

Technical Data Sheet

Compressor model **HLY70AAa**
 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 6,65 cm³
 Diameter 22,00 mm
 Stroke 17,48 mm
 Net Weight 9,45 Kg
 Oil type ISO VG 10 MINER
 Oil charge 210 cm³

MOTOR

Nominal Power 1/8 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-264 V
 Type RSIR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 8,10 A
 Max. Cont. Current (MCC) 0,90 A
 Main W. resist. at 25°C 25,19 Ω
 Start W. resist. at 25°C 22,02 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	92 kCal/h	80 W
COP	1,37 W/W	1,08 W/W
EER	1,18 kCal/Wh	0,93 kCal/Wh
Input Power	78 W	74 W
Current	0,53 A	0,52 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	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2	Option 3	Option 4
Reference	MRA38043	4TM181KFBYY	T0486	AE24AHS
Current	4,10 A	5,20 A	5,80 A	4,10 A
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	100,00 / 61,00 °C	105,00 / 61,00 °C	100,00 / 57,00 °C	110,00 / 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 °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	51	58	0,48	1,02	0,88
40	-30	71	66	0,50	1,25	1,07
40	-25	94	74	0,52	1,47	1,26
40	-23,3	103	77	0,53	1,55	1,33
40	-20	121	83	0,55	1,69	1,46
40	-15	150	91	0,58	1,91	1,64
40	-10	183	100	0,61	2,13	1,83

45	-35	48	57	0,48	0,99	0,85
45	-30	68	66	0,49	1,21	1,04
45	-25	91	74	0,52	1,42	1,22
45	-23,3	99	78	0,53	1,49	1,28
45	-20	117	84	0,55	1,63	1,40
45	-15	146	93	0,58	1,83	1,57
45	-10	178	102	0,62	2,03	1,75

50	-35	46	55	0,47	0,96	0,83
50	-30	65	65	0,49	1,16	1,00
50	-25	87	74	0,52	1,36	1,17
50	-23,3	96	78	0,53	1,43	1,23
50	-20	113	84	0,55	1,56	1,34
50	-15	142	94	0,59	1,75	1,51
50	-10	174	104	0,63	1,94	1,67

55	-35	43	54	0,47	0,93	0,80
55	-30	62	64	0,49	1,12	0,96
55	-25	84	74	0,52	1,31	1,13
55	-23,3	92	78	0,53	1,37	1,18
55	-20	109	85	0,55	1,49	1,28
55	-15	137	95	0,59	1,68	1,44
55	-10	169	106	0,64	1,85	1,59

60	-35	40	53	0,47	0,89	0,77
60	-30	59	64	0,49	1,08	0,92
60	-25	80	74	0,52	1,25	1,08
60	-23,3	88	78	0,53	1,31	1,13
60	-20	105	86	0,56	1,43	1,23
60	-15	133	97	0,60	1,60	1,38
60	-10	164	108	0,65	1,77	1,52

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	56	58	0,48	0,96	0,83
40	-30	79	66	0,50	1,19	1,03
40	-25	104	74	0,52	1,40	1,21
40	-23,3	114	77	0,53	1,47	1,27
40	-20	133	83	0,55	1,61	1,39
40	-15	165	91	0,58	1,81	1,56
40	-10	200	100	0,61	2,00	1,73

45	-35	51	57	0,48	0,90	0,78
45	-30	72	66	0,49	1,10	0,95
45	-25	96	74	0,52	1,29	1,12
45	-23,3	105	78	0,53	1,36	1,17
45	-20	124	84	0,55	1,48	1,28
45	-15	154	93	0,58	1,66	1,43
45	-10	187	102	0,62	1,84	1,59

50	-35	46	55	0,47	0,83	0,72
50	-30	66	65	0,49	1,01	0,87
50	-25	88	74	0,52	1,19	1,02
50	-23,3	97	78	0,53	1,24	1,07
50	-20	114	84	0,55	1,35	1,17
50	-15	143	94	0,59	1,52	1,31
50	-10	175	104	0,63	1,68	1,45

55	-35	41	54	0,47	0,76	0,66
55	-30	59	64	0,49	0,92	0,80
55	-25	80	74	0,52	1,08	0,93
55	-23,3	88	78	0,53	1,13	0,98
55	-20	104	85	0,55	1,23	1,06
55	-15	132	95	0,59	1,38	1,19
55	-10	162	106	0,64	1,53	1,32

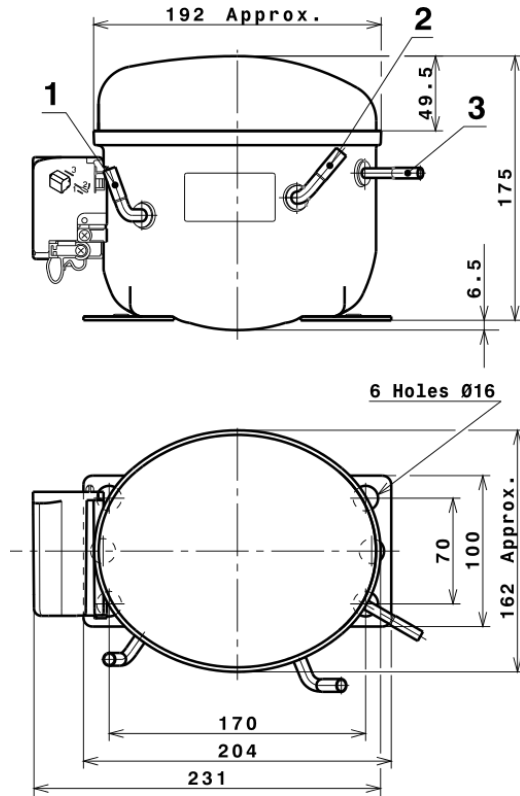
60	-35	36	53	0,47	0,69	0,60
60	-30	53	64	0,49	0,83	0,72
60	-25	72	74	0,52	0,97	0,84
60	-23,3	80	78	0,53	1,02	0,88
60	-20	95	86	0,56	1,11	0,96
60	-15	120	97	0,60	1,24	1,08
60	-10	149	108	0,65	1,38	1,19

