

Technical Data Sheet

Compressor model **HLY45AAa**
 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 7,15 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 RSIR
 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	1,25 W/W	0,97 W/W
EER	1,07 kCal/Wh	0,84 kCal/Wh
Input Power	56 W	54 W
Current	0,41 A	0,40 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	
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	29	41	0,37	0,82	0,71
40	-30	44	48	0,38	1,07	0,92
40	-25	61	54	0,40	1,32	1,14
40	-23,3	67	56	0,41	1,41	1,21
40	-20	80	60	0,42	1,57	1,35
40	-15	102	65	0,44	1,83	1,57
40	-10	126	70	0,46	2,09	1,80

45	-35	27	40	0,36	0,79	0,68
45	-30	42	47	0,38	1,04	0,89
45	-25	59	54	0,40	1,27	1,09
45	-23,3	65	56	0,41	1,35	1,16
45	-20	78	60	0,42	1,51	1,30
45	-15	99	66	0,45	1,75	1,51
45	-10	123	71	0,47	2,00	1,72

50	-35	26	39	0,36	0,77	0,66
50	-30	40	46	0,38	1,00	0,86
50	-25	56	54	0,40	1,22	1,05
50	-23,3	62	56	0,41	1,30	1,12
50	-20	75	60	0,42	1,45	1,24
50	-15	96	67	0,45	1,68	1,44
50	-10	119	73	0,47	1,91	1,64

55	-35	24	38	0,36	0,73	0,63
55	-30	38	46	0,38	0,96	0,82
55	-25	54	54	0,40	1,17	1,01
55	-23,3	60	56	0,41	1,25	1,07
55	-20	72	61	0,43	1,39	1,19
55	-15	93	68	0,45	1,60	1,38
55	-10	116	74	0,48	1,82	1,57

60	-35	22	37	0,36	0,70	0,60
60	-30	36	45	0,38	0,92	0,79
60	-25	52	53	0,40	1,12	0,97
60	-23,3	58	56	0,41	1,19	1,03
60	-20	70	61	0,43	1,33	1,14
60	-15	90	68	0,46	1,53	1,32
60	-10	113	75	0,49	1,74	1,50

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	32	41	0,37	0,77	0,67
40	-30	49	48	0,38	1,02	0,88
40	-25	68	54	0,40	1,26	1,09
40	-23,3	75	56	0,41	1,34	1,16
40	-20	89	60	0,42	1,49	1,29
40	-15	112	65	0,44	1,73	1,49
40	-10	138	70	0,46	1,97	1,70

45	-35	29	40	0,36	0,72	0,62
45	-30	44	47	0,38	0,95	0,82
45	-25	62	54	0,40	1,16	1,00
45	-23,3	69	56	0,41	1,23	1,07
45	-20	82	60	0,42	1,37	1,19
45	-15	104	66	0,45	1,59	1,37
45	-10	129	71	0,47	1,81	1,56

50	-35	26	39	0,36	0,66	0,57
50	-30	40	46	0,38	0,87	0,75
50	-25	57	54	0,40	1,06	0,92
50	-23,3	63	56	0,41	1,13	0,98
50	-20	76	60	0,42	1,26	1,09
50	-15	97	67	0,45	1,45	1,25
50	-10	120	73	0,47	1,65	1,43

55	-35	23	38	0,36	0,61	0,52
55	-30	36	46	0,38	0,79	0,68
55	-25	52	54	0,40	0,97	0,84
55	-23,3	57	56	0,41	1,03	0,89
55	-20	69	61	0,43	1,14	0,99
55	-15	89	68	0,45	1,32	1,14
55	-10	111	74	0,48	1,50	1,30

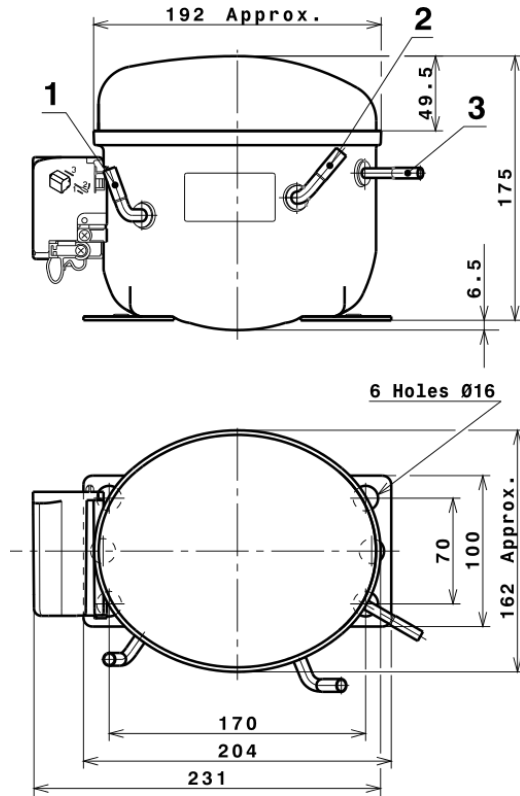
60	-35	20	37	0,36	0,54	0,47
60	-30	32	45	0,38	0,71	0,61
60	-25	46	53	0,40	0,87	0,75
60	-23,3	52	56	0,41	0,92	0,80
60	-20	63	61	0,43	1,03	0,89
60	-15	81	68	0,46	1,19	1,03
60	-10	102	75	0,49	1,36	1,17

