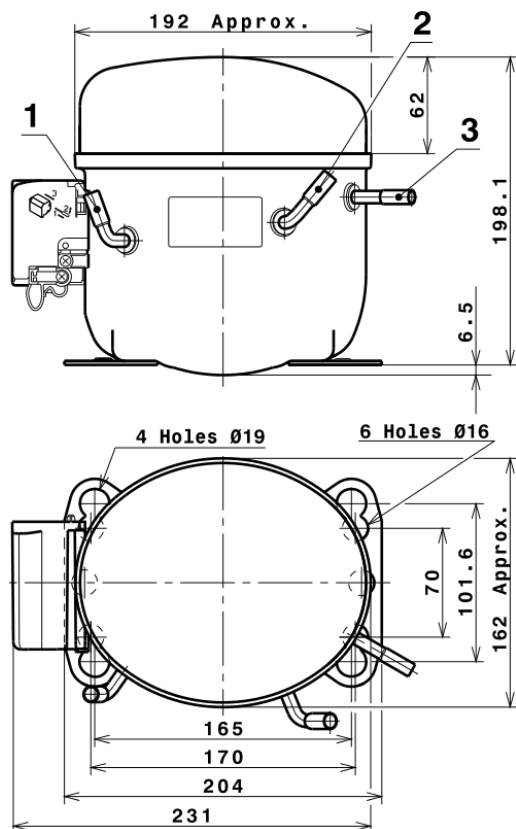
60	-35	80	115	0,90	0,70	0,60
60	-30	110	135	0,94	0,81	0,70
60	-25	148	157	0,98	0,94	0,81
60	-23,3	163	166	1,00	0,99	0,85
60	-20	196	183	1,05	1,07	0,93
60	-15	253	211	1,12	1,20	1,04
60	-10	319	242	1,22	1,32	1,14

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	952,6890157062	228,6383534438	1,1837266328	9,6378095982943
2	27,1191438860	4,8255268025	0,0168973155	0,30132584768197
3	-8,1919110589	1,5131665624	0,0046048320	-0,045370874797124
4	0,1771956888	0,0570904472	0,0002719479	0,0025757593037329
5	-0,1656671085	0,0490682331	0,0001424553	-0,00077684017057066

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

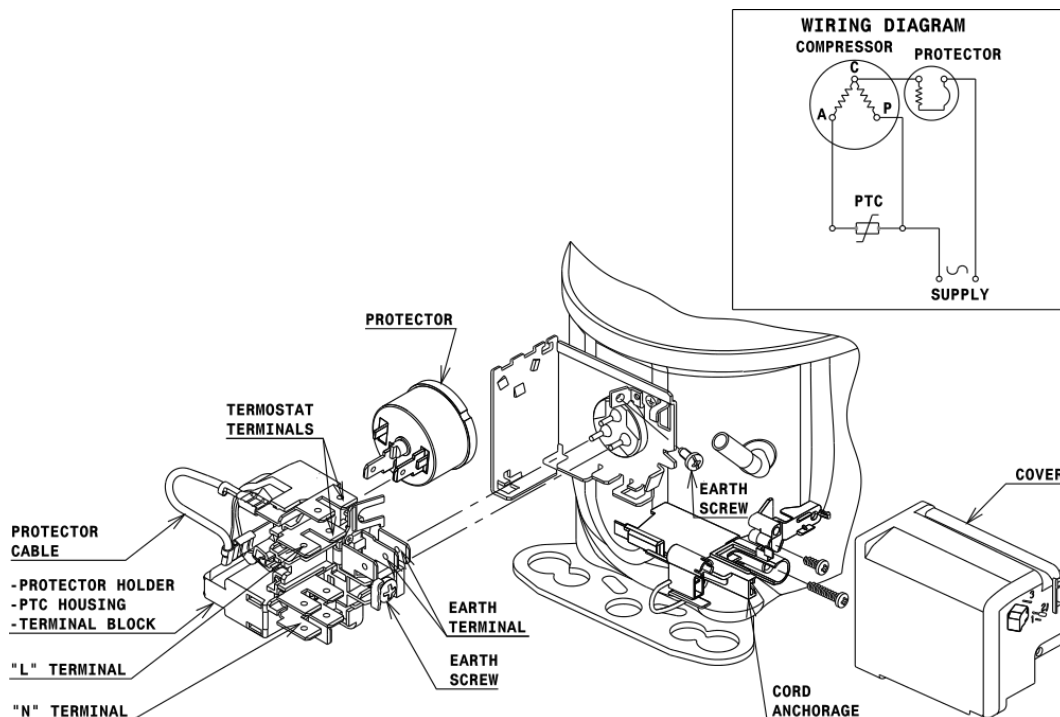


DESIGNATION INTERNAL DIAM.

1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

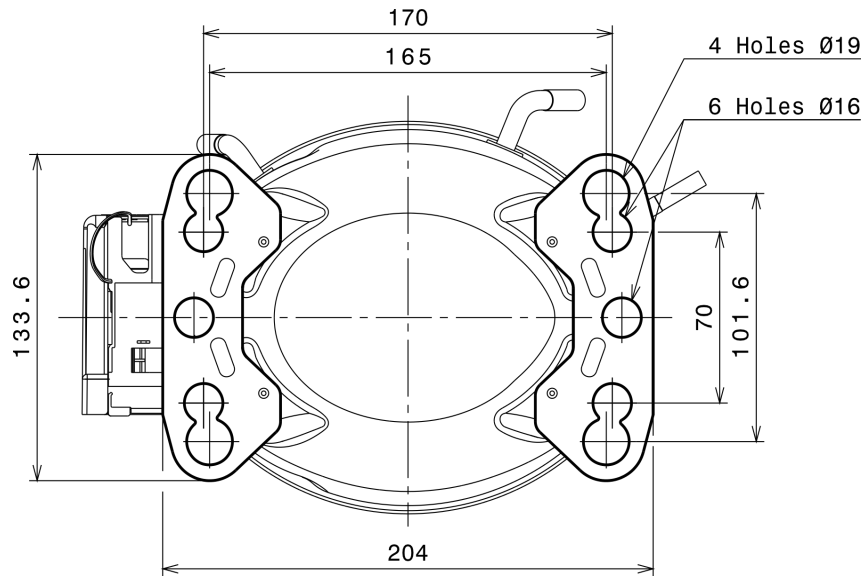
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



Technical Data Sheet

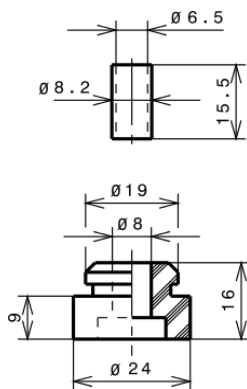
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

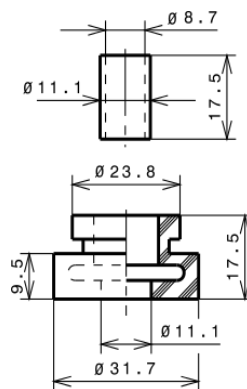
STANDARD

Ø16 holes (170x70 net)



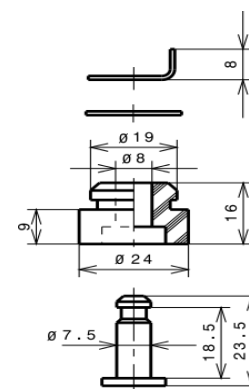
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

