

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 50Hz
 Voltage range 90-110 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 20,00 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	180 kCal/h	157 W
COP	1,28 W/W	1,01 W/W
EER	1,10 kCal/Wh	0,87 kCal/Wh
Input Power	164 W	155 W
Current	3,02 A	2,97 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 50 Hz	100 V 50 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	110	112	2,72	1,14	0,98
40	-30	146	131	2,83	1,29	1,11
40	-25	191	152	2,95	1,47	1,26
40	-23,3	209	159	2,99	1,53	1,32
40	-20	248	174	3,08	1,65	1,42
40	-15	314	198	3,21	1,84	1,59
40	-10	391	224	3,36	2,03	1,75

45	-35	103	111	2,72	1,09	0,93
45	-30	138	131	2,83	1,22	1,05
45	-25	182	153	2,96	1,39	1,19
45	-23,3	200	161	3,00	1,44	1,24
45	-20	237	177	3,09	1,56	1,34
45	-15	302	202	3,23	1,74	1,50
45	-10	378	229	3,38	1,92	1,65

50	-35	97	109	2,71	1,03	0,88
50	-30	130	131	2,83	1,15	0,99
50	-25	173	154	2,96	1,30	1,12
50	-23,3	190	162	3,01	1,36	1,17
50	-20	226	179	3,10	1,47	1,26
50	-15	290	206	3,25	1,64	1,41
50	-10	364	234	3,41	1,81	1,56

55	-35	90	108	2,70	0,97	0,83
55	-30	122	131	2,83	1,08	0,93
55	-25	163	155	2,97	1,22	1,05
55	-23,3	180	164	3,02	1,28	1,10
55	-20	216	181	3,12	1,38	1,19
55	-15	278	209	3,28	1,54	1,33
55	-10	351	239	3,44	1,71	1,47

60	-35	83	107	2,69	0,91	0,78
60	-30	114	131	2,83	1,01	0,87
60	-25	154	156	2,98	1,15	0,98
60	-23,3	170	166	3,03	1,20	1,03
60	-20	205	184	3,13	1,30	1,11
60	-15	266	213	3,30	1,45	1,25
60	-10	338	244	3,47	1,61	1,38

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	120	112	2,72	1,07	0,93
40	-30	162	131	2,83	1,24	1,07
40	-25	214	152	2,95	1,41	1,22
40	-23,3	233	159	2,99	1,47	1,27
40	-20	275	174	3,08	1,58	1,36
40	-15	346	198	3,21	1,75	1,51
40	-10	427	224	3,36	1,91	1,65

45	-35	109	111	2,72	0,98	0,85
45	-30	147	131	2,83	1,12	0,97
45	-25	195	153	2,96	1,27	1,10
45	-23,3	213	161	3,00	1,33	1,15
45	-20	252	177	3,09	1,43	1,23
45	-15	320	202	3,23	1,58	1,37
45	-10	397	229	3,38	1,73	1,50

50	-35	98	109	2,71	0,89	0,77
50	-30	132	131	2,83	1,01	0,87
50	-25	176	154	2,96	1,14	0,98
50	-23,3	193	162	3,01	1,19	1,03
50	-20	229	179	3,10	1,28	1,11
50	-15	293	206	3,25	1,42	1,23
50	-10	366	234	3,41	1,57	1,35

55	-35	86	108	2,70	0,80	0,69
55	-30	116	131	2,83	0,89	0,77
55	-25	157	155	2,97	1,01	0,87
55	-23,3	172	164	3,02	1,05	0,91
55	-20	207	181	3,12	1,14	0,98
55	-15	266	209	3,28	1,27	1,10
55	-10	336	239	3,44	1,41	1,21

60	-35	75	107	2,69	0,70	0,61
60	-30	101	131	2,83	0,78	0,67
60	-25	138	156	2,98	0,88	0,76
60	-23,3	152	166	3,03	0,92	0,79
60	-20	184	184	3,13	1,00	0,86
60	-15	240	213	3,30	1,12	0,97
60	-10	305	244	3,47	1,25	1,08

