

Technical Data Sheet

Compressor model **HLY70AAb**
 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 9,56 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 RSCR
 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	93 kCal/h	81 W
COP	1,46 W/W	1,15 W/W
EER	1,26 kCal/Wh	0,99 kCal/Wh
Input Power	74 W	71 W
Current	0,37 A	0,36 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

Run capacitor	3 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	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	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	kCal/h	W	A	W/W	kCal/Wh
40	-35	50	55	0,30	1,06	0,91
40	-30	71	63	0,33	1,31	1,13
40	-25	95	71	0,36	1,56	1,34
40	-23,3	104	73	0,37	1,65	1,42
40	-20	122	78	0,39	1,81	1,55
40	-15	152	86	0,42	2,05	1,76
40	-10	185	94	0,46	2,29	1,97

45	-35	47	54	0,30	1,03	0,88
45	-30	68	62	0,33	1,27	1,09
45	-25	91	71	0,36	1,51	1,29
45	-23,3	100	74	0,37	1,58	1,36
45	-20	118	79	0,39	1,74	1,49
45	-15	148	88	0,43	1,96	1,69
45	-10	180	96	0,47	2,18	1,88

50	-35	45	52	0,29	0,99	0,85
50	-30	65	62	0,32	1,23	1,05
50	-25	88	71	0,36	1,45	1,25
50	-23,3	97	74	0,37	1,52	1,31
50	-20	114	80	0,39	1,66	1,43
50	-15	143	89	0,43	1,88	1,61
50	-10	176	98	0,48	2,08	1,79

55	-35	42	51	0,29	0,96	0,82
55	-30	62	61	0,32	1,18	1,02
55	-25	85	71	0,36	1,39	1,20
55	-23,3	93	74	0,37	1,46	1,26
55	-20	110	80	0,40	1,60	1,37
55	-15	139	90	0,44	1,79	1,54
55	-10	171	100	0,49	1,99	1,71

60	-35	39	50	0,29	0,92	0,79
60	-30	59	60	0,32	1,13	0,98
60	-25	81	71	0,36	1,33	1,15
60	-23,3	89	74	0,37	1,40	1,20
60	-20	106	81	0,40	1,53	1,31
60	-15	135	92	0,45	1,71	1,47
60	-10	166	102	0,50	1,90	1,63

CECOMAF

Tc	Te	Cooling Capacity	Consumption	Current	COP	EER
°C	°C	W	W	A	W/W	kCal/Wh
40	-35	55	55	0,30	0,99	0,86
40	-30	78	63	0,33	1,25	1,08
40	-25	105	71	0,36	1,49	1,28
40	-23,3	115	73	0,37	1,57	1,35
40	-20	135	78	0,39	1,72	1,48
40	-15	167	86	0,42	1,94	1,67
40	-10	202	94	0,46	2,15	1,86

45	-35	50	54	0,30	0,93	0,80
45	-30	72	62	0,33	1,16	1,00
45	-25	97	71	0,36	1,37	1,19
45	-23,3	106	74	0,37	1,44	1,25
45	-20	125	79	0,39	1,58	1,36
45	-15	156	88	0,43	1,78	1,54
45	-10	189	96	0,47	1,97	1,70

50	-35	45	52	0,29	0,86	0,74
50	-30	66	62	0,32	1,07	0,92
50	-25	89	71	0,36	1,26	1,09
50	-23,3	98	74	0,37	1,32	1,14
50	-20	115	80	0,39	1,45	1,25
50	-15	144	89	0,43	1,63	1,40
50	-10	177	98	0,48	1,80	1,56

55	-35	40	51	0,29	0,79	0,68
55	-30	59	61	0,32	0,97	0,84
55	-25	81	71	0,36	1,15	0,99
55	-23,3	89	74	0,37	1,20	1,04
55	-20	106	80	0,40	1,31	1,14
55	-15	133	90	0,44	1,48	1,28
55	-10	164	100	0,49	1,64	1,41

