Technical Data Sheet

Compressor model **GLM12LAb**

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

Refrigerant **R134a**

APPLICATION

Application	Low Back Pressure
Refrigerant	R134a
Evaporating Temp.	-35,0 ºC to -10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	10,70 cm³
Diameter	25,40 mm
Stroke	21,12 mm
Net Weight	10,16 Kg
Oil type	ISO VG 32 ESTER
Oil charge	350 cm³

MOTOR

Nominal Power	3/8 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	198-255 V
Type	CSR
Phase number	1 PH
Locked Rotor Amps (LRA)	11,00 A
Max. Cont. Current (MCC)	2,20 A
Main W. resist. at 25ºC	10,35 Ω
Start W. resist. at 25ºC	11,66 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	240 kCal/h	204 W
COP	1,29 W/W	0,99 W/W
EER	1,11 kCal/Wh	0,86 kCal/Wh
Input Power	217 W	206 W
Current	1,25 A	1,21 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

Starting capacitor	47- 56 µF 330 V			
Run capacitor	5 µF 400 V			
Relay	Option 1			
Reference	2014 135. + NTC15Ω			
Pick-Up	5,80 A			
Drop-Out	4,95 A			
Protector	Option 1	Option 2		
Reference	T0138	AE86FHY		
Current	7,70 A	7,70 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 62,00 ºC	105,00 / 62,00 ºC		

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	121	147	1,01	0,96	0,82
40	-30	173	170	1,09	1,19	1,02
40	-25	238	195	1,17	1,42	1,22
40	-23,3	263	204	1,20	1,50	1,29
40	-20	316	222	1,27	1,65	1,42
40	-15	406	252	1,38	1,87	1,61
40	-10	508	284	1,51	2,08	1,79
45	-35	115	147	1,01	0,91	0,79
45	-30	167	171	1,09	1,13	0,97
45	-25	231	199	1,18	1,35	1,16
45	-23,3	255	208	1,22	1,43	1,23
45	-20	307	228	1,29	1,57	1,35
45	-15	396	260	1,41	1,78	1,53
45	-10	498	294	1,55	1,97	1,70
50	-35	110	146	1,01	0,87	0,75
50	-30	160	173	1,10	1,08	0,93
50	-25	223	202	1,20	1,28	1,10
50	-23,3	248	213	1,23	1,35	1,16
50	-20	299	234	1,31	1,49	1,28
50	-15	387	267	1,44	1,68	1,45
50	-10	488	303	1,59	1,87	1,61
55	-35	104	146	1,01	0,83	0,71
55	-30	154	175	1,10	1,02	0,88
55	-25	216	206	1,21	1,22	1,05
55	-23,3	240	217	1,25	1,29	1,11
55	-20	291	239	1,33	1,41	1,22
55	-15	378	275	1,47	1,60	1,37
55	-10	478	313	1,63	1,78	1,53
60	-35	98	146	1,01	0,79	0,68
60	-30	147	176	1,11	0,97	0,83
60	-25	209	210	1,22	1,16	1,00
60	-23,3	232	221	1,27	1,22	1,05
60	-20	283	245	1,35	1,34	1,15
60	-15	369	283	1,50	1,52	1,31
60	-10	468	323	1,67	1,69	1,45
65	-35	93	145	1,01	0,74	0,64
65	-30	141	178	1,11	0,92	0,79
65	-25	201	213	1,24	1,10	0,94
65	-23,3	225	226	1,28	1,16	1,00
65	-20	274	251	1,38	1,27	1,09
65	-15	360	290	1,53	1,44	1,24
65	-10	458	332	1,71	1,60	1,38

