Technical Data Sheet

Compressor model **HLY90AAb**

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

Refrigerant **R600a**

APPLICATION

Application	Low Back Pressure
Refrigerant	R600a
Evaporating Temp.	-35,0 ºC to -10,0 ºC
Expansion	Capillar
Comp. Cooling	Static
Max. ambient temp.	43,0 ºC

COMPRESSOR

Displacement	9,09 cm³
Diameter	24,29 mm
Stroke	19,62 mm
Net Weight	9,96 Kg
Oil type	ISO VG 10 MINER
Oil charge	345 cm³

MOTOR

Nominal Power	1/6 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-264 V
Type	RSCR
Phase number	1 PH
Locked Rotor Amps (LRA)	9,30 A
Max. Cont. Current (MCC)	1,10 A
Main W. resist. at 25ºC	17,64 Ω
Start W. resist. at 25ºC	21,62 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	127 kCal/h	111 W
COP	1,49 W/W	1,18 W/W
EER	1,28 kCal/Wh	1,02 kCal/Wh
Input Power	99 W	94 W
Current	0,50 A	0,48 A

APPROVALS

TEST CYCLE CONDITIONS

	ASHRAE	**CECOMAF**
	LBP (B)	**LBP (A)**
Evaporating temp. (T_e)	-23,3 ºC	-25,0 ºC
Condensing temp. (T_c)	55,0 ºC	55,0 ºC
Liquid temp. ($T_{liq.}$)	32,0 ºC	55,0 ºC
Ambient temp. ($T_{amb.}$)	32,0 ºC	32,0 ºC
Suction temp. ($T_{suction}$)	32,0 ºC	32,0 ºC
Voltage/Frequency	220 V 50 Hz	220 V 50 Hz

ELECTRICAL COMPONENTS

Run capacitor	4 µF 400 V			
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	AE37FJ
Current	6,20 A	7,00 A	6,80 A	5,90 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 ºC	120,00 / 61,00 ºC	120,00 / 62,00 ºC	115,00 / 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	-35	81	76	0,39	1,24	1,07
40	-30	103	85	0,43	1,41	1,21
40	-25	132	95	0,48	1,62	1,39
40	-23,3	144	98	0,50	1,70	1,46
40	-20	169	106	0,53	1,86	1,60
40	-15	213	117	0,58	2,11	1,82
40	-10	265	130	0,64	2,37	2,04
45	-35	77	74	0,38	1,20	1,04
45	-30	98	84	0,43	1,36	1,17
45	-25	127	95	0,48	1,56	1,34
45	-23,3	138	99	0,50	1,63	1,40
45	-20	163	106	0,53	1,78	1,53
45	-15	207	119	0,59	2,02	1,74
45	-10	258	133	0,65	2,26	1,94
50	-35	72	72	0,37	1,17	1,00
50	-30	93	83	0,42	1,31	1,12
50	-25	121	95	0,48	1,49	1,28
50	-23,3	133	99	0,50	1,56	1,34
50	-20	157	107	0,54	1,70	1,46
50	-15	200	121	0,60	1,93	1,66
50	-10	251	135	0,66	2,16	1,85
55	-35	68	70	0,36	1,13	0,97
55	-30	88	82	0,42	1,25	1,08
55	-25	116	94	0,48	1,43	1,23
55	-23,3	127	99	0,50	1,49	1,28
55	-20	151	108	0,54	1,63	1,40
55	-15	194	123	0,61	1,84	1,58
55	-10	244	138	0,67	2,06	1,77
60	-35	64	68	0,35	1,09	0,94
60	-30	83	81	0,41	1,20	1,03
60	-25	110	94	0,48	1,36	1,17
60	-23,3	121	99	0,50	1,42	1,22
60	-20	145	109	0,55	1,55	1,33
60	-15	187	124	0,61	1,75	1,51
60	-10	237	141	0,68	1,96	1,68

