

Technical Data Sheet

Compressor model **HPY14AJb**
 Voltage **100V 50/60Hz ~1**
 Refrigerant **R600a**

APPLICATION		COMPRESSOR	MOTOR
Application	Low Back Pressure	Displacement 14,32 cm ³	Nominal Power 1/5 hp
Refrigerant	R600a	Diameter 29,37 mm	Voltage/Frequency 100V 60Hz
Evaporating Temp.	-35,0 °C to -10,0 °C	Stroke 21,13 mm	Voltage range 90-110 V
Expansion	Capillar	Net Weight 10,86 Kg	Type RSCR
Comp. Cooling	Static	Oil type ISO VG 10 MINER	Phase number 1 PH
Max. ambient temp.	43,0 °C	Oil charge 400 cm ³	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	1,41 W/W	1,12 W/W
EER	1,21 kCal/Wh	0,96 kCal/Wh
Input Power	177 W	168 W
Current	1,98 A	1,89 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

Run capacitor	20 µF 250 V		
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	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-35	128	126	1,49	1,18	1,02
40	-30	172	145	1,67	1,39	1,19
40	-25	228	165	1,87	1,60	1,38
40	-23,3	249	173	1,94	1,67	1,44
40	-20	293	189	2,09	1,81	1,55
40	-15	370	215	2,34	2,00	1,72
40	-10	457	243	2,61	2,19	1,88

45	-35	120	124	1,47	1,13	0,97
45	-30	163	144	1,66	1,32	1,13
45	-25	217	166	1,88	1,52	1,30
45	-23,3	238	174	1,96	1,58	1,36
45	-20	281	191	2,11	1,71	1,47
45	-15	356	218	2,37	1,90	1,63
45	-10	442	248	2,66	2,07	1,78

50	-35	113	122	1,45	1,07	0,92
50	-30	154	143	1,66	1,25	1,07
50	-25	206	167	1,88	1,43	1,23
50	-23,3	226	176	1,97	1,50	1,29
50	-20	269	193	2,14	1,62	1,39
50	-15	342	222	2,41	1,79	1,54
50	-10	426	253	2,70	1,96	1,69

55	-35	105	120	1,43	1,02	0,88
55	-30	145	143	1,65	1,18	1,01
55	-25	195	168	1,89	1,35	1,16
55	-23,3	215	177	1,98	1,41	1,21
55	-20	257	195	2,16	1,53	1,31
55	-15	328	226	2,44	1,69	1,46
55	-10	411	258	2,75	1,85	1,59

60	-35	97	118	1,41	0,96	0,82
60	-30	136	142	1,64	1,11	0,95
60	-25	185	169	1,90	1,27	1,09
60	-23,3	204	178	1,99	1,33	1,14
60	-20	244	198	2,18	1,44	1,24
60	-15	315	229	2,48	1,60	1,37
60	-10	396	263	2,80	1,75	1,50

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	140	126	1,49	1,11	0,96
40	-30	192	145	1,67	1,33	1,14
40	-25	253	165	1,87	1,53	1,32
40	-23,3	277	173	1,94	1,60	1,38
40	-20	325	189	2,09	1,72	1,49
40	-15	407	215	2,34	1,90	1,64
40	-10	499	243	2,61	2,06	1,78

45	-35	127	124	1,47	1,02	0,88
45	-30	174	144	1,66	1,21	1,04
45	-25	231	166	1,88	1,39	1,20
45	-23,3	253	174	1,96	1,45	1,25
45	-20	299	191	2,11	1,56	1,35
45	-15	376	218	2,37	1,72	1,49
45	-10	464	248	2,66	1,87	1,62

50	-35	114	122	1,45	0,93	0,81
50	-30	156	143	1,66	1,09	0,94
50	-25	209	167	1,88	1,25	1,08
50	-23,3	230	176	1,97	1,31	1,13
50	-20	272	193	2,14	1,41	1,22
50	-15	345	222	2,41	1,56	1,34
50	-10	429	253	2,70	1,69	1,46

55	-35	101	120	1,43	0,84	0,72
55	-30	139	143	1,65	0,97	0,84
55	-25	187	168	1,89	1,12	0,96
55	-23,3	206	177	1,98	1,16	1,01
55	-20	246	195	2,16	1,26	1,09
55	-15	314	226	2,44	1,39	1,20
55	-10	393	258	2,75	1,52	1,32

60	-35	88	118	1,41	0,74	0,64
60	-30	121	142	1,64	0,85	0,74
60	-25	165	169	1,90	0,98	0,85
60	-23,3	182	178	1,99	1,02	0,88
60	-20	219	198	2,18	1,11	0,96
60	-15	284	229	2,48	1,24	1,07
60	-10	358	263	2,80	1,36	1,18

