

Technical Data Sheet

Compressor model **HPY14AJa**
Voltage **100V 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 14,32 cm³
Diameter 29,37 mm
Stroke 21,13 mm
Net Weight 10,75 Kg
Oil type ISO VG 10 MINER
Oil charge 400 cm³

MOTOR

Nominal Power 1/5 hp
Voltage/Frequency 100V 60Hz
Voltage range 90-110 V
Type RSIR
Phase number 1 PH
Locked Rotor Amps (LRA) 19,00 A
Max. Cont. Current (MCC) 3,50 A
Main W. resist. at 25°C 2,15 Ω
Start W. resist. at 25°C 4,63 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	215 kCal/h	187 W
COP	1,34 W/W	1,06 W/W
EER	1,15 kCal/Wh	0,91 kCal/Wh
Input Power	187 W	177 W
Current	2,80 A	2,72 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	100 V 60 Hz	100 V 60 Hz

ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K115			
Voltage	100 - 115 V			
Resistance	4,70 Ω			
Protector	Option 1	Option 2		
Reference	T0791	4TM774RFBZZ		
Current	18,20 A	19,50 A		
Time check	7,5-14 seg	5-15 seg		
Disc temp. (Open/Close)	130,00 / 62,00 °C	130,00 / 61,00 °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	128	129	2,35	1,15	0,99
40	-30	172	150	2,52	1,33	1,15
40	-25	228	174	2,70	1,52	1,31
40	-23,3	249	182	2,76	1,59	1,37
40	-20	293	199	2,89	1,71	1,47
40	-15	370	227	3,11	1,90	1,63
40	-10	457	256	3,33	2,08	1,79

45	-35	120	128	2,34	1,10	0,94
45	-30	163	150	2,52	1,26	1,09
45	-25	217	175	2,71	1,44	1,24
45	-23,3	238	184	2,77	1,50	1,29
45	-20	281	202	2,91	1,62	1,39
45	-15	356	230	3,13	1,80	1,55
45	-10	442	261	3,37	1,97	1,69

50	-35	113	126	2,33	1,04	0,89
50	-30	154	150	2,52	1,19	1,03
50	-25	206	176	2,72	1,36	1,17
50	-23,3	226	185	2,79	1,42	1,22
50	-20	269	204	2,93	1,53	1,32
50	-15	342	234	3,16	1,70	1,46
50	-10	426	266	3,41	1,86	1,60

55	-35	105	125	2,32	0,98	0,84
55	-30	145	150	2,51	1,12	0,96
55	-25	195	177	2,72	1,28	1,10
55	-23,3	215	187	2,80	1,34	1,15
55	-20	257	207	2,95	1,45	1,24
55	-15	328	238	3,19	1,61	1,38
55	-10	411	271	3,45	1,76	1,52

60	-35	97	124	2,31	0,92	0,79
60	-30	136	150	2,51	1,05	0,90
60	-25	185	179	2,73	1,20	1,03
60	-23,3	204	189	2,81	1,26	1,08
60	-20	244	209	2,97	1,36	1,17
60	-15	315	241	3,22	1,52	1,30
60	-10	396	276	3,49	1,67	1,43

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	140	129	2,35	1,08	0,94
40	-30	192	150	2,52	1,27	1,10
40	-25	253	174	2,70	1,46	1,26
40	-23,3	277	182	2,76	1,52	1,31
40	-20	325	199	2,89	1,63	1,41
40	-15	407	227	3,11	1,80	1,55
40	-10	499	256	3,33	1,95	1,69

45	-35	127	128	2,34	0,99	0,86
45	-30	174	150	2,52	1,16	1,00
45	-25	231	175	2,71	1,32	1,14
45	-23,3	253	184	2,77	1,38	1,19
45	-20	299	202	2,91	1,48	1,28
45	-15	376	230	3,13	1,63	1,41
45	-10	464	261	3,37	1,78	1,54

