

# Technical Data Sheet

Compressor model **HLY55MAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R600a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	5,46 cm <sup>3</sup>	Nominal Power	1/10 hp
Refrigerant	R600a	Diameter	20,88 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	15,93 mm	Voltage range	187-264 V
Expansion	Capillar	Net Weight	9,80 Kg	Type	RSIR
Comp. Cooling	Static	Oil type	ISO VG 10 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	265 cm <sup>3</sup>	Locked Rotor Amps (LRA)	7,50 A
				Max. Cont. Current (MCC)	1,20 A
				Main W. resist. at 25°C	23,25 Ω
				Start W. resist. at 25°C	24,35 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	255 kCal/h	250 W
COP	2,51 W/W	2,18 W/W
EER	2,16 kCal/Wh	1,89 kCal/Wh
Input Power	118 W	114 W
Current	0,70 A	0,68 A



## TEST CYCLE CONDITIONS

	ASHRAE HMBP (D)	CECOMAF HMBP (C)
Evaporating temp. (T <sub>e</sub> )	7,2 °C	5,0 °C
Condensing temp. (T <sub>c</sub> )	55,0 °C	55,0 °C
Liquid temp. (T <sub>liq.</sub> )	46,0 °C	55,0 °C
Ambient temp. (T <sub>amb.</sub> )	35,0 °C	32,0 °C
Suction temp. (T <sub>suction</sub> )	35,0 °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		
Reference	4TM222NFBYY	T0366		
Current	7,00 A	6,80 A		
Time check	5-15 seg	7,5-14 seg		
Disc temp. (Open/Close)	120,00 / 61,00 °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	-25	65	58	0,48	1,30	1,12
40	-20	91	64	0,50	1,65	1,42
40	-15	121	71	0,52	2,00	1,72
40	-10	156	77	0,54	2,36	2,03
40	-5	196	84	0,57	2,71	2,33
40	0	239	91	0,59	3,07	2,64
40	5	287	98	0,62	3,42	2,94
40	7,2	310	101	0,63	3,57	3,07
40	10	340	105	0,65	3,76	3,23

45	-25	58	58	0,48	1,17	1,01
45	-20	83	65	0,50	1,48	1,27
45	-15	111	72	0,53	1,79	1,54
45	-10	144	80	0,55	2,10	1,81
45	-5	182	87	0,58	2,42	2,08
45	0	224	95	0,61	2,73	2,35
45	5	270	103	0,64	3,04	2,62
45	7,2	292	107	0,65	3,18	2,73
45	10	321	111	0,67	3,35	2,88

50	-25	52	58	0,48	1,04	0,89
50	-20	74	66	0,50	1,31	1,12
50	-15	101	74	0,53	1,58	1,36
50	-10	132	82	0,56	1,87	1,60
50	-5	168	91	0,59	2,15	1,85
50	0	208	100	0,62	2,43	2,09
50	5	252	108	0,66	2,71	2,33
50	7,2	273	112	0,68	2,83	2,43
50	10	301	117	0,70	2,98	2,57

55	-25	45	58	0,48	0,90	0,78
55	-20	66	67	0,51	1,14	0,98
55	-15	91	76	0,54	1,39	1,19
55	-10	120	85	0,57	1,64	1,41
55	-5	154	94	0,60	1,90	1,63
55	0	192	104	0,64	2,15	1,85
55	5	235	114	0,68	2,40	2,07
55	7,2	255	118	0,70	2,51	2,16
55	10	282	124	0,72	2,65	2,28

60	-25	38	58	0,48	0,77	0,66
60	-20	57	68	0,51	0,98	0,84
60	-15	80	78	0,54	1,20	1,03
60	-10	108	88	0,58	1,43	1,23
60	-5	140	98	0,62	1,66	1,43
60	0	176	108	0,66	1,89	1,63
60	5	217	119	0,70	2,12	1,83
60	7,2	237	124	0,72	2,23	1,91
60	10	263	130	0,75	2,35	2,02

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	70	58	0,48	1,20	1,04
40	-20	98	65	0,50	1,53	1,32
40	-15	131	71	0,52	1,85	1,60
40	-10	169	77	0,54	2,18	1,89
40	-5	212	84	0,57	2,51	2,17
40	0	259	91	0,59	2,83	2,45
40	5	310	98	0,62	3,16	2,73
40	7,2	335	102	0,63	3,29	2,85
40	10	367	106	0,65	3,47	3,00

45	-25	63	58	0,48	1,08	0,93
45	-20	89	65	0,50	1,36	1,17
45	-15	120	73	0,53	1,65	1,42
45	-10	155	80	0,55	1,94	1,67
45	-5	196	88	0,58	2,23	1,92
45	0	241	96	0,61	2,51	2,17
45	5	290	104	0,64	2,80	2,42
45	7,2	313	107	0,66	2,92	2,52
45	10	344	112	0,67	3,08	2,66

50	-25	55	58	0,48	0,95	0,82
50	-20	79	66	0,51	1,20	1,03
50	-15	108	74	0,53	1,45	1,25
50	-10	142	83	0,56	1,71	1,48
50	-5	180	91	0,59	1,97	1,70
50	0	222	100	0,63	2,22	1,92
50	5	270	109	0,66	2,48	2,14
50	7,2	292	113	0,68	2,59	2,24
50	10	322	118	0,70	2,73	2,36