CECOMAF

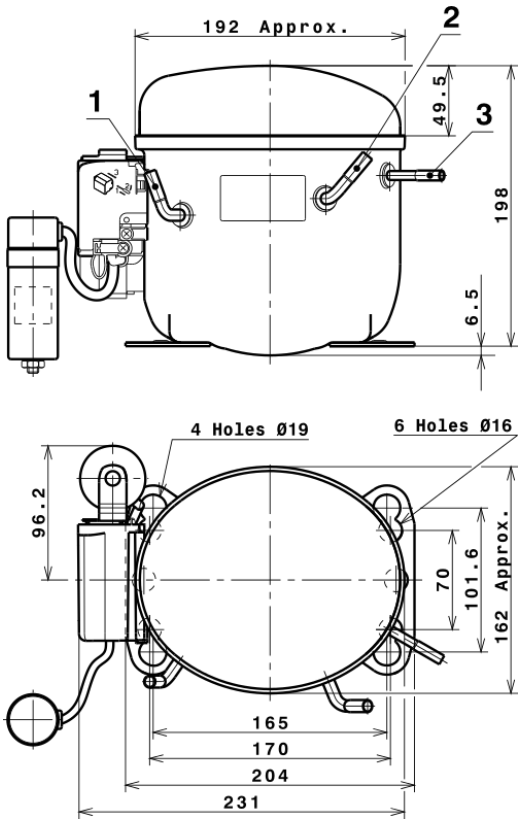
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-35	132	147	1,01	0,90	0,77
40	-30	193	170	1,09	1,13	0,98
40	-25	265	195	1,17	1,36	1,18
40	-23,3	292	204	1,20	1,43	1,24
40	-20	349	222	1,27	1,57	1,36
40	-15	445	252	1,38	1,77	1,53
40	-10	553	284	1,51	1,95	1,68
45	-35	121	147	1,01	0,82	0,71
45	-30	177	171	1,09	1,03	0,89
45	-25	245	199	1,18	1,23	1,06
45	-23,3	270	208	1,22	1,30	1,12
45	-20	324	228	1,29	1,42	1,23
45	-15	416	260	1,41	1,60	1,38
45	-10	519	294	1,55	1,77	1,53
50	-35	109	146	1,01	0,75	0,65
50	-30	161	173	1,10	0,93	0,80
50	-25	224	202	1,20	1,11	0,96
50	-23,3	249	213	1,23	1,17	1,01
50	-20	299	234	1,31	1,28	1,11
50	-15	386	267	1,44	1,44	1,25
50	-10	485	303	1,59	1,60	1,38
55	-35	98	146	1,01	0,67	0,58
55	-30	145	175	1,10	0,83	0,72
55	-25	204	206	1,21	0,99	0,86
55	-23,3	227	217	1,25	1,04	0,90
55	-20	275	239	1,33	1,15	0,99
55	-15	357	275	1,47	1,30	1,12
55	-10	451	313	1,63	1,44	1,24
60	-35	87	146	1,01	0,60	0,52
60	-30	130	176	1,11	0,73	0,63
60	-25	184	210	1,22	0,88	0,76
60	-23,3	205	221	1,27	0,93	0,80
60	-20	250	245	1,35	1,02	0,88
60	-15	327	283	1,50	1,16	1,00
60	-10	417	323	1,67	1,29	1,12
65	-35	76	145	1,01	0,52	0,45
65	-30	114	178	1,11	0,64	0,55
65	-25	163	213	1,24	0,77	0,66
65	-23,3	183	226	1,28	0,81	0,70
65	-20	225	251	1,38	0,90	0,77
65	-15	298	290	1,53	1,03	0,89
65	-10	382	332	1,71	1,15	0,99

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.146,7832346474	251,9242252171	1,3872303741	20,237932207342
2	34,5205281273	4,5127841075	0,0220512899	0,68523529159659
3	-8,9096428801	2,7985857601	0,0118355436	-0,056190320396886
4	0,2294447494	0,0480882819	0,0003398159	0,0062370940528859
5	-0,1901773563	0,0819053129	0,0003443065	-0,00084678680480361

