

Technical Data Sheet

Compressor model **HLY45AAb**
 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 4,56 cm³
 Diameter 19,09 mm
 Stroke 15,93 mm
 Net Weight 7,26 Kg
 Oil type ISO VG 10 MINER
 Oil charge 210 cm³

MOTOR

Nominal Power 1/12 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-264 V
 Type RSCR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 5,40 A
 Max. Cont. Current (MCC) 0,80 A
 Main W. resist. at 25°C 35,08 Ω
 Start W. resist. at 25°C 44,76 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	60 kCal/h	52 W
COP	1,32 W/W	1,02 W/W
EER	1,13 kCal/Wh	0,88 kCal/Wh
Input Power	53 W	51 W
Current	0,27 A	0,26 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
Reference	4TM104JFBYY	T0299	AE23AHM
Current	2,90 A	7,50 A	3,00 A
Time check	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	100,00 / 61,00 °C	120,00 / 62,00 °C	95,00 / 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	30	40	0,21	0,87	0,75
40	-30	44	45	0,24	1,13	0,97
40	-25	61	51	0,26	1,40	1,20
40	-23,3	67	53	0,27	1,49	1,28
40	-20	80	56	0,28	1,66	1,43
40	-15	102	62	0,31	1,93	1,66
40	-10	127	67	0,33	2,20	1,90

45	-35	28	39	0,21	0,84	0,73
45	-30	42	45	0,23	1,09	0,94
45	-25	59	51	0,26	1,34	1,16
45	-23,3	65	53	0,27	1,43	1,23
45	-20	78	57	0,29	1,60	1,37
45	-15	99	63	0,31	1,85	1,59
45	-10	124	68	0,34	2,10	1,81

50	-35	27	38	0,20	0,82	0,70
50	-30	40	44	0,23	1,05	0,91
50	-25	56	51	0,26	1,29	1,11
50	-23,3	62	53	0,27	1,37	1,18
50	-20	75	57	0,29	1,53	1,32
50	-15	96	63	0,32	1,77	1,52
50	-10	120	70	0,34	2,01	1,73

55	-35	25	37	0,20	0,79	0,68
55	-30	38	44	0,23	1,01	0,87
55	-25	54	51	0,26	1,24	1,07
55	-23,3	60	53	0,27	1,32	1,13
55	-20	72	57	0,29	1,47	1,26
55	-15	93	64	0,32	1,69	1,45
55	-10	117	71	0,35	1,92	1,65

60	-35	23	36	0,20	0,75	0,65
60	-30	36	43	0,23	0,97	0,84
60	-25	52	51	0,26	1,19	1,02
60	-23,3	58	53	0,27	1,26	1,08
60	-20	70	58	0,29	1,40	1,21
60	-15	90	65	0,32	1,61	1,39
60	-10	114	72	0,36	1,83	1,57

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	33	40	0,21	0,82	0,71
40	-30	49	45	0,24	1,08	0,93
40	-25	68	51	0,26	1,33	1,15
40	-23,3	75	53	0,27	1,42	1,22
40	-20	89	56	0,28	1,58	1,37
40	-15	113	62	0,31	1,83	1,58
40	-10	139	67	0,33	2,07	1,79

45	-35	30	39	0,21	0,77	0,66
45	-30	45	45	0,23	1,00	0,86
45	-25	62	51	0,26	1,23	1,06
45	-23,3	69	53	0,27	1,31	1,13
45	-20	82	57	0,29	1,45	1,26
45	-15	105	63	0,31	1,68	1,45
45	-10	130	68	0,34	1,90	1,64

50	-35	27	38	0,20	0,71	0,61
50	-30	41	44	0,23	0,92	0,79
50	-25	57	51	0,26	1,13	0,97
50	-23,3	63	53	0,27	1,20	1,03
50	-20	76	57	0,29	1,33	1,15
50	-15	97	63	0,32	1,53	1,32
50	-10	121	70	0,34	1,74	1,50

55	-35	24	37	0,20	0,65	0,56
55	-30	37	44	0,23	0,84	0,72
55	-25	52	51	0,26	1,02	0,88
55	-23,3	57	53	0,27	1,08	0,94
55	-20	69	57	0,29	1,21	1,04
55	-15	89	64	0,32	1,39	1,20
55	-10	112	71	0,35	1,58	1,36

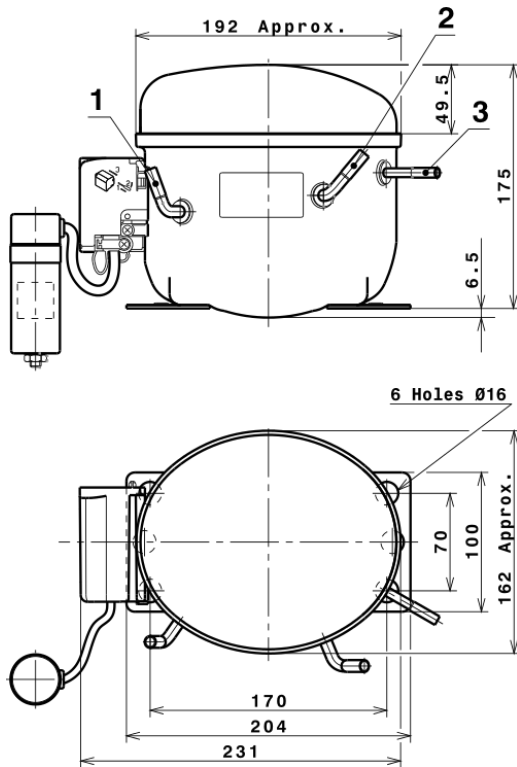
60	-35	21	36	0,20	0,58	0,50
60	-30	32	43	0,23	0,75	0,65
60	-25	46	51	0,26	0,92	0,79
60	-23,3	52	53	0,27	0,97	0,84
60	-20	63	58	0,29	1,09	0,94
60	-15	82	65	0,32	1,25	1,08
60	-10	103	72	0,36	1,42	1,23