55	-25	48	58	0,48	0,82	0,71
55	-20	70	67	0,51	1,04	0,90
55	-15	96	76	0,54	1,26	1,09
55	-10	128	85	0,57	1,49	1,29
55	-5	164	95	0,61	1,72	1,49
55	0	204	105	0,64	1,96	1,69
55	5	250	114	0,68	2,18	1,89
55	7,2	271	119	0,70	2,28	1,97
55	10	300	124	0,73	2,41	2,08

60	-25	40	58	0,48	0,69	0,60
60	-20	60	68	0,51	0,88	0,76
60	-15	85	78	0,55	1,09	0,94
60	-10	114	88	0,58	1,29	1,12
60	-5	148	98	0,62	1,50	1,30
60	0	186	109	0,66	1,71	1,48
60	5	229	120	0,71	1,92	1,66
60	7,2	250	124	0,73	2,01	1,74
60	10	277	130	0,75	2,13	1,84

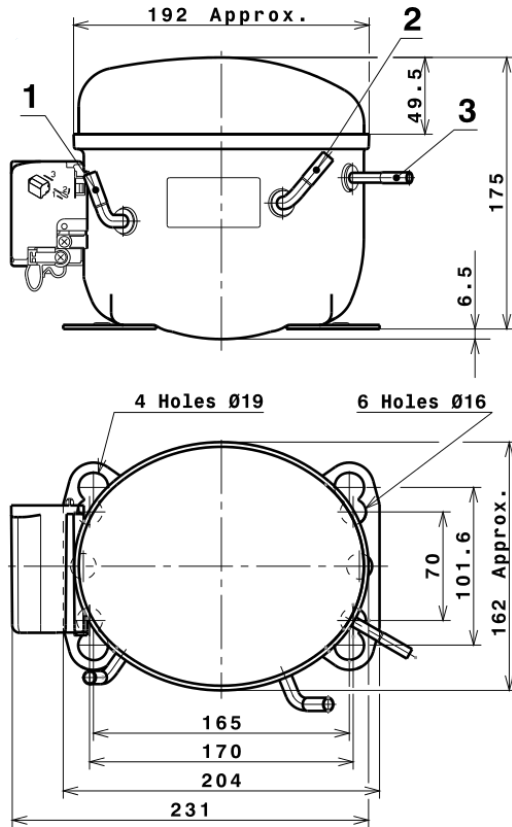
## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	400,8726378395	57,1072344381	0,4465270445	3,8319539832931
2	13,2083963275	0,0066873467	-0,0002088557	0,1346952521504
3	-3,6918935534	0,9068818214	0,0037806085	-0,018245224222995
4	0,0914242363	0,0041890711	0,0000528723	0,0013853236437595
5	-0,0883972042	0,0362752729	0,0001512243	-0,00023570473379648

Equation	$x_1 + x_2Te + x_3Tc + x_4Te^2 + x_5TeTc$
----------	---

# Technical Data Sheet

## COMPRESSOR DIMENSIONS

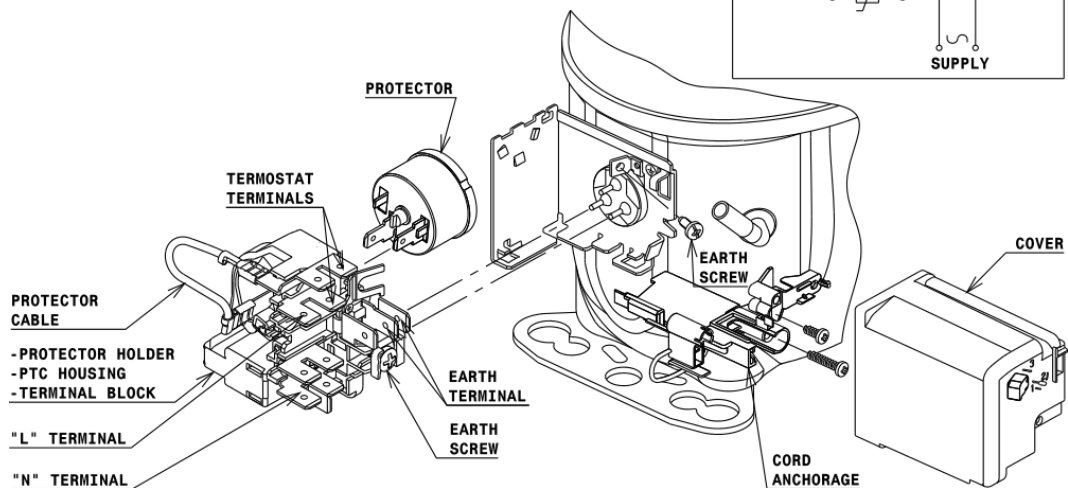
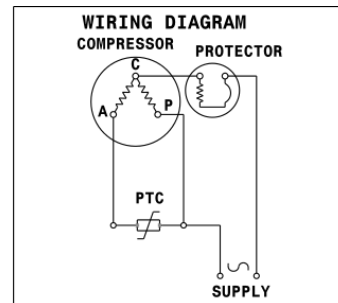


## DESIGNATION INTERNAL DIAM.

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)



# Technical Data Sheet

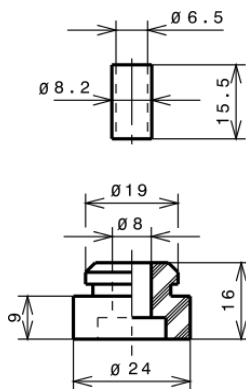
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

### STANDARD

Ø16 holes (170x70 net)



### AMERICAN FEET

Ø19 holes (165x101.6 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R600a HMBP