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

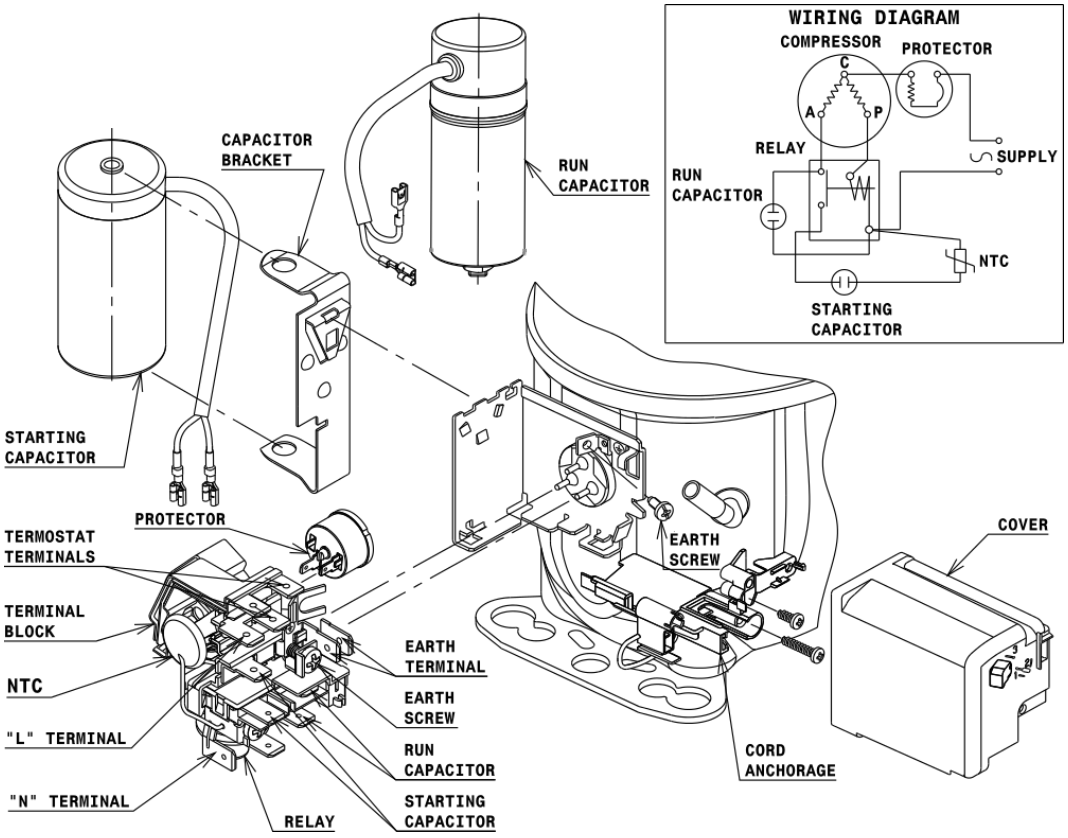
COMPRESSOR DIMENSIONS



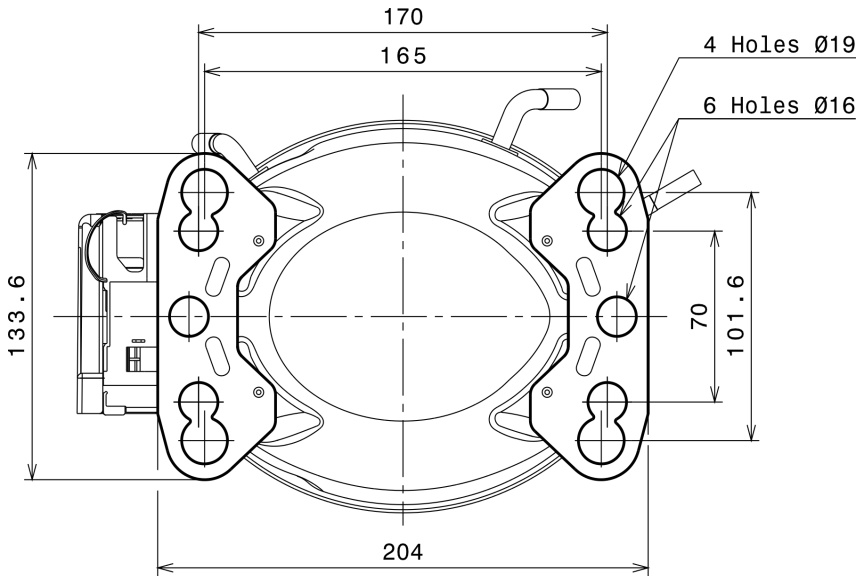
	DESIGNATION	INTERNAL DIAM.
1	Suction	8,1 mm
2	Service	8,1 mm
3	Discharge	6,5 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSR CONNECTION (CURRENT RELAY + NTC) (L, P ranges)



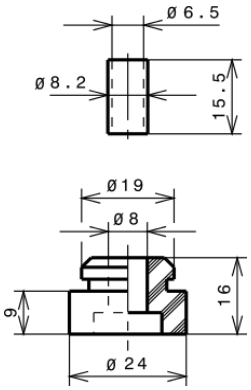
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

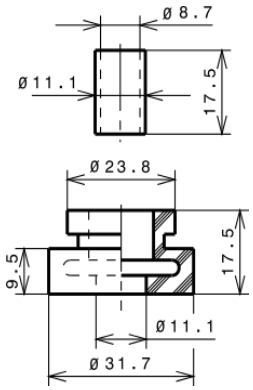
STANDARD

Ø16 holes (170x70 net)



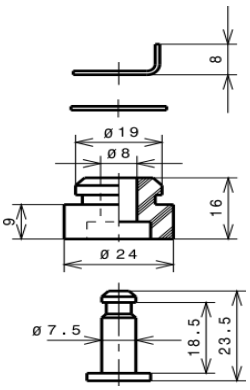
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a LBP