Technical Data Sheet

Compressor model **HLY70MAb**

Voltage **220-240V 50Hz ~1**

Refrigerant **R600a**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R600a
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	6,65 cm³
Diameter	22,00 mm
Stroke	17,48 mm
Net Weight	8,70 Kg
Oil type	ISO VG 10 MINER
Oil charge	265 cm³

MOTOR

Nominal Power	1/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	RSCR
Phase number	1 PH
Locked Rotor Amps (LRA)	4,60 A
Max. Cont. Current (MCC)	1,30 A
Main W. resist. at 25ºC	26,47 Ω
Start W. resist. at 25ºC	30,60 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	314 kCal/h	307 W
COP	2,69 W/W	2,33 W/W
EER	2,31 kCal/Wh	2,01 kCal/Wh
Input Power	136 W	132 W
Current	0,67 A	0,65 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	HMBP (D)	**HMBP (C)**
Evaporating temp. (T_e)	7,2 ºC	5,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	46,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	35,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	35,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Run capacitor	3 µF 400 V			
Relay	Option 1			
Reference	PTC K100			
Voltage	200-240 V			
Resistance	14.00 Ω			
Protector	Option 1	Option 2		
Reference	T0508	AE18FU		
Current	6,50 A	6,30 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	135,00 / 62,00 ºC	120,00 / 62,00 ºC		

This product is approved for R290 and R600a regarding explosion safety according to standard EN 60335-1 and EN 60335-2-34

Technical Data Sheet

cubigel compressors

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	72	66	0,37	1,27	1,09
40	-20	99	75	0,40	1,54	1,33
40	-15	132	83	0,43	1,84	1,58
40	-10	171	92	0,47	2,16	1,86
40	-5	216	101	0,51	2,50	2,15
40	0	267	109	0,55	2,84	2,45
40	5	325	118	0,59	3,20	2,75
40	7,2	352	122	0,60	3,36	2,89
40	10	388	127	0,63	3,56	3,06
45	-25	69	66	0,37	1,20	1,04
45	-20	94	76	0,40	1,45	1,24
45	-15	126	85	0,44	1,72	1,48
45	-10	163	94	0,48	2,01	1,73
45	-5	207	104	0,52	2,32	2,00
45	0	257	113	0,56	2,64	2,27
45	5	313	123	0,61	2,97	2,55
45	7,2	339	127	0,63	3,12	2,68
45	10	375	132	0,65	3,30	2,84
50	-25	65	67	0,37	1,14	0,98
50	-20	89	77	0,41	1,36	1,17
50	-15	119	87	0,45	1,60	1,38
50	-10	156	97	0,49	1,87	1,61
50	-5	198	107	0,53	2,16	1,86
50	0	246	117	0,58	2,45	2,11
50	5	301	127	0,63	2,76	2,37
50	7,2	327	131	0,65	2,89	2,49
50	10	361	137	0,67	3,07	2,64
55	-25	62	67	0,37	1,08	0,93
55	-20	85	78	0,41	1,27	1,09
55	-15	113	88	0,45	1,49	1,28
55	-10	148	99	0,50	1,74	1,49
55	-5	189	110	0,55	2,00	1,72
55	0	236	120	0,60	2,28	1,96
55	5	289	131	0,65	2,56	2,20
55	7,2	314	136	0,67	2,69	2,31
55	10	348	142	0,70	2,85	2,45
60	-25	59	67	0,37	1,01	0,87
60	-20	80	79	0,42	1,18	1,01
60	-15	107	90	0,46	1,38	1,19
60	-10	140	101	0,51	1,61	1,38
60	-5	180	113	0,56	1,85	1,59
60	0	225	124	0,61	2,11	1,81
60	5	277	136	0,67	2,37	2,04
60	7,2	301	141	0,69	2,49	2,14
60	10	334	147	0,73	2,64	2,27

