Technical Data Sheet

Compressor model **HLY70MAa**

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	8,59 Kg
Oil type	ISO VG 10 MINER
Oil charge	265 cm³

MOTOR

Nominal Power	1/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	RSIR
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	2,50 W/W	2,17 W/W
EER	2,15 kCal/Wh	1,87 kCal/Wh
Input Power	146 W	142 W
Current	0,84 A	0,82 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

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	68	0,56	1,23	1,06
40	-20	99	77	0,59	1,49	1,28
40	-15	132	87	0,62	1,77	1,52
40	-10	171	96	0,65	2,06	1,77
40	-5	216	106	0,68	2,37	2,04
40	0	267	116	0,72	2,69	2,31
40	5	325	126	0,76	3,01	2,59
40	7,2	352	130	0,77	3,15	2,71
40	10	388	136	0,80	3,33	2,86
45	-25	69	69	0,57	1,16	1,00
45	-20	94	79	0,60	1,39	1,19
45	-15	126	89	0,63	1,64	1,41
45	-10	163	99	0,66	1,91	1,64
45	-5	207	110	0,70	2,20	1,89
45	0	257	120	0,74	2,49	2,14
45	5	313	131	0,78	2,78	2,39
45	7,2	339	135	0,80	2,92	2,51
45	10	375	141	0,82	3,09	2,65
50	-25	65	69	0,57	1,10	0,94
50	-20	89	80	0,60	1,30	1,11
50	-15	119	91	0,63	1,52	1,31
50	-10	156	102	0,67	1,77	1,52
50	-5	198	113	0,71	2,03	1,75
50	0	246	124	0,75	2,30	1,98
50	5	301	136	0,80	2,58	2,22
50	7,2	327	141	0,82	2,70	2,32
50	10	361	147	0,84	2,86	2,46
55	-25	62	70	0,57	1,03	0,89
55	-20	85	82	0,60	1,21	1,04
55	-15	113	93	0,64	1,41	1,21
55	-10	148	105	0,68	1,64	1,41
55	-5	189	117	0,72	1,88	1,62
55	0	236	129	0,77	2,13	1,83
55	5	289	141	0,82	2,39	2,05
55	7,2	314	146	0,84	2,50	2,15
55	10	348	153	0,87	2,65	2,28
60	-25	59	71	0,57	0,97	0,83
60	-20	80	83	0,61	1,12	0,96
60	-15	107	95	0,65	1,31	1,12
60	-10	140	108	0,69	1,51	1,30
60	-5	180	120	0,74	1,74	1,49
60	0	225	133	0,79	1,97	1,69
60	5	277	146	0,84	2,21	1,90
60	7,2	301	151	0,86	2,32	1,99
60	10	334	159	0,90	2,45	2,11