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	282,7152068294	62,3214422485	0,4490227646	2,7994296928351
2	7,9958817891	0,0911416448	0,0032046211	0,085852751072009
3	-2,3017258164	0,4634160847	0,0018808839	-0,010511097197942
4	0,0418844733	-0,0074262806	0,0000420570	0,00061648129032576
5	-0,0491748257	0,0190753623	0,0000675466	-0,00017663360138916

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

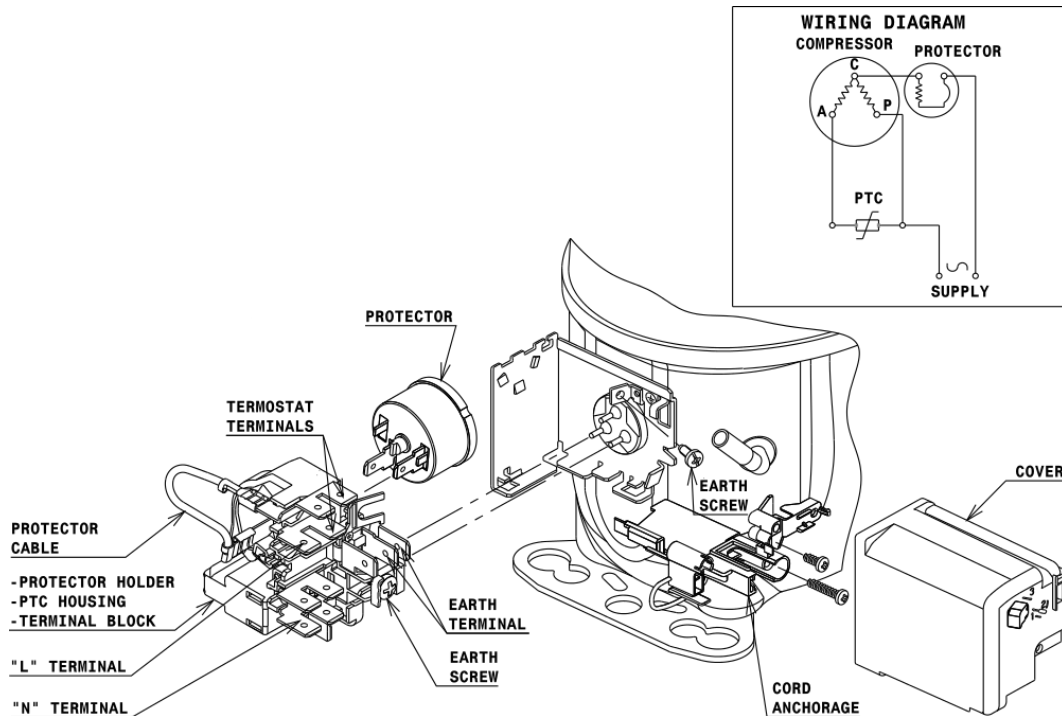


DESIGNATION INTERNAL DIAM.

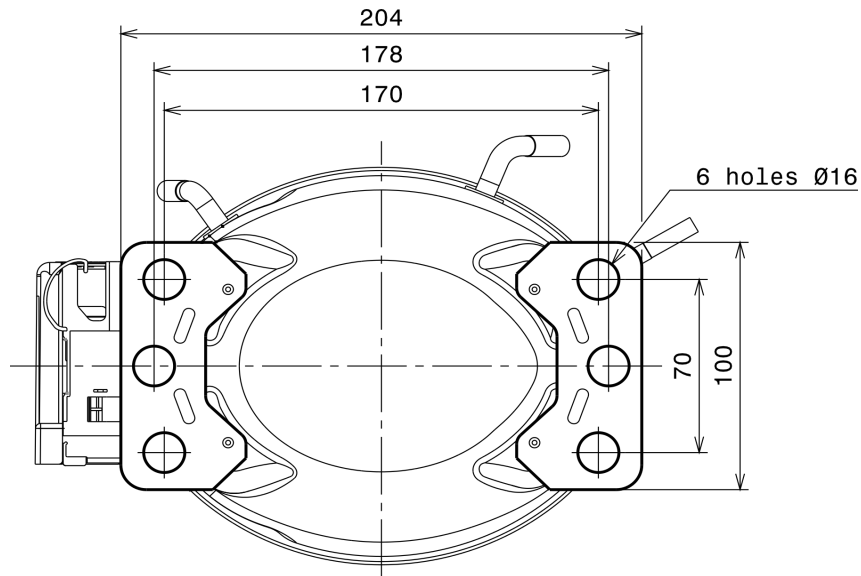
DESIGNATION	INTERNAL DIAM.
1 Suction	6,5 mm
2 Service	6,5 mm
3 Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

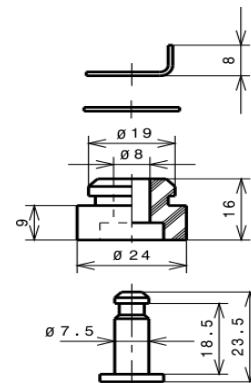
STANDARD

$\varnothing 16$ holes (170x70 net)



SNAP-ON

$\varnothing 16$ holes (170x70 net)



SOA

SOA R600a LBP

