

# Technical Data Sheet

Compressor model **HUY70MAa**  
 Voltage **220-240V 50Hz ~1**  
 Refrigerant **R600a**

## APPLICATION

## COMPRESSOR

## MOTOR

Application	High-Medium Back Pressure	Displacement	6,70 cm <sup>3</sup>	Nominal Power	1/8 hp
Refrigerant	R600a	Diameter	21,99 mm	Voltage/Frequency	220-240V 50Hz
Evaporating Temp.	-25,0 °C to 10,0 °C	Stroke	17,50 mm	Voltage range	187-255 V
Expansion	Capillar	Net Weight	8,90 Kg	Type	RSIR
Comp. Cooling	Static	Oil type	ISO VG 10 MINER	Phase number	1 PH
Max. ambient temp.	43,0 °C	Oil charge	200 cm <sup>3</sup>	Locked Rotor Amps (LRA)	5,50 A
				Max. Cont. Current (MCC)	1,10 A
				Main W. resist. at 25°C	21,55 Ω
				Start W. resist. at 25°C	17,50 Ω

## NOMINAL PERFORMANCE

## APPROVALS

	ASHRAE	CECOMAF
Cooling Capacity	345 kCal/h	338 W
COP	2,87 W/W	2,47 W/W
EER	2,46 kCal/Wh	2,14 kCal/Wh
Input Power	140 W	137 W
Current	0,89 A	0,88 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	AE37FJ	B59-115		
Current	5,90 A	5,90 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	115,00 / 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	-25	78	70	0,68	1,30	1,11
40	-20	104	78	0,70	1,55	1,33
40	-15	137	86	0,73	1,86	1,60
40	-10	177	94	0,75	2,20	1,89
40	-5	223	101	0,77	2,57	2,21
40	0	277	108	0,80	2,97	2,56
40	5	336	115	0,82	3,40	2,92
40	7,2	365	118	0,83	3,60	3,09
40	10	403	122	0,84	3,85	3,31

45	-25	77	71	0,68	1,26	1,08
45	-20	102	80	0,71	1,48	1,27
45	-15	134	89	0,74	1,75	1,51
45	-10	173	98	0,76	2,06	1,77
45	-5	219	106	0,79	2,40	2,06
45	0	271	114	0,81	2,76	2,38
45	5	330	122	0,84	3,15	2,71
45	7,2	358	125	0,85	3,33	2,86
45	10	396	130	0,86	3,56	3,06

50	-25	76	73	0,69	1,22	1,05
50	-20	100	83	0,72	1,41	1,22
50	-15	132	92	0,75	1,66	1,43
50	-10	170	102	0,78	1,94	1,67
50	-5	214	111	0,81	2,24	1,93
50	0	266	120	0,83	2,57	2,21
50	5	324	129	0,86	2,92	2,51
50	7,2	352	133	0,87	3,08	2,65
50	10	389	137	0,88	3,29	2,83

55	-25	75	74	0,69	1,18	1,01
55	-20	99	85	0,72	1,35	1,16
55	-15	129	96	0,76	1,57	1,35
55	-10	166	106	0,79	1,82	1,57
55	-5	210	116	0,82	2,10	1,81
55	0	260	126	0,85	2,40	2,06
55	5	318	136	0,88	2,72	2,34
55	7,2	345	140	0,89	2,87	2,46
55	10	382	145	0,90	3,06	2,63

60	-25	74	75	0,69	1,14	0,98
60	-20	97	87	0,73	1,29	1,11
60	-15	126	99	0,77	1,49	1,28
60	-10	162	110	0,80	1,71	1,47
60	-5	205	121	0,84	1,97	1,69
60	0	255	132	0,87	2,24	1,93
60	5	311	143	0,90	2,54	2,18
60	7,2	338	147	0,91	2,67	2,30
60	10	375	153	0,93	2,84	2,45

## CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	84	70	0,68	1,20	1,03
40	-20	113	79	0,70	1,44	1,24
40	-15	149	86	0,73	1,72	1,49
40	-10	192	94	0,75	2,04	1,76
40	-5	242	102	0,78	2,38	2,06
40	0	299	109	0,80	2,75	2,38
40	5	363	116	0,82	3,14	2,71
40	7,2	394	119	0,83	3,32	2,87
40	10	435	122	0,84	3,55	3,07