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	402,3667834715	93,0385332178	0,6105605424	3,9752151917308
2	10,9014401919	0,7390092068	0,0077282603	0,11721472054397
3	-3,2461916286	0,6815093540	0,0028879211	-0,014369222385173
4	0,0591713650	0,0024023430	0,0001324464	0,00087075585037639
5	-0,0649745205	0,0272515661	0,0000981923	-0,00021265567275025

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

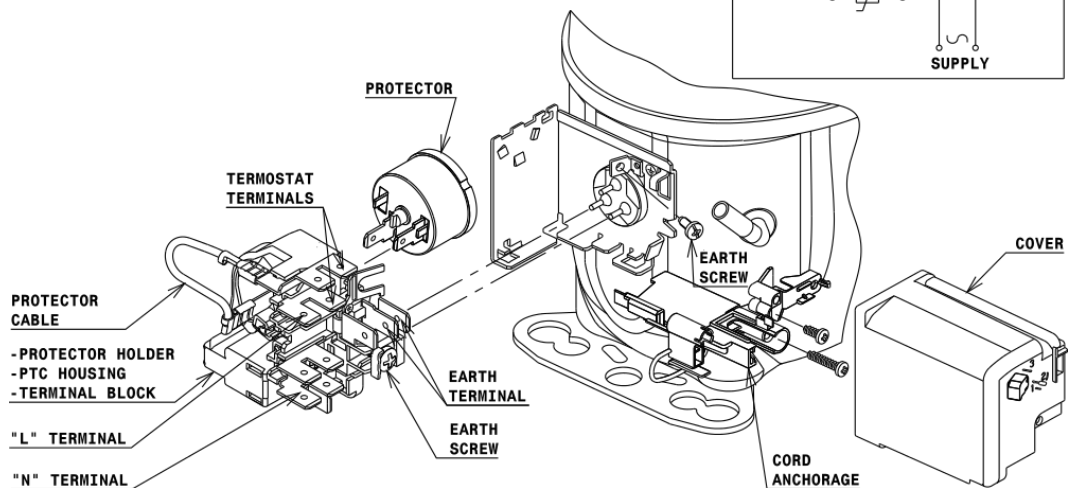
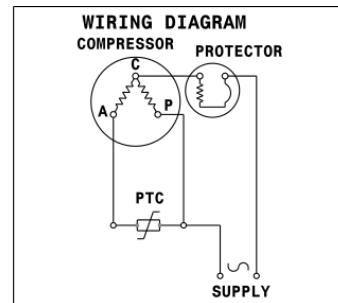


DESIGNATION INTERNAL DIAM.

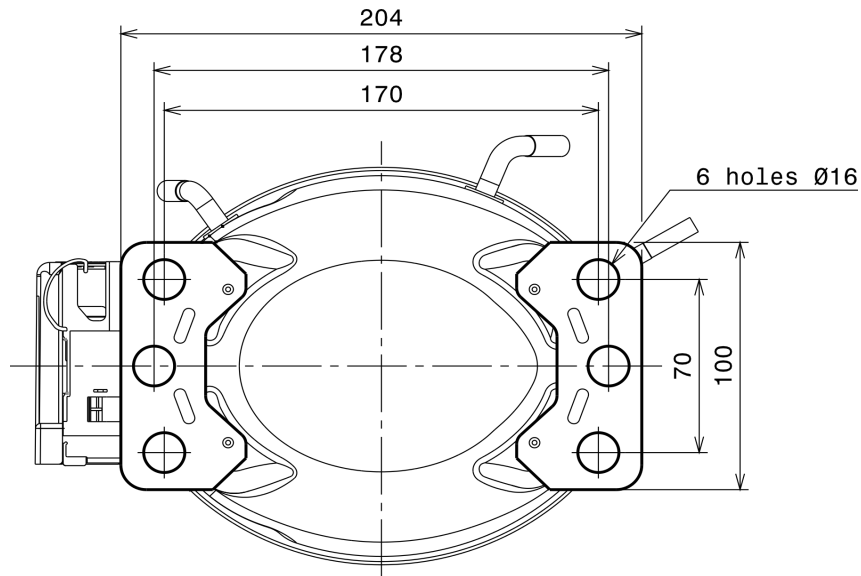
DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

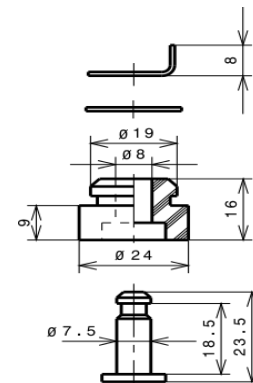
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

