

# Technical Data Sheet

Compressor model **HLY80AAa**  
 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 8,10 cm<sup>3</sup>  
 Diameter 24,29 mm  
 Stroke 17,47 mm  
 Net Weight 9,45 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 210 cm<sup>3</sup>

## MOTOR

Nominal Power 1/7 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type RSIR  
 Phase number 1 PH  
 Locked Rotor Amps (LRA) 8,60 A  
 Max. Cont. Current (MCC) 1,00 A  
 Main W. resist. at 25°C 22,02 Ω  
 Start W. resist. at 25°C 22,53 Ω

## NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	113 kCal/h	99 W
COP	1,41 W/W	1,11 W/W
EER	1,22 kCal/Wh	0,96 kCal/Wh
Input Power	93 W	89 W
Current	0,62 A	0,60 A

## APPROVALS



## TEST CYCLE CONDITIONS

	ASHRAE LBP (B)	CECOMAF LBP (A)
Evaporating temp. (T <sub>e</sub> )	-23,3 °C	-25,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	32,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	32,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	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	MSP318LZ	4TM189NFBYY	T0462	AE37FJ
Current	5,90 A	5,50 A	6,20 A	5,90 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	110,00 / 62,00 °C	115,00 / 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	67	69	0,54	1,13	0,97
40	-30	90	79	0,57	1,32	1,14
40	-25	117	89	0,60	1,53	1,32
40	-23,3	127	92	0,62	1,60	1,38
40	-20	149	99	0,64	1,74	1,50
40	-15	186	110	0,69	1,96	1,68
40	-10	228	122	0,74	2,17	1,87

45	-35	63	67	0,53	1,09	0,94
45	-30	85	78	0,57	1,28	1,10
45	-25	112	89	0,60	1,47	1,26
45	-23,3	123	93	0,62	1,54	1,32
45	-20	144	100	0,65	1,67	1,44
45	-15	181	112	0,70	1,87	1,61
45	-10	222	124	0,75	2,08	1,79

50	-35	60	66	0,53	1,06	0,91
50	-30	81	77	0,56	1,23	1,06
50	-25	108	89	0,60	1,41	1,21
50	-23,3	118	93	0,62	1,48	1,27
50	-20	139	101	0,65	1,60	1,38
50	-15	175	114	0,70	1,79	1,54
50	-10	216	127	0,76	1,98	1,71

55	-35	56	64	0,52	1,02	0,88
55	-30	77	76	0,56	1,18	1,01
55	-25	103	89	0,60	1,35	1,16
55	-23,3	113	93	0,62	1,41	1,22
55	-20	134	102	0,65	1,53	1,32
55	-15	170	115	0,71	1,71	1,47
55	-10	210	129	0,77	1,89	1,63

60	-35	52	62	0,51	0,98	0,84
60	-30	73	75	0,56	1,13	0,97
60	-25	98	89	0,60	1,29	1,11
60	-23,3	108	93	0,62	1,35	1,16
60	-20	129	102	0,66	1,46	1,26
60	-15	164	117	0,72	1,64	1,41
60	-10	204	131	0,78	1,81	1,55

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	73	69	0,54	1,06	0,92
40	-30	99	79	0,57	1,26	1,09
40	-25	130	89	0,60	1,46	1,26
40	-23,3	141	92	0,62	1,53	1,32
40	-20	165	99	0,64	1,66	1,43
40	-15	205	110	0,69	1,85	1,60
40	-10	249	122	0,74	2,04	1,76

45	-35	67	67	0,53	0,99	0,86
45	-30	91	78	0,57	1,17	1,01
45	-25	119	89	0,60	1,35	1,16
45	-23,3	130	93	0,62	1,41	1,22
45	-20	153	100	0,65	1,52	1,32
45	-15	191	112	0,70	1,70	1,47
45	-10	233	124	0,75	1,87	1,62

50	-35	60	66	0,53	0,92	0,79
50	-30	82	77	0,56	1,07	0,92
50	-25	109	89	0,60	1,23	1,06
50	-23,3	119	93	0,62	1,29	1,11
50	-20	140	101	0,65	1,39	1,20
50	-15	176	114	0,70	1,55	1,34
50	-10	217	127	0,76	1,71	1,48

55	-35	54	64	0,52	0,84	0,72
55	-30	74	76	0,56	0,97	0,84
55	-25	99	89	0,60	1,11	0,96
55	-23,3	108	93	0,62	1,16	1,01
55	-20	128	102	0,65	1,26	1,09
55	-15	162	115	0,71	1,41	1,22
55	-10	201	129	0,77	1,56	1,35

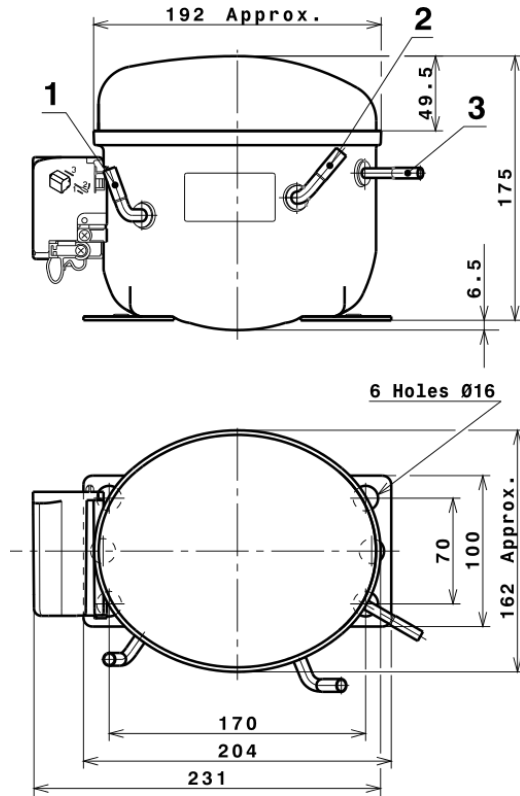
60	-35	47	62	0,51	0,76	0,65
60	-30	65	75	0,56	0,87	0,75
60	-25	88	89	0,60	1,00	0,86
60	-23,3	97	93	0,62	1,04	0,90
60	-20	116	102	0,66	1,13	0,98
60	-15	148	117	0,72	1,27	1,10
60	-10	185	131	0,78	1,41	1,22