CECOMAF

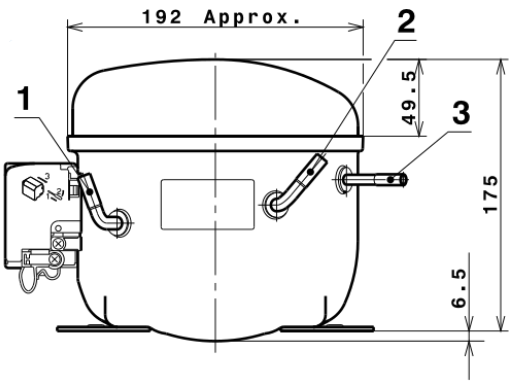
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	78	68	0,57	1,14	0,98
40	-20	107	78	0,59	1,38	1,19
40	-15	143	87	0,62	1,64	1,41
40	-10	185	97	0,65	1,91	1,65
40	-5	234	107	0,69	2,19	1,89
40	0	289	117	0,72	2,48	2,14
40	5	351	126	0,76	2,78	2,40
40	7,2	380	131	0,78	2,91	2,51
40	10	419	136	0,80	3,07	2,65
45	-25	74	69	0,57	1,07	0,92
45	-20	101	79	0,60	1,28	1,11
45	-15	135	89	0,63	1,51	1,31
45	-10	176	100	0,66	1,76	1,52
45	-5	223	110	0,70	2,02	1,75
45	0	276	121	0,74	2,29	1,98
45	5	336	131	0,78	2,56	2,21
45	7,2	365	136	0,80	2,68	2,31
45	10	403	142	0,82	2,83	2,45
50	-25	70	70	0,57	1,00	0,87
50	-20	96	81	0,60	1,19	1,03
50	-15	128	92	0,64	1,40	1,21
50	-10	167	103	0,67	1,62	1,40
50	-5	212	114	0,71	1,86	1,61
50	0	264	125	0,75	2,11	1,82
50	5	322	136	0,80	2,36	2,04
50	7,2	349	141	0,82	2,47	2,13
50	10	386	148	0,85	2,61	2,26
55	-25	66	70	0,57	0,94	0,81
55	-20	90	82	0,60	1,10	0,95
55	-15	121	94	0,64	1,29	1,11
55	-10	157	106	0,68	1,49	1,29
55	-5	201	117	0,73	1,71	1,48
55	0	251	129	0,77	1,94	1,67
55	5	307	142	0,82	2,17	1,87
55	7,2	334	147	0,84	2,27	1,96
55	10	370	154	0,87	2,41	2,08
60	-25	62	71	0,57	0,87	0,75
60	-20	84	83	0,61	1,01	0,87
60	-15	113	96	0,65	1,18	1,02
60	-10	148	108	0,69	1,37	1,18
60	-5	190	121	0,74	1,57	1,35
60	0	238	134	0,79	1,78	1,54
60	5	292	147	0,84	2,00	1,72
60	7,2	318	152	0,87	2,09	1,81
60	10	353	159	0,90	2,22	1,92

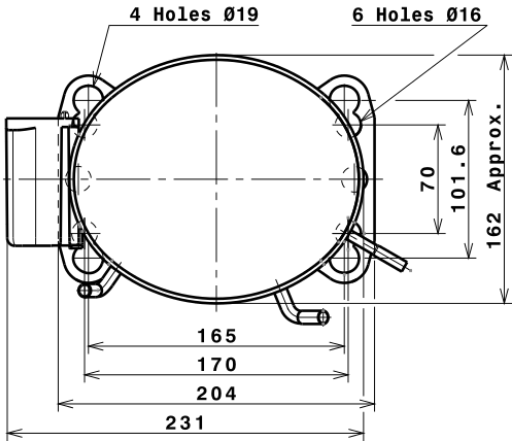
EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	390,8559298481	83,8921586036	0,5802476221	3,4311890222674
2	14,4470883946	0,8344489421	0,0027210933	0,14430260538074
3	-2,6928924645	0,8841504664	0,0037023201	0,00072532543481888
4	0,1256714776	0,0021109214	0,0000670505	0,0018898828110089
5	-0,0753961887	0,0298894007	0,0001327029	0,0001074553240732