CECOMAF

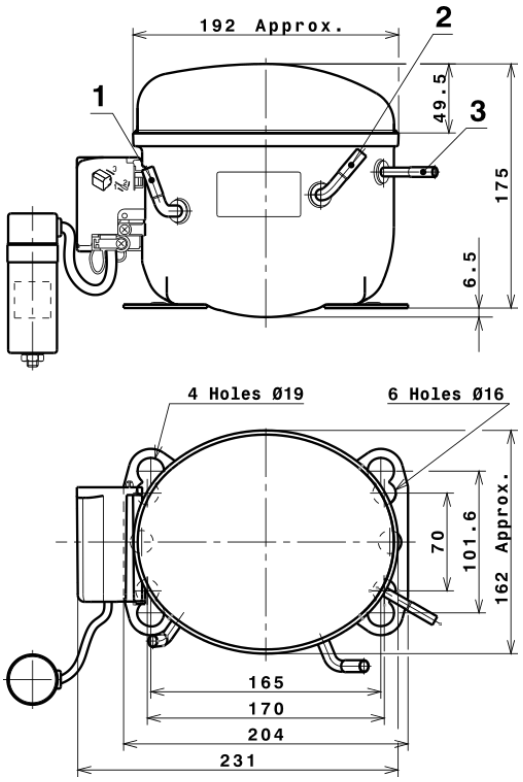
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	78	66	0,37	1,17	1,01
40	-20	107	75	0,40	1,43	1,23
40	-15	143	84	0,44	1,71	1,48
40	-10	185	92	0,47	2,00	1,73
40	-5	234	101	0,51	2,31	2,00
40	0	289	110	0,55	2,63	2,27
40	5	351	119	0,59	2,95	2,55
40	7,2	380	123	0,61	3,10	2,68
40	10	419	128	0,63	3,28	2,84
45	-25	74	67	0,37	1,11	0,96
45	-20	101	76	0,41	1,33	1,15
45	-15	135	85	0,44	1,59	1,37
45	-10	176	95	0,48	1,86	1,60
45	-5	223	104	0,52	2,14	1,85
45	0	276	114	0,57	2,43	2,10
45	5	336	123	0,61	2,73	2,36
45	7,2	365	127	0,63	2,86	2,47
45	10	403	133	0,65	3,03	2,62
50	-25	70	67	0,37	1,04	0,90
50	-20	96	77	0,41	1,24	1,07
50	-15	128	87	0,45	1,47	1,27
50	-10	167	97	0,49	1,72	1,48
50	-5	212	107	0,54	1,98	1,71
50	0	264	117	0,58	2,24	1,94
50	5	322	128	0,63	2,52	2,18
50	7,2	349	132	0,65	2,64	2,28
50	10	386	138	0,68	2,80	2,42
55	-25	66	67	0,37	0,98	0,85
55	-20	90	78	0,41	1,15	1,00
55	-15	121	89	0,46	1,36	1,17
55	-10	157	100	0,50	1,58	1,37
55	-5	201	110	0,55	1,82	1,57
55	0	251	121	0,60	2,07	1,79
55	5	307	132	0,65	2,33	2,01
55	7,2	334	137	0,67	2,44	2,11
55	10	370	143	0,70	2,59	2,24
60	-25	62	68	0,37	0,92	0,79
60	-20	84	79	0,42	1,07	0,92
60	-15	113	90	0,46	1,25	1,08
60	-10	148	102	0,51	1,45	1,26
60	-5	190	113	0,56	1,67	1,45
60	0	238	125	0,62	1,91	1,65
60	5	292	136	0,67	2,14	1,85
60	7,2	318	141	0,70	2,25	1,94
60	10	353	148	0,73	2,39	2,06

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	390,8559298481	82,1055034566	0,4109783243	3,4311890222674
2	14,4470883946	0,7086397492	0,0030005037	0,14430260538074
3	-2,6928924645	0,7621511701	0,0036681556	0,00072532543481888
4	0,1256714776	0,0010325255	0,0000423776	0,0018898828110089
5	-0,0753961887	0,0277477378	0,0001362232	0,0001074553240732