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	505,7477406934	117,6384107227	0,7359742056	5,0253295081273
2	14,0462691910	1,2938139549	0,0083533806	0,15356524381341
3	-4,0541163350	0,8041707617	0,0034767919	-0,018227347572404
4	0,0895142873	0,0095643275	0,0001149450	0,0013065406020376
5	-0,0784797120	0,0327011454	0,0001305930	-0,0002486774411133

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

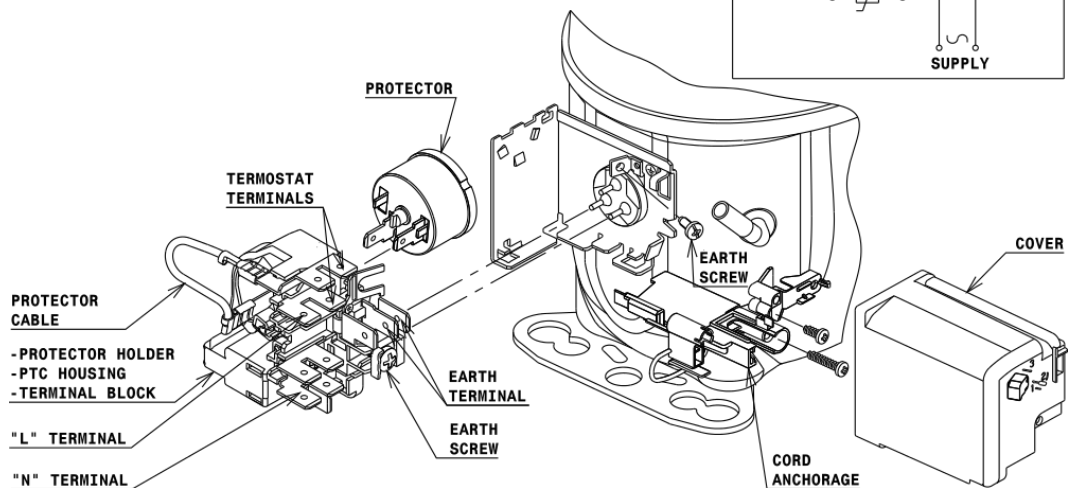
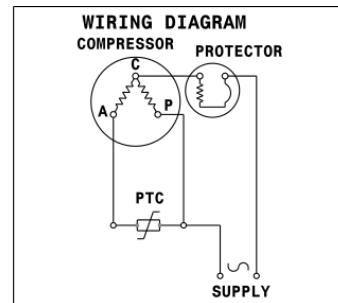


## DESIGNATION INTERNAL DIAM.

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

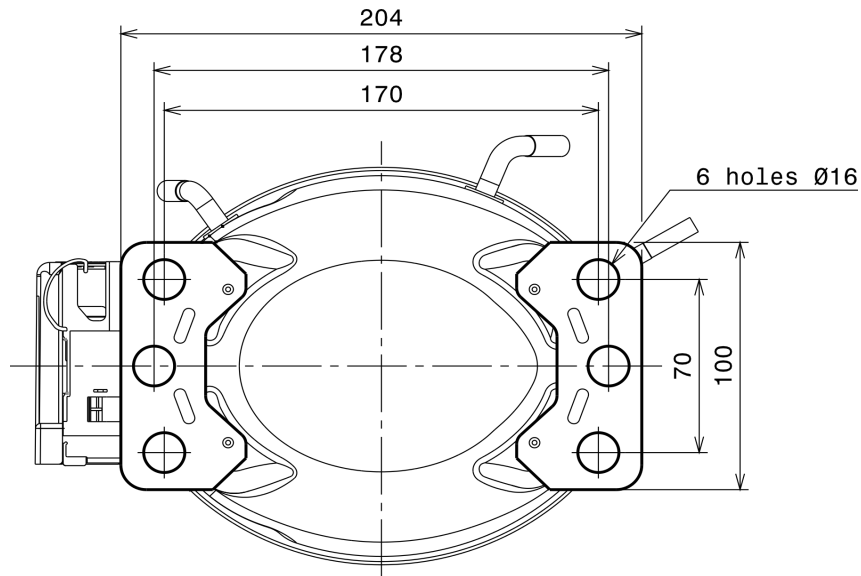
## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (L, P ranges)



# Technical Data Sheet

## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

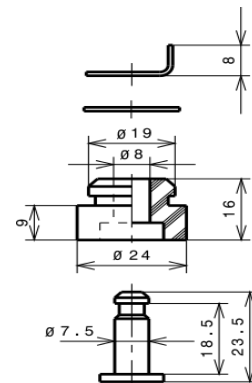
### STANDARD

Ø16 holes (170x70 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R600a LBP

