

Technical Data Sheet

Compressor model **HLY99AAb**
 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 9,95 cm³
 Diameter 25,40 mm
 Stroke 19,62 mm
 Net Weight 11,06 Kg
 Oil type ISO VG 10 MINER
 Oil charge 340 cm³

MOTOR

Nominal Power 1/6 hp
 Voltage/Frequency 220-240V 50Hz
 Voltage range 187-264 V
 Type RSCR
 Phase number 1 PH
 Locked Rotor Amps (LRA) 11,40 A
 Max. Cont. Current (MCC) 1,20 A
 Main W. resist. at 25°C 14,17 Ω
 Start W. resist. at 25°C 18,25 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	137 kCal/h	120 W
COP	1,48 W/W	1,16 W/W
EER	1,27 kCal/Wh	1,00 kCal/Wh
Input Power	108 W	103 W
Current	0,57 A	0,55 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	4 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	MSP331LZ	4TM222NFBYY	T0366	AE18FU
Current	6,20 A	7,00 A	6,80 A	6,30 A
Time check	7,5-14 seg	5-15 seg	7,5-14 seg	7,5-14 seg
Disc temp. (Open/Close)	120,00 / 61,00 °C	120,00 / 61,00 °C	120,00 / 62,00 °C	120,00 / 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	83	81	0,45	1,19	1,02
40	-30	109	92	0,51	1,37	1,18
40	-25	141	103	0,55	1,59	1,37
40	-23,3	154	107	0,57	1,67	1,44
40	-20	181	115	0,59	1,83	1,57
40	-15	229	127	0,63	2,09	1,79
40	-10	283	140	0,66	2,35	2,02

45	-35	79	79	0,44	1,16	1,00
45	-30	104	91	0,50	1,33	1,14
45	-25	136	103	0,55	1,53	1,31
45	-23,3	148	108	0,57	1,60	1,38
45	-20	175	116	0,60	1,76	1,51
45	-15	222	129	0,63	2,00	1,72
45	-10	276	143	0,66	2,25	1,93

50	-35	74	77	0,43	1,12	0,97
50	-30	99	90	0,50	1,28	1,10
50	-25	130	103	0,55	1,47	1,26
50	-23,3	143	108	0,57	1,54	1,32
50	-20	169	117	0,60	1,68	1,45
50	-15	215	131	0,64	1,91	1,64
50	-10	268	145	0,67	2,15	1,85

55	-35	70	75	0,42	1,09	0,93
55	-30	94	89	0,49	1,23	1,06
55	-25	125	103	0,55	1,41	1,21
55	-23,3	137	108	0,57	1,48	1,27
55	-20	163	118	0,60	1,61	1,39
55	-15	208	133	0,64	1,83	1,57
55	-10	261	148	0,67	2,05	1,76

60	-35	66	73	0,41	1,05	0,90
60	-30	89	88	0,49	1,18	1,01
60	-25	119	103	0,55	1,35	1,16
60	-23,3	131	108	0,57	1,41	1,21
60	-20	157	118	0,60	1,54	1,32
60	-15	202	134	0,65	1,75	1,50
60	-10	254	151	0,67	1,96	1,68

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	91	81	0,45	1,12	0,97
40	-30	121	92	0,51	1,31	1,13
40	-25	158	103	0,55	1,52	1,32
40	-23,3	172	107	0,57	1,60	1,38
40	-20	201	115	0,59	1,75	1,51
40	-15	252	127	0,63	1,98	1,71
40	-10	309	140	0,66	2,21	1,91

45	-35	83	79	0,44	1,05	0,91
45	-30	110	91	0,50	1,21	1,05
45	-25	145	103	0,55	1,40	1,21
45	-23,3	158	108	0,57	1,47	1,27
45	-20	186	116	0,60	1,60	1,39
45	-15	234	129	0,63	1,81	1,57
45	-10	289	143	0,66	2,03	1,75

50	-35	75	77	0,43	0,97	0,84
50	-30	100	90	0,50	1,11	0,96
50	-25	132	103	0,55	1,28	1,11
50	-23,3	145	108	0,57	1,34	1,16
50	-20	171	117	0,60	1,46	1,27
50	-15	217	131	0,64	1,66	1,43
50	-10	270	145	0,67	1,86	1,60

55	-35	67	75	0,42	0,89	0,77
55	-30	90	89	0,49	1,01	0,87
55	-25	120	103	0,55	1,16	1,00
55	-23,3	131	108	0,57	1,22	1,05
55	-20	156	118	0,60	1,33	1,15
55	-15	200	133	0,64	1,50	1,30
55	-10	250	148	0,67	1,69	1,46

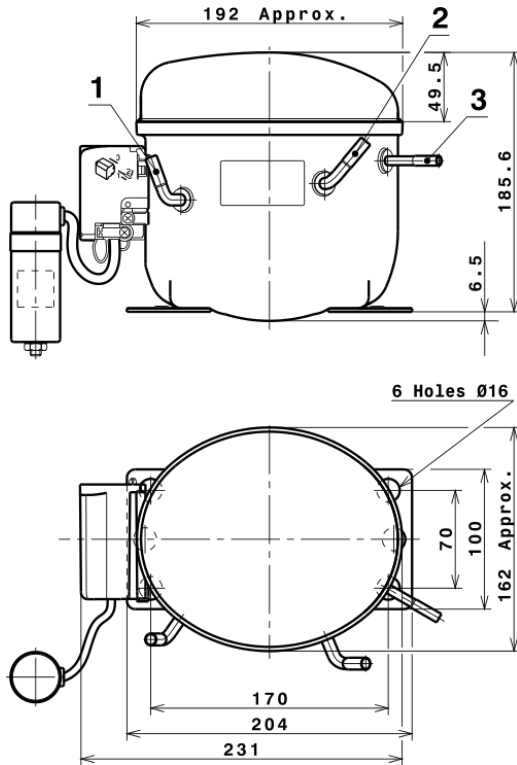
60	-35	59	73	0,41	0,81	0,70
60	-30	80	88	0,49	0,91	0,78
60	-25	107	103	0,55	1,04	0,90
60	-23,3	118	108	0,57	1,09	0,94
60	-20	141	118	0,60	1,19	1,03
60	-15	182	134	0,65	1,35	1,17
60	-10	230	151	0,67	1,53	1,32