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

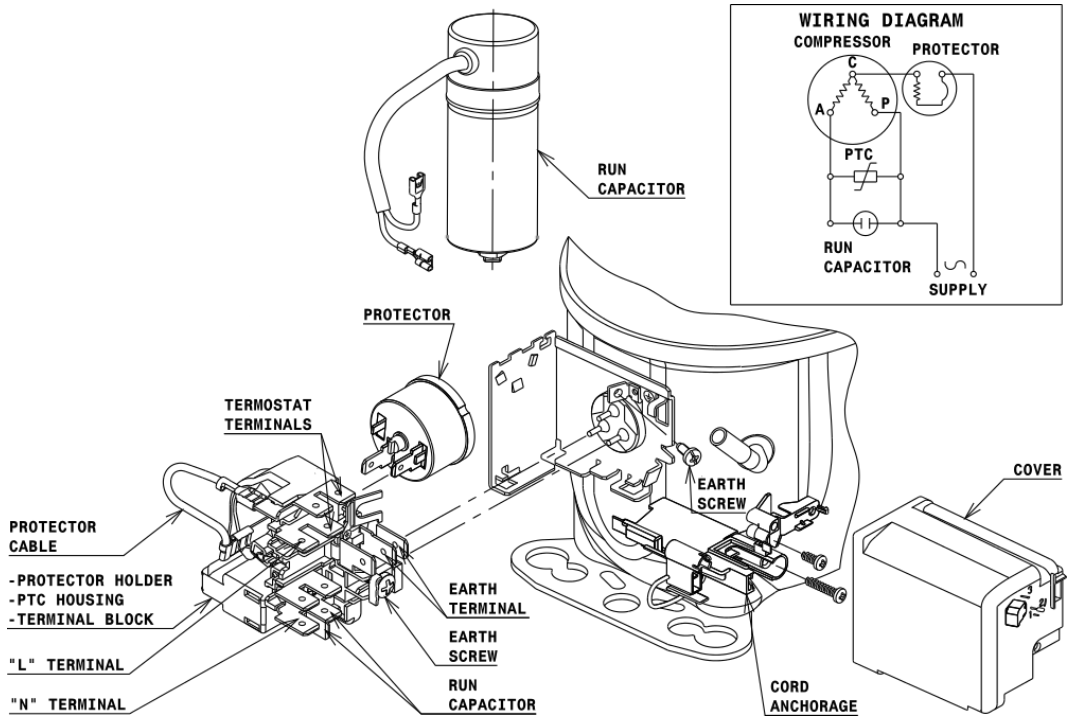
COMPRESSOR DIMENSIONS



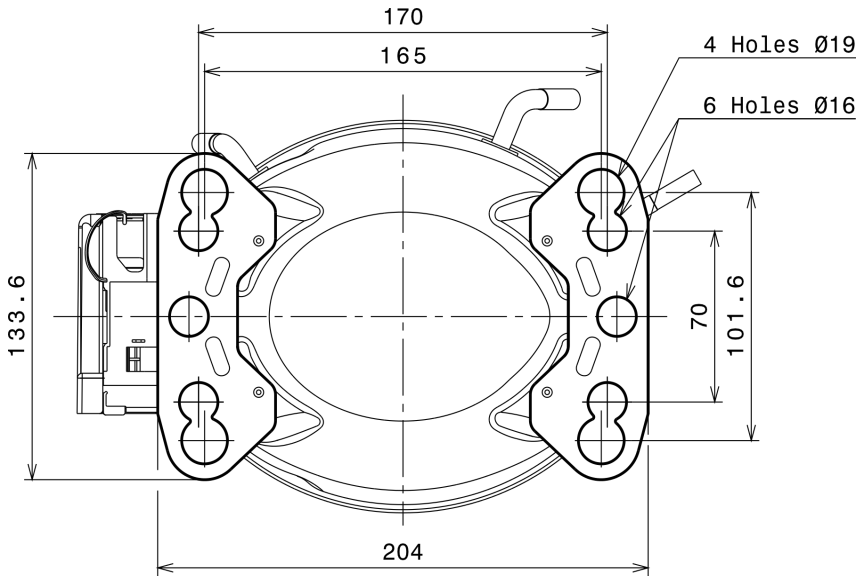
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



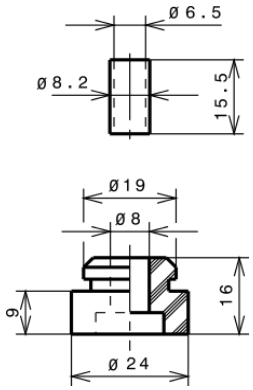
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

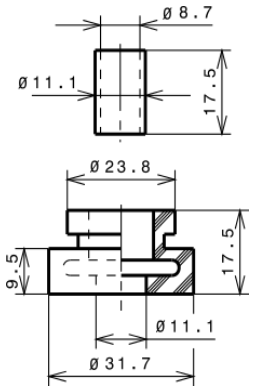
STANDARD

Ø16 holes (170x70 net)



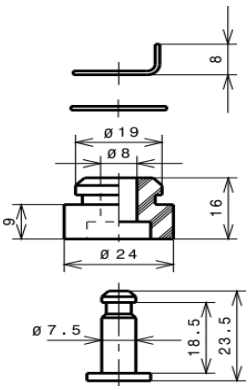
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a HMBP