Technical Data Sheet

Compressor model **HPY14RAb**

Voltage **220-240V 50Hz ~1**

Refrigerant **R600a**

APPLICATION

Application	High Back Pressure
Refrigerant	R600a
Evaporating Temp.	-15,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	14,32 cm³
Diameter	29,37 mm
Stroke	21,13 mm
Net Weight	9,84 Kg
Oil type	ISO VG 46 MINER
Oil charge	350 cm³

MOTOR

Nominal Power	1/5 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	11,00 A
Max. Cont. Current (MCC)	2,60 A
Main W. resist. at 25ºC	11,70 Ω
Start W. resist. at 25ºC	27,65 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	680 kCal/h	668 W
COP	2,61 W/W	2,26 W/W
EER	2,24 kCal/Wh	1,96 kCal/Wh
Input Power	303 W	295 W
Current	1,51 A	1,48 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HBP (D)	**HBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	47- 56 µF 330 V			
Run capacitor	6 µF 400 V			
Relay	Option 1	Option 2		
Reference	2014 127. + NTC15Î©	QLZ-4.8A+NTC15		
Pick-Up	4,80 A	4.8 A		
Drop-Out	4,10 A	4.1 A		
Protector	Option 1	Option 2	Option 3	
Reference	MRP61AMK	T0138	AE86FHY	
Current	7,80 A	7,70 A	7,70 A	
Time check	7,5-14 seg	7,5-14 seg	7,5-14 seg	
Disc temp. (Open/Close)	105,00 / 61,00 ºC	105,00 / 62,00 ºC	105,00 / 62,00 ºC	

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	328	193	1,06	1,98	1,70
40	-10	414	209	1,13	2,30	1,98
40	-5	511	225	1,19	2,64	2,27
40	0	621	241	1,26	2,99	2,57
40	5	743	258	1,32	3,34	2,87
40	7,2	800	266	1,36	3,50	3,01
40	10	876	276	1,40	3,70	3,18
45	-15	307	199	1,09	1,80	1,54
45	-10	388	216	1,15	2,09	1,80
45	-5	481	234	1,22	2,40	2,06
45	0	587	252	1,30	2,71	2,33
45	5	704	270	1,37	3,03	2,61
45	7,2	760	278	1,41	3,18	2,73
45	10	834	289	1,45	3,36	2,89
50	-15	285	204	1,11	1,62	1,40
50	-10	362	223	1,18	1,89	1,62
50	-5	452	242	1,26	2,17	1,86
50	0	553	262	1,34	2,46	2,11
50	5	666	282	1,42	2,75	2,36
50	7,2	720	291	1,46	2,88	2,48
50	10	792	302	1,51	3,05	2,62
55	-15	264	210	1,13	1,46	1,26
55	-10	337	230	1,21	1,70	1,46
55	-5	422	251	1,29	1,96	1,68
55	0	519	272	1,38	2,22	1,91
55	5	628	293	1,47	2,49	2,14
55	7,2	680	303	1,51	2,61	2,24
55	10	749	315	1,56	2,76	2,38
60	-15	243	216	1,15	1,31	1,13
60	-10	311	237	1,24	1,53	1,31
60	-5	392	260	1,33	1,76	1,51
60	0	485	282	1,42	2,00	1,72
60	5	590	305	1,52	2,25	1,93
60	7,2	640	315	1,56	2,36	2,03
60	10	707	328	1,62	2,50	2,15

