

# Technical Data Sheet

Compressor model **HPY14AAb**  
 Voltage **220-240V 50Hz ~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 cm<sup>3</sup>  
 Diameter 29,37 mm  
 Stroke 21,13 mm  
 Net Weight 11,52 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 300 cm<sup>3</sup>

## MOTOR

Nominal Power 1/5 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type RSCR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 11,50 A  
 Max. Cont. Current (MCC) 1,30 A  
 Main W. resist. at 25°C 12,69 Ω  
 Start W. resist. at 25°C 17,08 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	190 kCal/h	166 W
COP	1,50 W/W	1,19 W/W
EER	1,29 kCal/Wh	1,03 kCal/Wh
Input Power	147 W	140 W
Current	0,73 A	0,70 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	32,0 °C	32,0 °C
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

## ELECTRICAL COMPONENTS

Run capacitor	5 µF 400 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2	Option 3	Option 4
Reference	MSP348LZ	4TM276NFBYY	T0502	AE15BU
Current	7,40 A	9,00 A	9,00 A	8,00 A
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C	130,00 / 62,00 °C	120,00 / 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	117	102	0,54	1,33	1,15
40	-30	155	118	0,61	1,53	1,31
40	-25	202	135	0,68	1,74	1,50
40	-23,3	220	141	0,70	1,82	1,56
40	-20	259	153	0,76	1,97	1,69
40	-15	325	173	0,84	2,19	1,89
40	-10	401	193	0,93	2,42	2,08

45	-35	110	101	0,54	1,26	1,09
45	-30	146	118	0,61	1,44	1,24
45	-25	192	137	0,69	1,64	1,41
45	-23,3	210	143	0,71	1,71	1,47
45	-20	248	156	0,77	1,85	1,59
45	-15	313	176	0,86	2,06	1,77
45	-10	387	198	0,95	2,28	1,96

50	-35	103	101	0,53	1,19	1,02
50	-30	138	119	0,61	1,35	1,16
50	-25	183	138	0,69	1,54	1,32
50	-23,3	200	145	0,72	1,61	1,38
50	-20	237	159	0,78	1,74	1,49
50	-15	301	180	0,88	1,94	1,67
50	-10	374	203	0,98	2,14	1,84

55	-35	96	100	0,53	1,12	0,96
55	-30	130	119	0,61	1,27	1,09
55	-25	173	140	0,70	1,44	1,24
55	-23,3	190	147	0,73	1,50	1,29
55	-20	226	161	0,79	1,63	1,40
55	-15	288	184	0,89	1,82	1,57
55	-10	360	208	1,00	2,01	1,73

60	-35	89	99	0,53	1,04	0,90
60	-30	121	120	0,61	1,18	1,01
60	-25	163	141	0,71	1,34	1,16
60	-23,3	180	149	0,74	1,40	1,21
60	-20	215	164	0,80	1,52	1,31
60	-15	276	188	0,91	1,71	1,47
60	-10	346	213	1,02	1,89	1,63

## CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	128	102	0,54	1,25	1,08
40	-30	172	118	0,61	1,46	1,26
40	-25	225	135	0,68	1,67	1,44
40	-23,3	245	141	0,70	1,74	1,50
40	-20	287	153	0,76	1,87	1,62
40	-15	358	173	0,84	2,08	1,79
40	-10	438	193	0,93	2,27	1,96

45	-35	116	101	0,54	1,14	0,99
45	-30	156	118	0,61	1,32	1,14
45	-25	205	137	0,69	1,50	1,30
45	-23,3	224	143	0,71	1,57	1,35
45	-20	263	156	0,77	1,69	1,46
45	-15	331	176	0,86	1,87	1,62
45	-10	407	198	0,95	2,06	1,78