45	-25	83	72	0,68	1,15	1,00
45	-20	110	81	0,71	1,36	1,18
45	-15	145	90	0,74	1,62	1,40
45	-10	187	98	0,77	1,90	1,64
45	-5	236	107	0,79	2,21	1,91
45	0	292	115	0,82	2,54	2,20
45	5	355	123	0,84	2,89	2,50
45	7,2	385	126	0,85	3,05	2,64
45	10	425	130	0,86	3,26	2,82

50	-25	81	73	0,69	1,11	0,96
50	-20	108	83	0,72	1,29	1,12
50	-15	141	93	0,75	1,52	1,31
50	-10	182	102	0,78	1,77	1,53
50	-5	229	112	0,81	2,05	1,77
50	0	284	121	0,83	2,35	2,03
50	5	346	130	0,86	2,67	2,31
50	7,2	376	133	0,87	2,82	2,43
50	10	416	138	0,88	3,01	2,60

55	-25	80	74	0,69	1,07	0,93
55	-20	105	85	0,73	1,23	1,06
55	-15	137	96	0,76	1,43	1,23
55	-10	177	107	0,79	1,66	1,43
55	-5	223	117	0,82	1,91	1,65
55	0	277	127	0,85	2,18	1,89
55	5	338	137	0,88	2,47	2,14
55	7,2	367	141	0,89	2,61	2,25
55	10	406	146	0,91	2,78	2,40

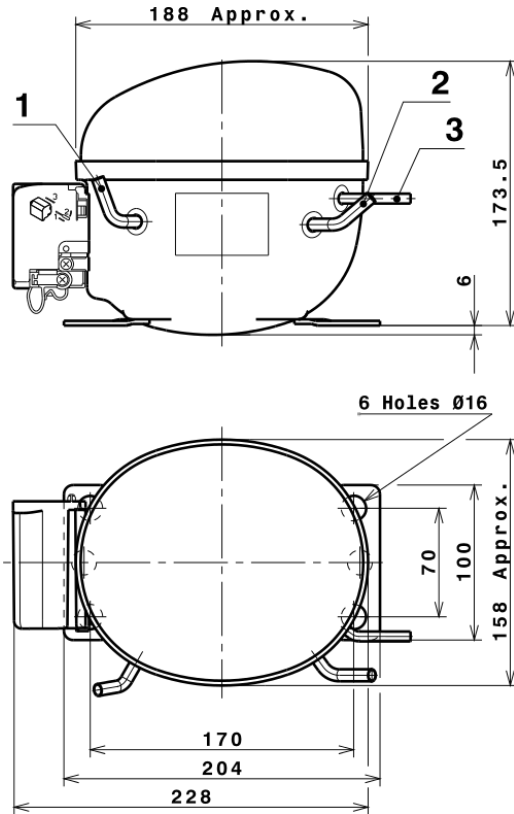
60	-25	78	76	0,70	1,03	0,89
60	-20	102	88	0,73	1,17	1,01
60	-15	133	99	0,77	1,34	1,16
60	-10	172	111	0,80	1,55	1,34
60	-5	217	122	0,84	1,78	1,54
60	0	270	133	0,87	2,03	1,75
60	5	329	144	0,90	2,29	1,98
60	7,2	358	148	0,91	2,41	2,09
60	10	396	154	0,93	2,57	2,22

## EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	358,6280060968	61,9177861402	0,6637752823	2,882135832104
2	13,9953919666	-0,0737645335	-0,0000236410	0,1361069481715
3	-1,6461399601	1,2348410378	0,0035835517	0,017295779056937
4	0,1392141283	-0,0045352397	-0,0000262398	0,0020910019711639
5	-0,0523227685	0,0384404056	0,0001081330	0,00047461465596006