50	-35	114	126	2,33	0,90	0,78
50	-30	156	150	2,52	1,04	0,90
50	-25	209	176	2,72	1,19	1,03
50	-23,3	230	185	2,79	1,24	1,07
50	-20	272	204	2,93	1,33	1,15
50	-15	345	234	3,16	1,48	1,28
50	-10	429	266	3,41	1,61	1,39

55	-35	101	125	2,32	0,81	0,70
55	-30	139	150	2,51	0,92	0,80
55	-25	187	177	2,72	1,06	0,91
55	-23,3	206	187	2,80	1,10	0,95
55	-20	246	207	2,95	1,19	1,03
55	-15	314	238	3,19	1,32	1,14
55	-10	393	271	3,45	1,45	1,25

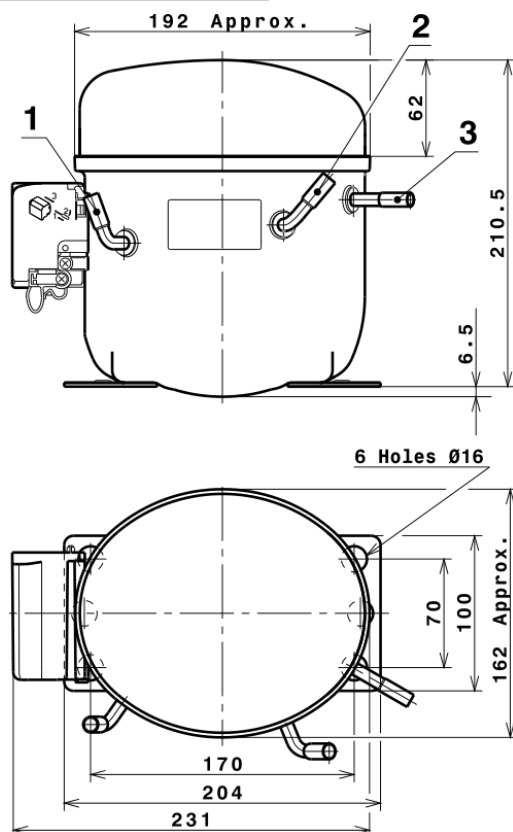
60	-35	88	124	2,31	0,71	0,61
60	-30	121	150	2,51	0,81	0,70
60	-25	165	179	2,73	0,93	0,80
60	-23,3	182	189	2,81	0,97	0,84
60	-20	219	209	2,97	1,05	0,91
60	-15	284	241	3,22	1,17	1,01
60	-10	358	276	3,49	1,30	1,12

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.056,9419090154	266,8769639916	3,4179988619	10,66545672874
2	30,2060789555	5,0227121809	0,0388374080	0,33487411147851
3	-8,9833803181	1,5403961085	0,0119172567	-0,048351047110534
4	0,1972706426	0,0420675183	0,0003246592	0,0028685423557738
5	-0,1818056754	0,0517911877	0,0004007351	-0,00081251456639012