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	286,2466217811	60,8780300623	0,3057643150	2,8419462205477
2	8,2638930517	0,3233336498	0,0015978753	0,089631182082959
3	-2,3112297922	0,4634160847	0,0020653910	-0,010511097197942
4	0,0478362186	-0,0004474852	0,0000019867	0,00070033053205522
5	-0,0491785893	0,0190753623	0,0000844033	-0,00017663360138916

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

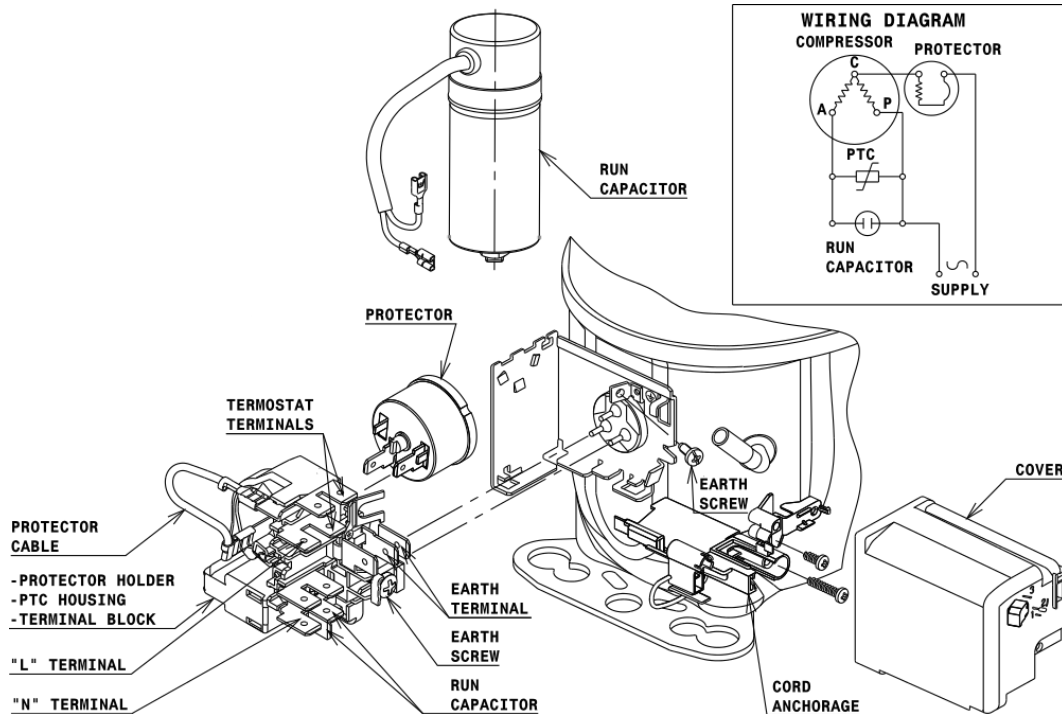


DESIGNATION INTERNAL DIAM.

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

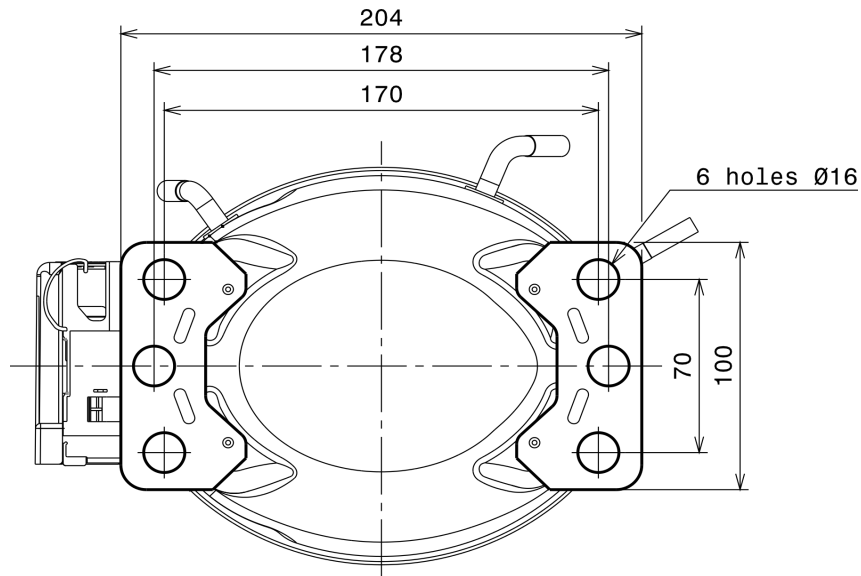
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

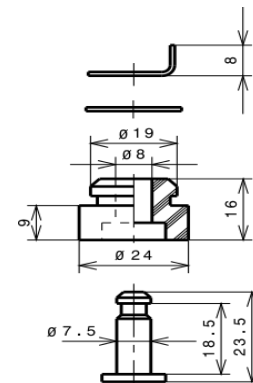
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