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

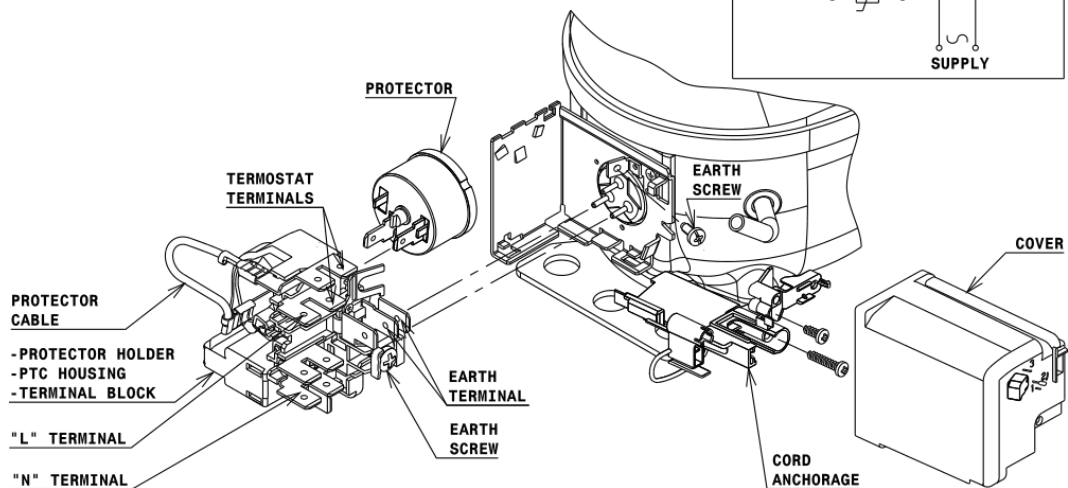
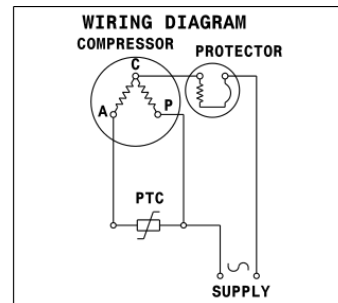


## DESIGNATION INTERNAL DIAM.

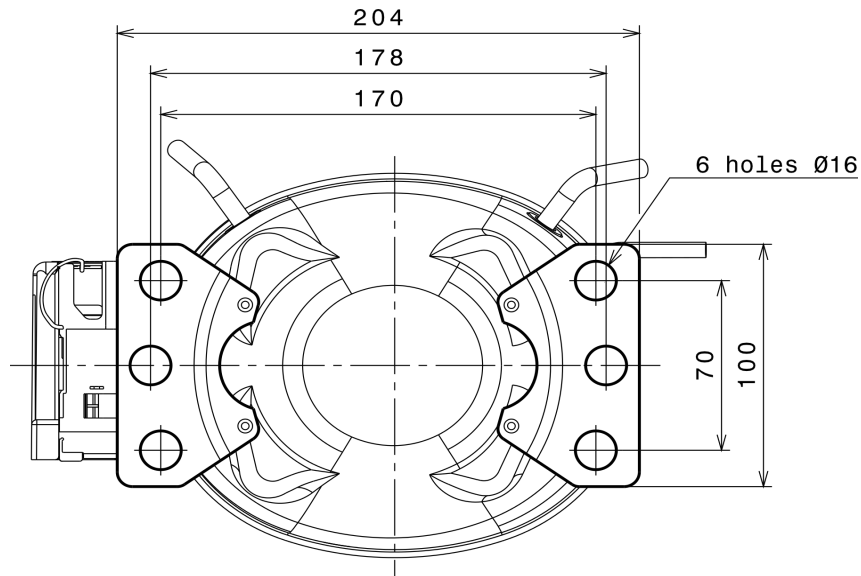
DESIGNATION	INTERNAL DIAM.
1 Service	6,2 mm
2 Suction	6,2 mm
3 Discharge	4,9 mm

## WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

### RSIR CONNECTION (PTC) (U range)



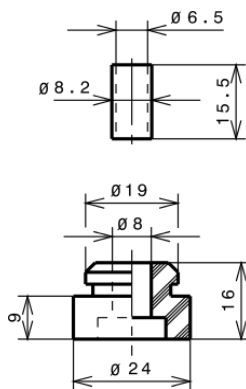
## FIXINGS



## SILENT BLOCKS (MOUNTING ACCESSORIES)

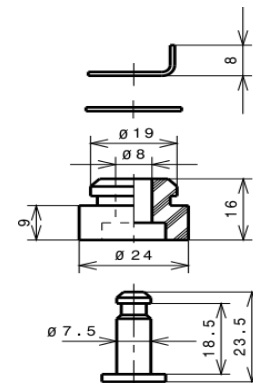
### STANDARD

Ø16 holes (170x70 net)



### SNAP-ON

Ø16 holes (170x70 net)



## SOA

SOA R600a HMBP