CECOMAF

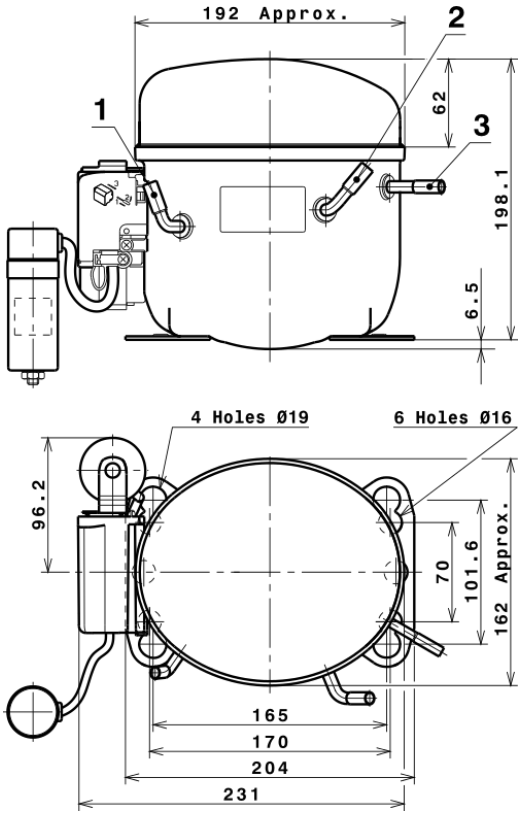
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-15	354	194	1,07	1,83	1,58
40	-10	447	210	1,13	2,13	1,84
40	-5	552	226	1,19	2,44	2,11
40	0	671	243	1,26	2,76	2,39
40	5	802	260	1,33	3,09	2,67
40	7,2	864	268	1,36	3,23	2,79
40	10	946	277	1,40	3,41	2,95
45	-15	330	200	1,09	1,65	1,43
45	-10	417	217	1,16	1,92	1,66
45	-5	518	235	1,23	2,21	1,91
45	0	631	253	1,30	2,49	2,15
45	5	757	272	1,38	2,79	2,41
45	7,2	817	280	1,41	2,92	2,52
45	10	896	291	1,46	3,08	2,66
50	-15	305	205	1,11	1,49	1,28
50	-10	388	224	1,19	1,73	1,49
50	-5	483	244	1,26	1,98	1,71
50	0	592	263	1,34	2,25	1,94
50	5	713	283	1,43	2,51	2,17
50	7,2	770	292	1,46	2,63	2,28
50	10	846	304	1,51	2,79	2,41
55	-15	281	211	1,13	1,33	1,15
55	-10	358	232	1,22	1,55	1,34
55	-5	449	252	1,30	1,78	1,54
55	0	552	274	1,39	2,02	1,74
55	5	668	295	1,48	2,26	1,96
55	7,2	723	305	1,52	2,37	2,05
55	10	797	317	1,57	2,51	2,17
60	-15	256	217	1,16	1,18	1,02
60	-10	329	239	1,24	1,38	1,19
60	-5	414	261	1,33	1,59	1,37
60	0	512	284	1,43	1,81	1,56
60	5	623	307	1,53	2,03	1,75
60	7,2	676	317	1,57	2,13	1,84
60	10	747	330	1,63	2,26	1,95

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	981,7947690395	164,7364918683	0,9337888986	9,2128416401543
2	32,9373364845	1,0058937613	0,0031884045	0,3188218602066
3	-8,1356114064	2,0954506602	0,0087160580	-0,028812446913004
4	0,2501464096	0,0093027693	0,0000715489	0,0039015764120843
5	-0,2122331470	0,0620563632	0,0002771448	-0,00013788549404463