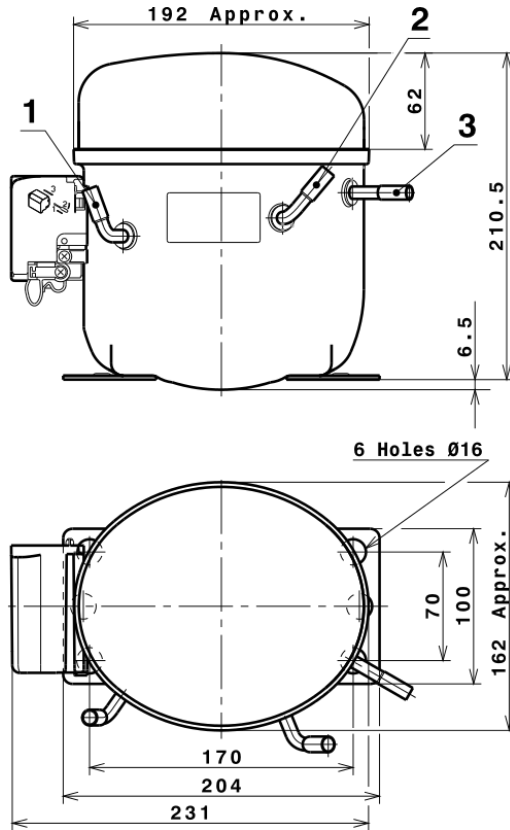
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	913,7068592059	225,6491193206	3,3629130427	9,2591241810365
2	26,8481214438	4,1043319591	0,0222125333	0,30078579036719
3	-7,7318217694	1,5403961085	0,0085552351	-0,042044388791769
4	0,1910181505	0,0353129887	0,0001745767	0,0027669794652921
5	-0,1561607883	0,0517911877	0,0002892131	-0,00070653440555662

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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Technical Data Sheet

COMPRESSOR DIMENSIONS

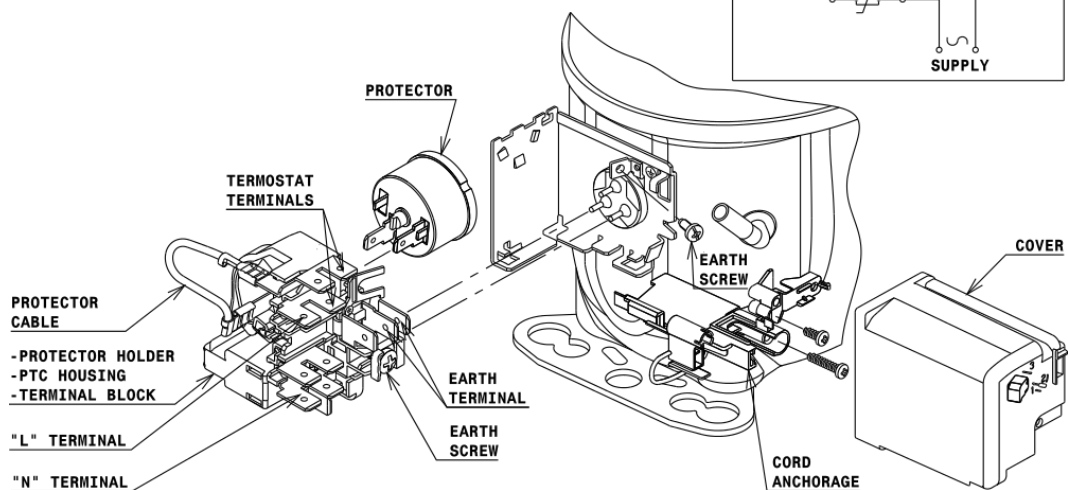


DESIGNATION INTERNAL DIAM.

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)



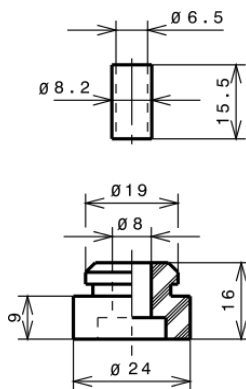
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

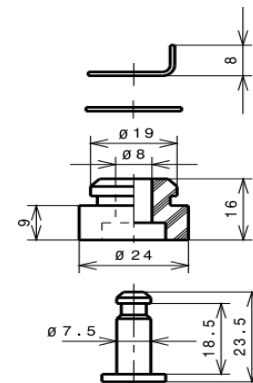
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