50	-35	104	101	0,53	1,03	0,89
50	-30	140	119	0,61	1,18	1,02
50	-25	186	138	0,69	1,34	1,16
50	-23,3	203	145	0,72	1,40	1,21
50	-20	240	159	0,78	1,51	1,31
50	-15	303	180	0,88	1,68	1,45
50	-10	376	203	0,98	1,85	1,60

55	-35	92	100	0,53	0,92	0,80
55	-30	124	119	0,61	1,04	0,90
55	-25	166	140	0,70	1,19	1,03
55	-23,3	182	147	0,73	1,24	1,07
55	-20	216	161	0,79	1,34	1,16
55	-15	276	184	0,89	1,50	1,29
55	-10	345	208	1,00	1,66	1,43

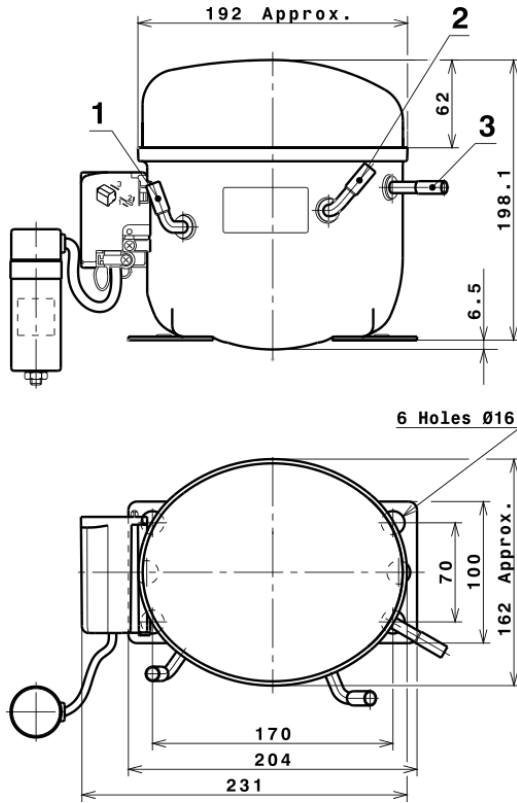
60	-35	80	99	0,53	0,81	0,70
60	-30	109	120	0,61	0,91	0,78
60	-25	146	141	0,71	1,03	0,89
60	-23,3	161	149	0,74	1,08	0,93
60	-20	193	164	0,80	1,18	1,02
60	-15	249	188	0,91	1,32	1,14
60	-10	313	213	1,02	1,47	1,27

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	926,9783771252	183,4582314189	0,8930602159	9,3658825032184
2	26,3273362499	2,9384337767	0,0139064088	0,29268552376478
3	-7,8998139197	1,4859370163	0,0066889091	-0,04292234166559
4	0,1755608898	0,0236619377	0,0001337779	0,0025508742082015
5	-0,1573214759	0,0463452785	0,0002074138	-0,00070688208109825

