

# Technical Data Sheet

Compressor model **HLY99AAa**  
 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 cm<sup>3</sup>  
 Diameter 25,40 mm  
 Stroke 19,62 mm  
 Net Weight 10,95 Kg  
 Oil type ISO VG 10 MINER  
 Oil charge 345 cm<sup>3</sup>

## MOTOR

Nominal Power 1/6 hp  
 Voltage/Frequency 220-240V 50Hz  
 Voltage range 187-264 V  
 Type RSIR  
 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	136 kCal/h	119 W
COP	1,40 W/W	1,10 W/W
EER	1,20 kCal/Wh	0,95 kCal/Wh
Input Power	113 W	108 W
Current	0,80 A	0,78 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	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	86	85	0,72	1,18	1,01
40	-30	110	96	0,75	1,33	1,14
40	-25	141	108	0,78	1,53	1,31
40	-23,3	154	112	0,80	1,60	1,37
40	-20	180	121	0,82	1,74	1,50
40	-15	227	134	0,87	1,97	1,69
40	-10	282	149	0,93	2,20	1,89

45	-35	81	83	0,71	1,14	0,98
45	-30	105	95	0,74	1,28	1,10
45	-25	136	108	0,78	1,46	1,26
45	-23,3	148	112	0,80	1,53	1,32
45	-20	174	122	0,83	1,67	1,43
45	-15	221	136	0,88	1,88	1,62
45	-10	275	152	0,94	2,10	1,81

50	-35	77	81	0,71	1,10	0,95
50	-30	99	94	0,74	1,23	1,06
50	-25	130	108	0,78	1,40	1,20
50	-23,3	142	113	0,80	1,47	1,26
50	-20	168	123	0,83	1,59	1,37
50	-15	214	138	0,89	1,80	1,55
50	-10	267	155	0,95	2,01	1,72

55	-35	72	79	0,70	1,06	0,91
55	-30	94	93	0,74	1,18	1,01
55	-25	124	108	0,78	1,34	1,15
55	-23,3	136	113	0,80	1,40	1,20
55	-20	162	124	0,83	1,52	1,31
55	-15	207	140	0,89	1,72	1,48
55	-10	260	158	0,96	1,91	1,65

60	-35	67	77	0,69	1,02	0,87
60	-30	89	92	0,74	1,13	0,97
60	-25	118	108	0,78	1,28	1,10
60	-23,3	130	113	0,80	1,33	1,15
60	-20	155	125	0,84	1,45	1,25
60	-15	200	142	0,90	1,64	1,41
60	-10	253	161	0,97	1,83	1,57

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	94	85	0,72	1,11	0,96
40	-30	122	96	0,75	1,27	1,10
40	-25	158	108	0,78	1,46	1,26
40	-23,3	171	112	0,80	1,53	1,32
40	-20	200	121	0,82	1,66	1,44
40	-15	251	134	0,87	1,87	1,61
40	-10	308	149	0,93	2,07	1,79

45	-35	86	83	0,71	1,03	0,89
45	-30	112	95	0,74	1,18	1,02
45	-25	145	108	0,78	1,34	1,16
45	-23,3	158	112	0,80	1,40	1,21
45	-20	185	122	0,83	1,52	1,32
45	-15	233	136	0,88	1,71	1,48
45	-10	288	152	0,94	1,90	1,64

50	-35	77	81	0,71	0,96	0,83
50	-30	101	94	0,74	1,07	0,93
50	-25	132	108	0,78	1,22	1,06
50	-23,3	144	113	0,80	1,28	1,10
50	-20	170	123	0,83	1,39	1,20
50	-15	216	138	0,89	1,56	1,35
50	-10	269	155	0,95	1,73	1,50

55	-35	69	79	0,70	0,87	0,75
55	-30	90	93	0,74	0,97	0,84
55	-25	119	108	0,78	1,10	0,95
55	-23,3	130	113	0,80	1,15	1,00
55	-20	155	124	0,83	1,25	1,08
55	-15	198	140	0,89	1,41	1,22
55	-10	249	158	0,96	1,57	1,36

60	-35	61	77	0,69	0,79	0,68
60	-30	80	92	0,74	0,87	0,75
60	-25	106	108	0,78	0,98	0,85
60	-23,3	117	113	0,80	1,03	0,89
60	-20	140	125	0,84	1,12	0,97
60	-15	181	142	0,90	1,27	1,10
60	-10	229	161	0,97	1,42	1,23

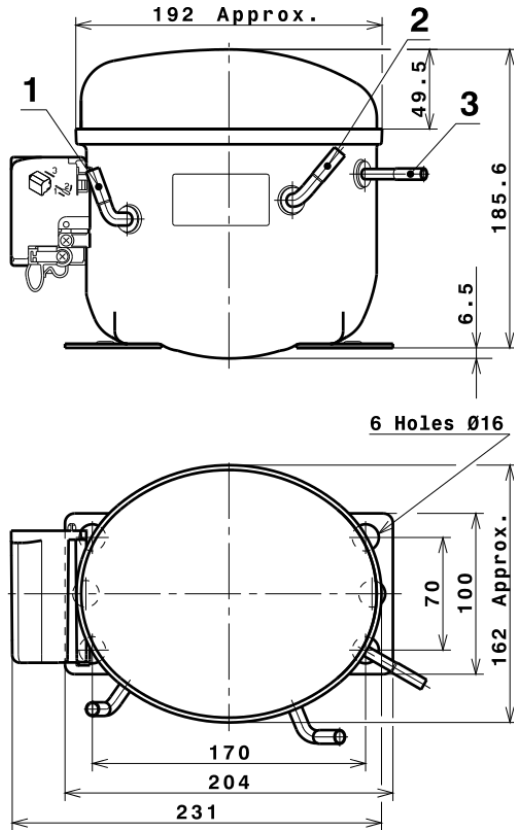
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	633,5542094731	144,6143179810	0,9244763266	6,3373939444167
2	18,5583971338	1,8784457544	0,0096345960	0,20751273003516
3	-4,9700702197	1,0222640310	0,0037897323	-0,022085472759636
4	0,1425149058	0,0198066851	0,0001461261	0,0020630632098473
5	-0,0942681159	0,0408773492	0,0001403740	-0,00028469981547242

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
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# Technical Data Sheet

## 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)

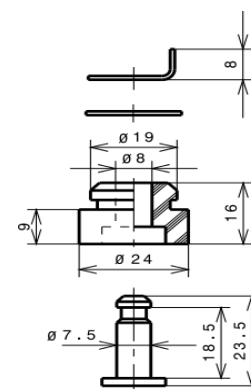
### STANDARD

$\varnothing 16$  holes (170x70 net)



### SNAP-ON

$\varnothing 16$  holes (170x70 net)



## SOA

SOA R600a LBP