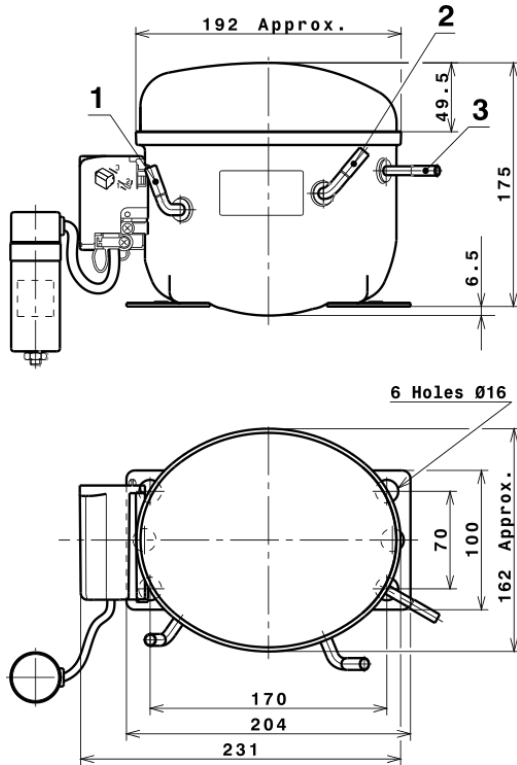
60	-35	35	50	0,29	0,71	0,62
60	-30	53	60	0,32	0,88	0,76
60	-25	73	71	0,36	1,03	0,89
60	-23,3	81	74	0,37	1,08	0,94
60	-20	96	81	0,40	1,18	1,02
60	-15	122	92	0,45	1,33	1,15
60	-10	151	102	0,50	1,48	1,28

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	405,7510018711	84,7427703808	0,4359919633	3,9998989323957
2	10,9150615074	0,4962884659	0,0059919577	0,11656712449276
3	-3,2764462782	0,6815093540	0,0033029239	-0,014369222385173
4	0,0556208498	-0,0002611566	0,0000923990	0,00082150167412699
5	-0,0661067176	0,0272515661	0,0001184033	-0,00021265567275024

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

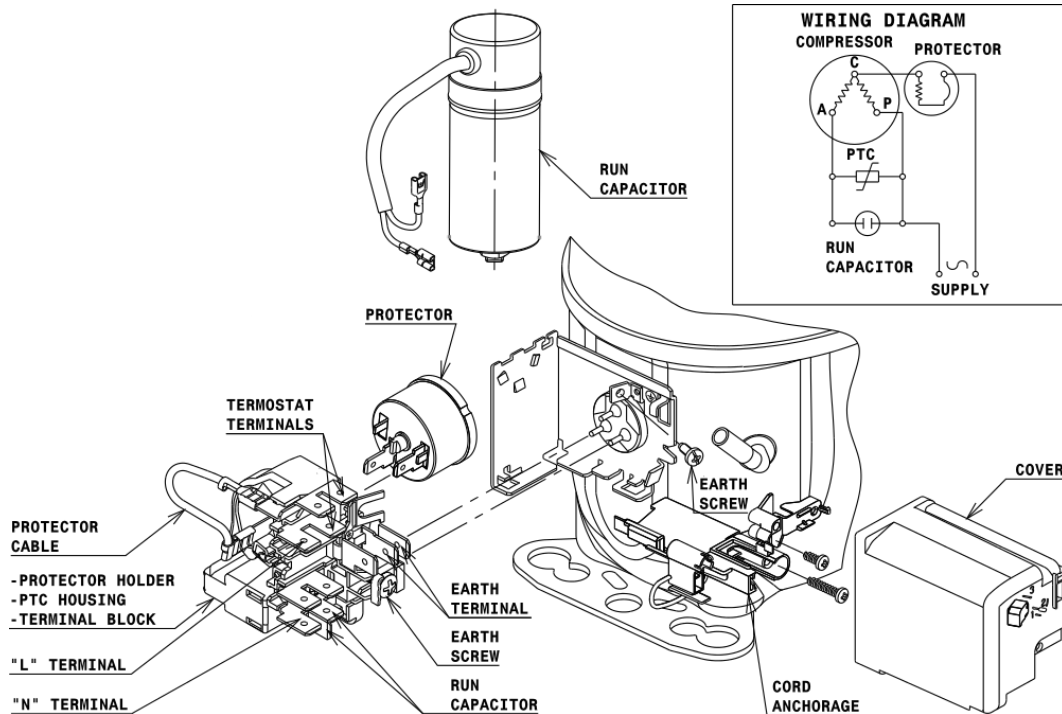


DESIGNATION INTERNAL DIAM.

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

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



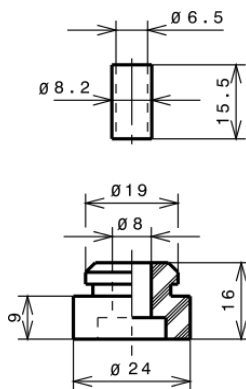
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

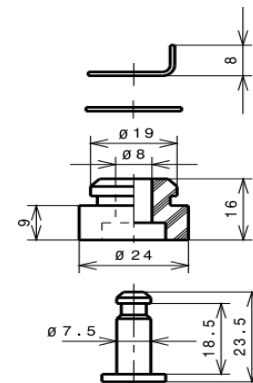
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