CECOMAF

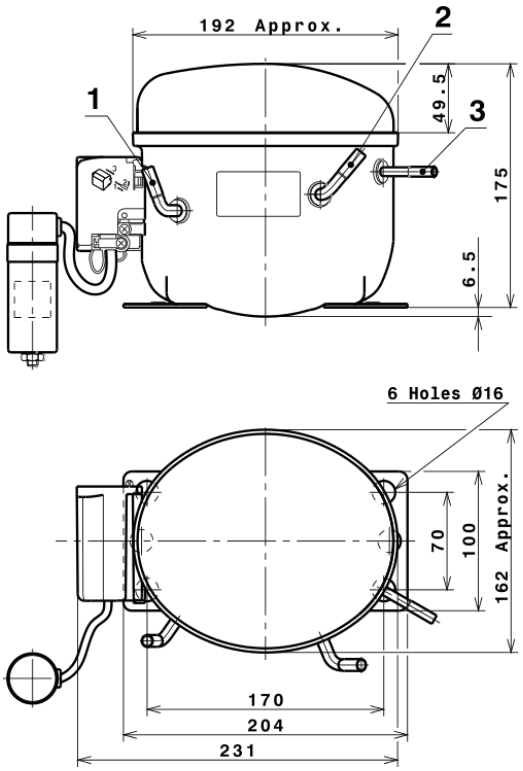
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	89	76	0,39	1,17	1,01
40	-30	114	85	0,43	1,35	1,16
40	-25	148	95	0,48	1,55	1,34
40	-23,3	160	98	0,50	1,63	1,41
40	-20	188	106	0,53	1,78	1,53
40	-15	235	117	0,58	2,00	1,73
40	-10	290	130	0,64	2,23	1,92
45	-35	81	74	0,38	1,09	0,94
45	-30	104	84	0,43	1,24	1,08
45	-25	135	95	0,48	1,43	1,23
45	-23,3	147	99	0,50	1,50	1,29
45	-20	173	106	0,53	1,63	1,41
45	-15	219	119	0,59	1,83	1,59
45	-10	271	133	0,65	2,04	1,76
50	-35	73	72	0,37	1,01	0,88
50	-30	95	83	0,42	1,14	0,99
50	-25	123	95	0,48	1,30	1,12
50	-23,3	135	99	0,50	1,36	1,18
50	-20	159	107	0,54	1,48	1,28
50	-15	202	121	0,60	1,67	1,44
50	-10	252	135	0,66	1,86	1,61
55	-35	65	70	0,36	0,93	0,80
55	-30	85	82	0,42	1,03	0,89
55	-25	111	94	0,48	1,18	1,02
55	-23,3	122	99	0,50	1,23	1,06
55	-20	145	108	0,54	1,34	1,16
55	-15	186	123	0,61	1,51	1,31
55	-10	234	138	0,67	1,69	1,46
60	-35	57	68	0,35	0,84	0,73
60	-30	75	81	0,41	0,92	0,80
60	-25	99	94	0,48	1,05	0,91
60	-23,3	109	99	0,50	1,10	0,95
60	-20	130	109	0,55	1,20	1,03
60	-15	169	124	0,61	1,36	1,17
60	-10	215	141	0,68	1,53	1,32

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	598,2656716287	124,5557706777	0,6031869831	5,9968107522912
2	17,6989278619	1,5325420328	0,0046907294	0,19870143832133
3	-4,7018101446	0,9268321694	0,0039442226	-0,021207519885814
4	0,1388635389	0,0187960281	0,0000325992	0,0020080614104245
5	-0,0897070734	0,0381507246	0,0001706309	-0,0002843521399308