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

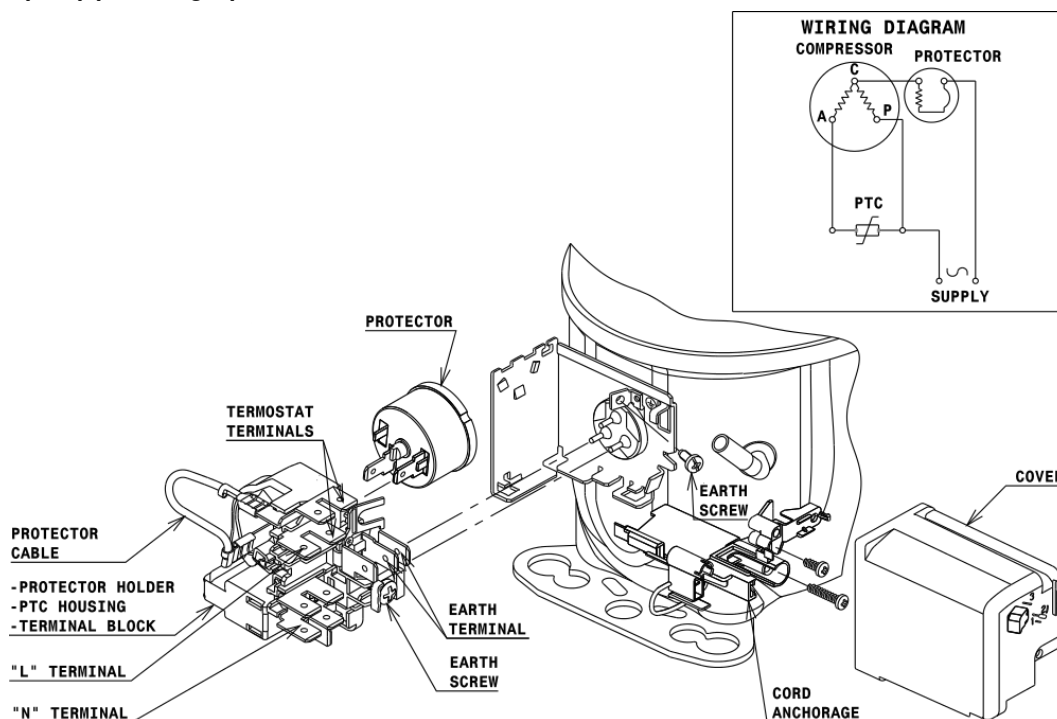


DESIGNATION INTERNAL DIAM.

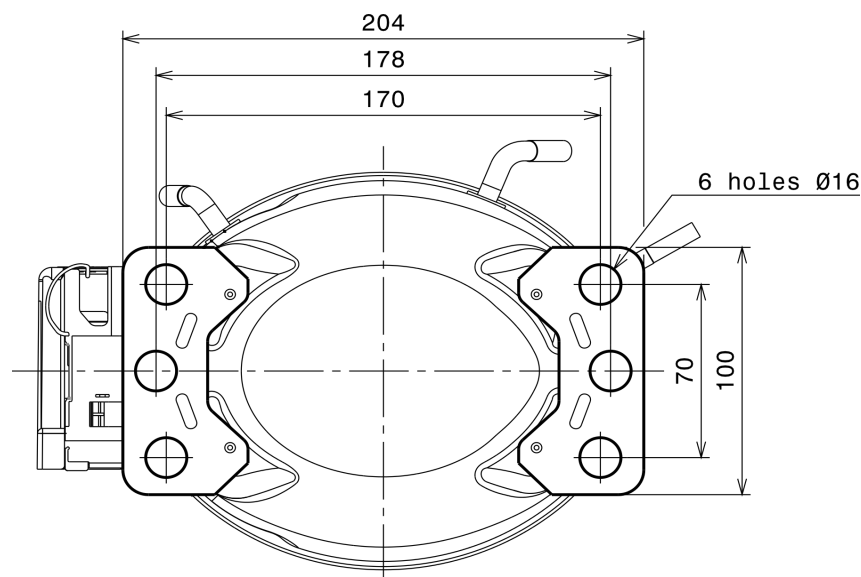
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



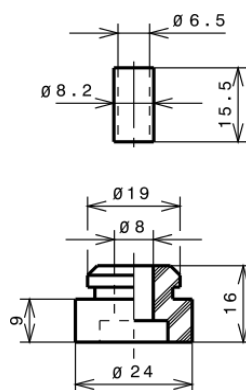
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

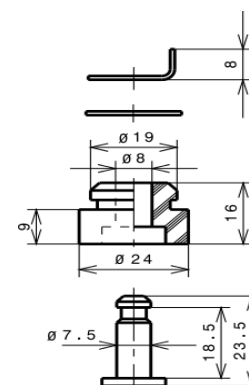
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