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	634,9719739323	133,0205751814	0,5879477825	6,338608410426
2	18,4605032879	1,2477451436	-0,0065994732	0,20499142827869
3	-5,0192747301	0,9268321694	0,0019367232	-0,022431786451581
4	0,1330126452	0,0079167173	-0,0002231074	0,0019299597918684
5	-0,0982419330	0,0381507246	0,0001161315	-0,000319331184667

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

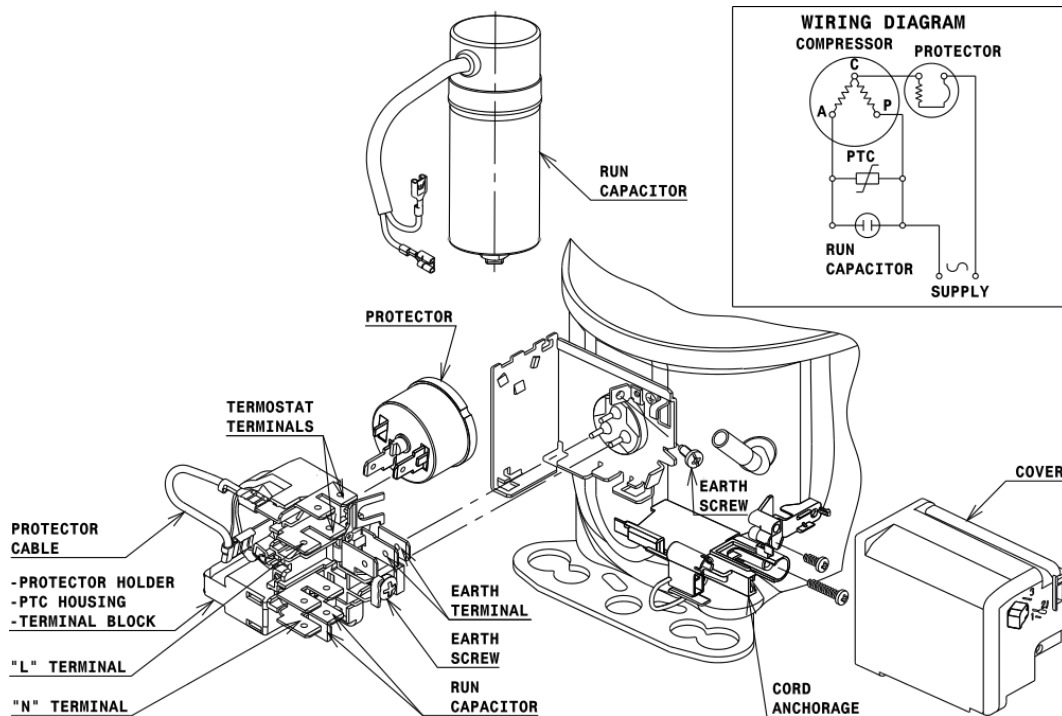


DESIGNATION INTERNAL DIAM.

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

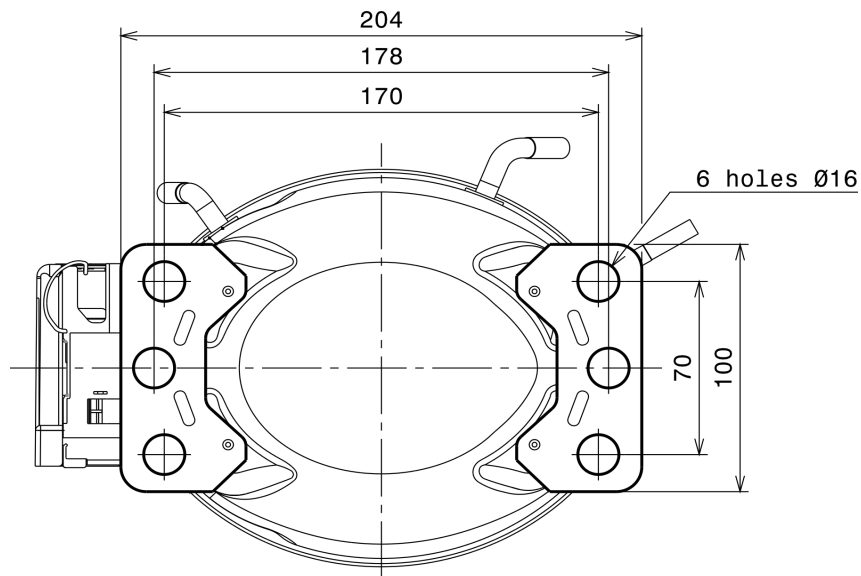
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



Technical Data Sheet

FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

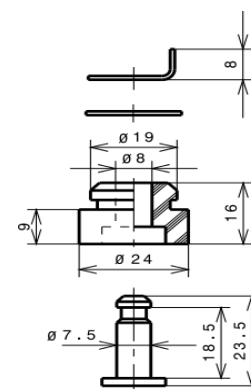
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP