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

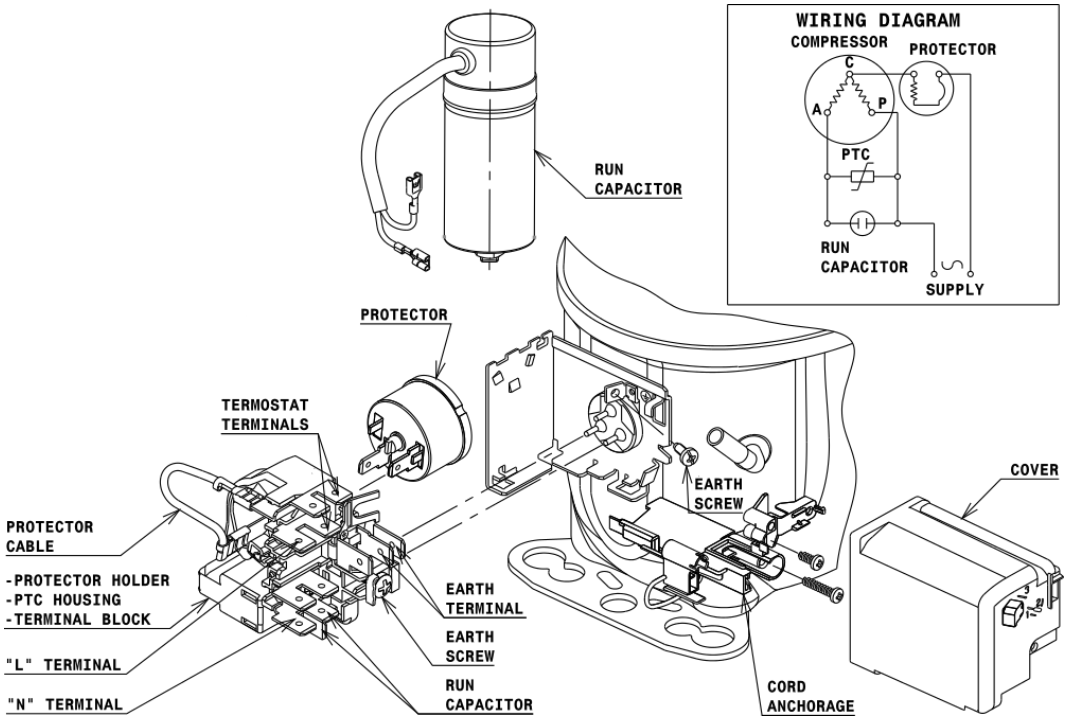
COMPRESSOR DIMENSIONS



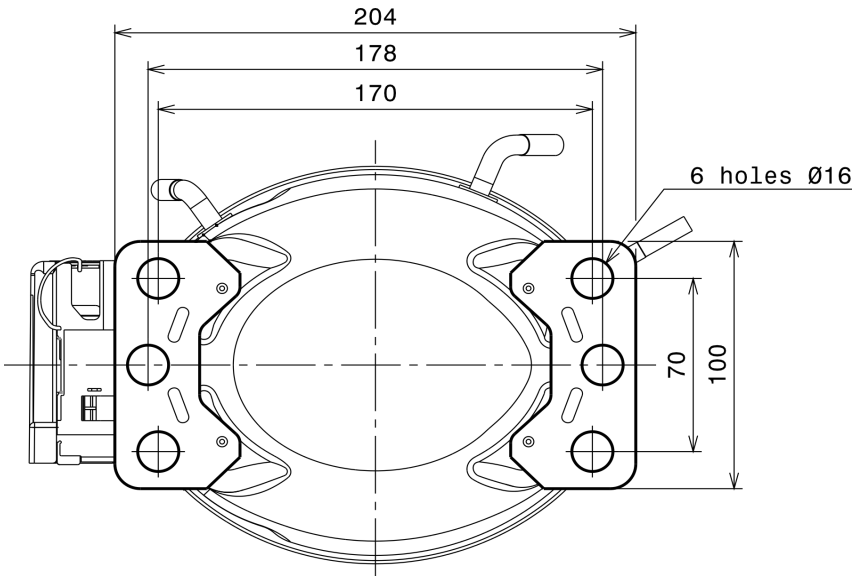
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

RSCR CONNECTION (L, P ranges)



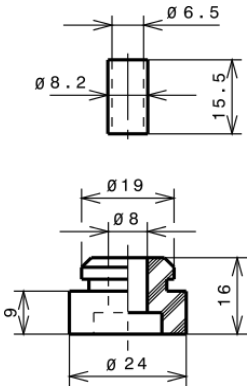
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

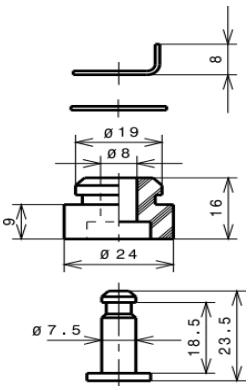
STANDARD

Ø16 holes (170x70 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R600a LBP