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

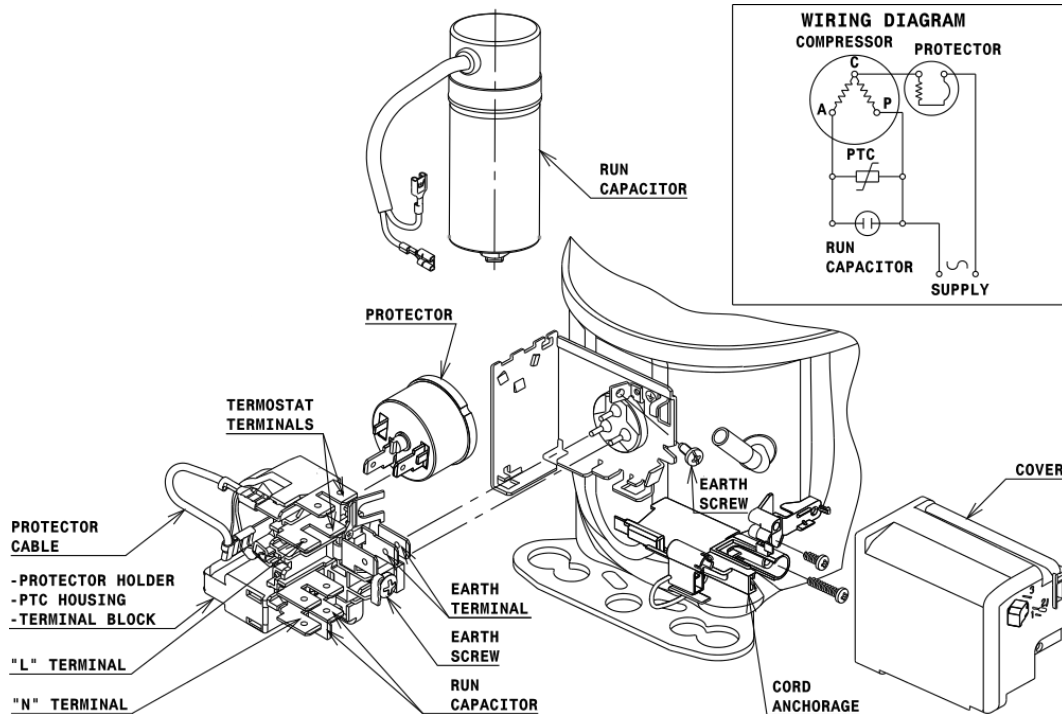


## DESIGNATION INTERNAL DIAM.

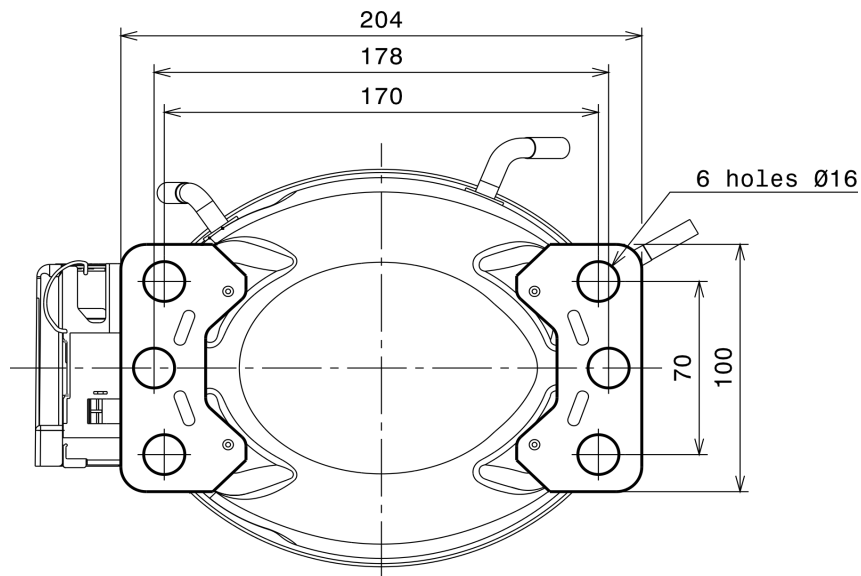
DESIGNATION	INTERNAL DIAM.
1 Suction	8,1 mm
2 Service	8,1 mm
3 Discharge	6,5 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSCR CONNECTION (L, P ranges)



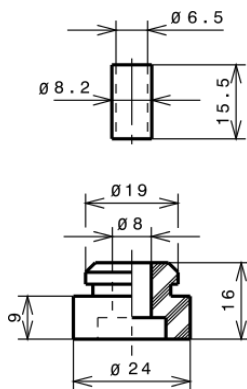
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

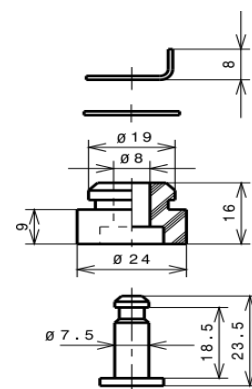
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R600a LBP