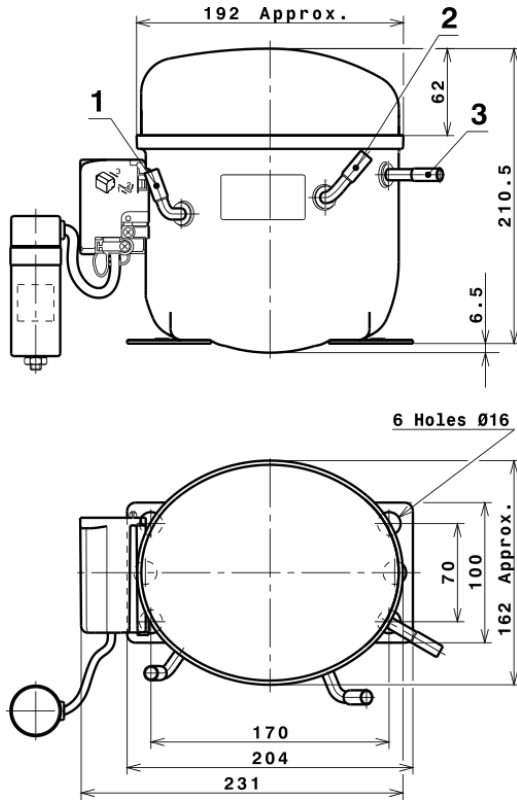
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.056,9419090154	250,1913495982	2,6723052792	10,66545672874
2	30,2060789555	4,7655697492	0,0442613351	0,33487411147851
3	-8,9833803181	1,5948552006	0,0150775065	-0,048351047110534
4	0,1972706426	0,0502864690	0,0004483695	0,0028685423557738
5	-0,1818056754	0,0572370969	0,0005439430	-0,00081251456639012

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

Technical Data Sheet

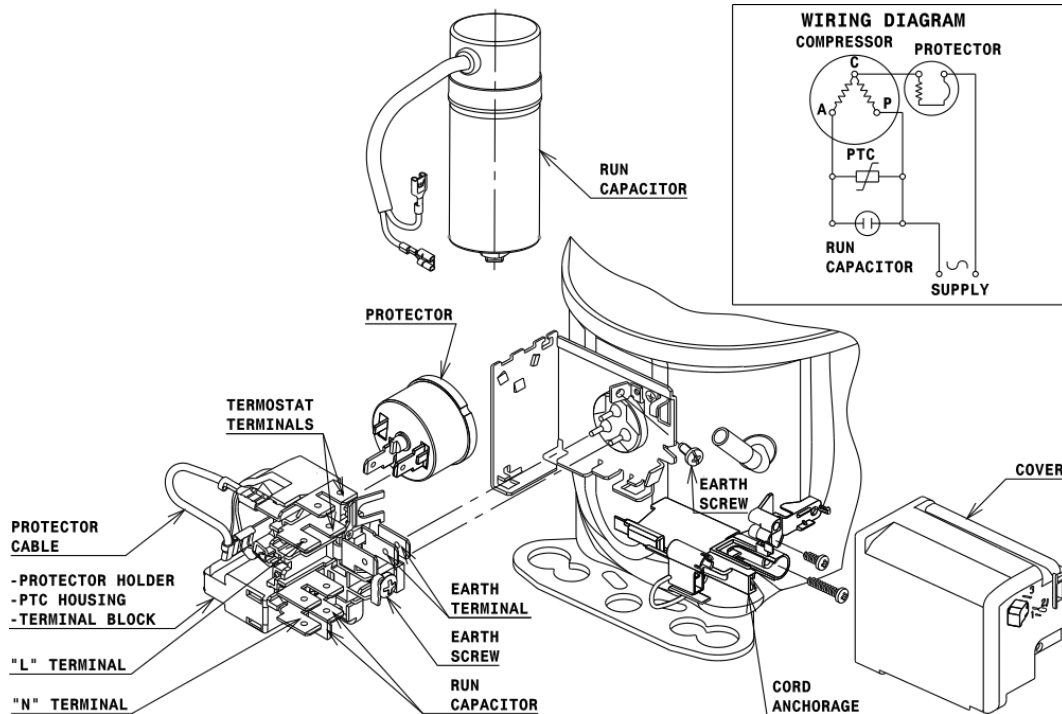
COMPRESSOR DIMENSIONS



DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

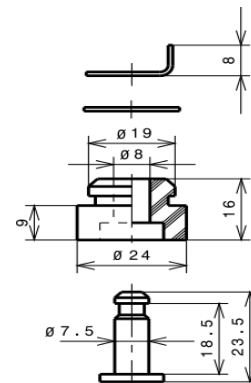
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