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

COMPRESSOR DIMENSIONS

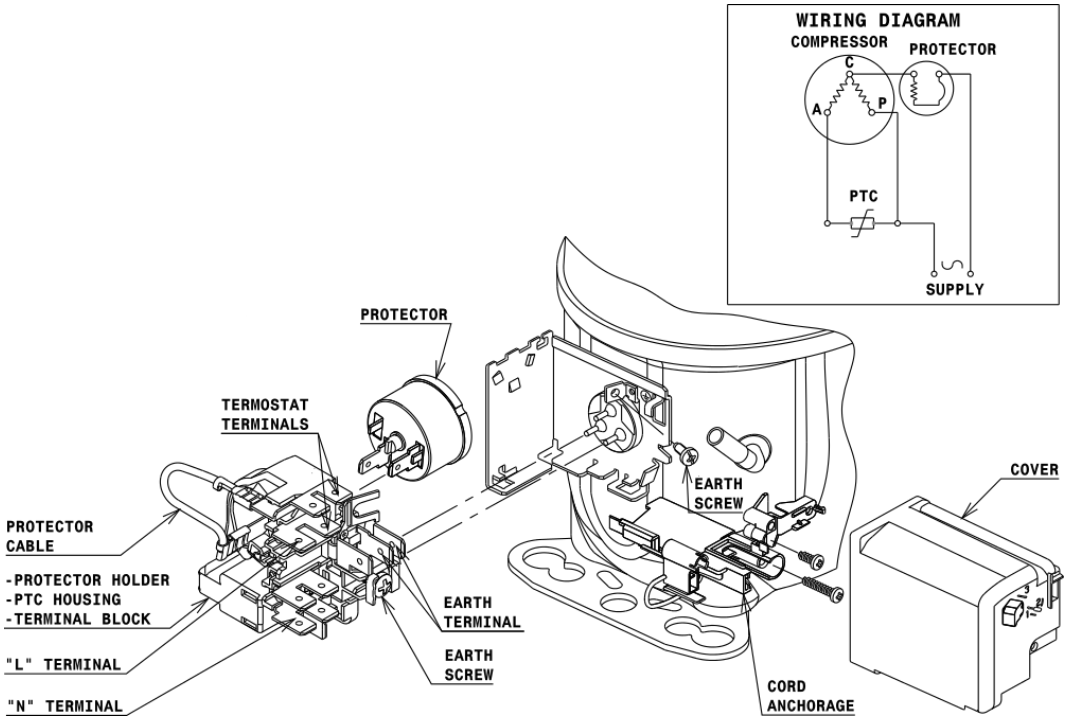




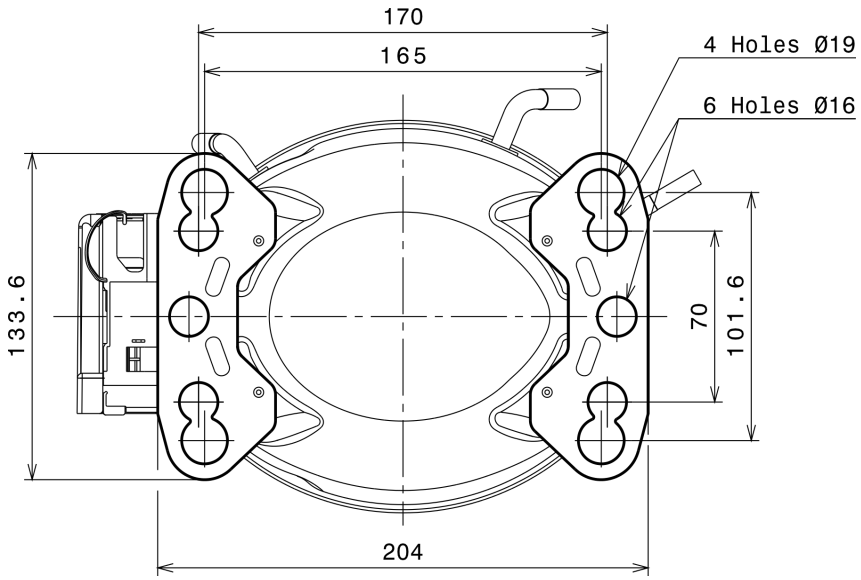
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSIR CONNECTION (PTC) (L, P ranges)



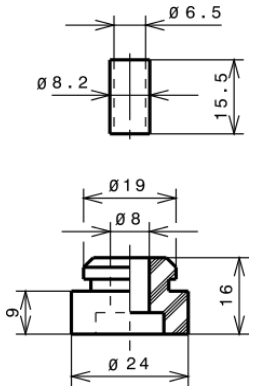
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

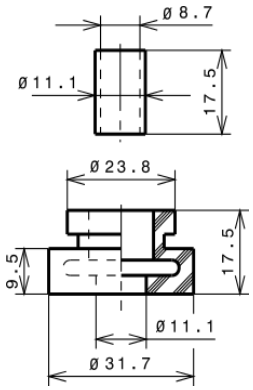
STANDARD

Ø16 holes (170x70 net)



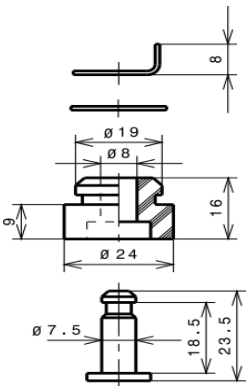
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a HMBP