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

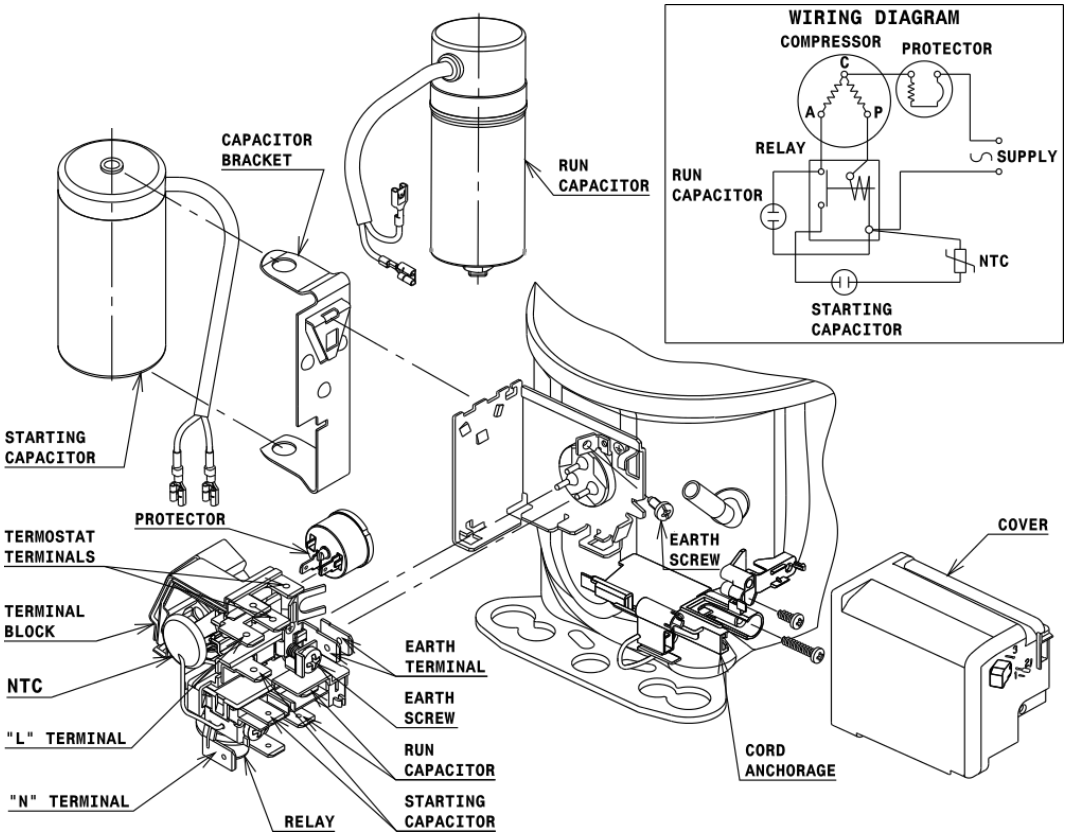
COMPRESSOR DIMENSIONS



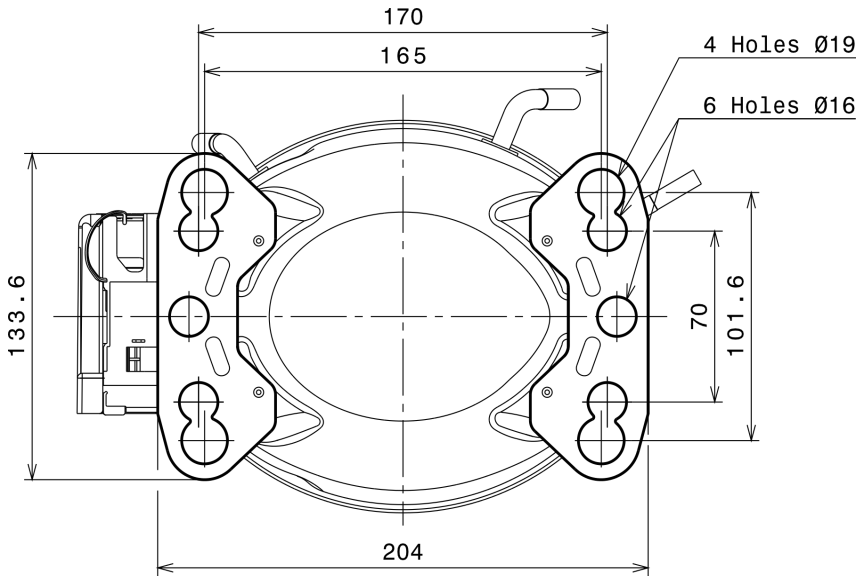
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



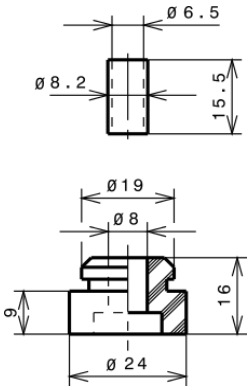
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

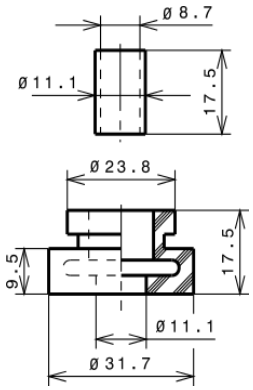
STANDARD

Ø16 holes (170x70 net)



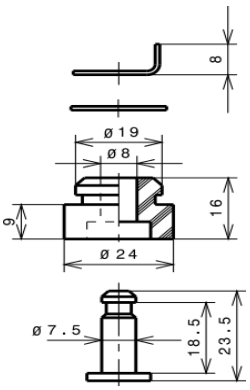
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a HBP