Technical Data Sheet

Compressor model **GL90TC**

Voltage **100V 50/60Hz ~1**

Refrigerant **R134a**

APPLICATION

Application	High-Medium Back Pressure
Refrigerant	R134a
Evaporating Temp.	-25,0 ºC to 10,0 ºC
Expansion	Capillar/Valve
Comp. Cooling	Fan cooled
Max. ambient temp.	43,0 ºC
Compatible refriger.	R1234yf

COMPRESSOR

Displacement	8,85 cm³
Diameter	25,40 mm
Stroke	17,47 mm
Net Weight	11,48 Kg
Oil type	ISO VG 32 ESTER
Oil charge	300 cm³

MOTOR

Nominal Power	1/4 hp
Voltage/Frequency	100V 50Hz
Voltage range	85-110 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	32,00 A
Max. Cont. Current (MCC)	9,00 A
Main W. resist. at 25ºC	1,17 Ω
Start W. resist. at 25ºC	5,05 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	680 kCal/h	660 W
COP	2,08 W/W	1,75 W/W
EER	1,79 kCal/Wh	1,51 kCal/Wh
Input Power	380 W	378 W
Current	5,40 A	5,37 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	100 V 50 Hz	100 V 50 Hz

ELECTRICAL COMPONENTS

Starting capacitor	170 µF 160 V			
Relay	Option 1			
Reference	2014 170.			
Pick-Up	12,10 A			
Drop-Out	10,30 A			
Protector	Option 1	Option 2		
Reference	MRT00ALK	T0435		
Current	17,00 A	31,00 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 ºC	95,00 / 57,00 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	-25	175	200	4,40	1,02	0,88
40	-20	242	237	4,37	1,19	1,02
40	-15	322	267	4,43	1,40	1,21
40	-10	416	292	4,54	1,66	1,43
40	-5	523	310	4,66	1,96	1,69
40	0	643	323	4,76	2,32	1,99
40	5	777	329	4,82	2,75	2,36
40	7,2	840	330	4,83	2,96	2,55
40	10	924	329	4,82	3,26	2,80
45	-25	162	200	4,40	0,94	0,81
45	-20	222	239	4,37	1,08	0,93
45	-15	296	272	4,45	1,27	1,09
45	-10	384	299	4,59	1,49	1,28
45	-5	485	321	4,74	1,76	1,51
45	0	599	336	4,88	2,08	1,78
45	5	726	345	4,97	2,45	2,11
45	7,2	787	347	4,99	2,64	2,27
45	10	867	348	5,00	2,90	2,49
50	-25	148	200	4,40	0,86	0,74
50	-20	203	242	4,37	0,98	0,84
50	-15	271	278	4,47	1,13	0,98
50	-10	352	307	4,64	1,33	1,15
50	-5	447	331	4,84	1,57	1,35
50	0	554	349	5,01	1,85	1,59
50	5	676	360	5,15	2,18	1,88
50	7,2	733	363	5,18	2,35	2,02
50	10	810	366	5,21	2,58	2,22
55	-25	135	200	4,40	0,79	0,68
55	-20	183	244	4,37	0,87	0,75
55	-15	245	283	4,49	1,01	0,87
55	-10	320	315	4,70	1,18	1,02
55	-5	408	341	4,94	1,39	1,20
55	0	510	361	5,16	1,64	1,41
55	5	625	376	5,34	1,94	1,66
55	7,2	680	380	5,40	2,08	1,79
55	10	754	384	5,45	2,28	1,96
60	-25	122	200	4,40	0,71	0,61
60	-20	164	247	4,38	0,77	0,66
60	-15	219	288	4,52	0,89	0,76
60	-10	288	323	4,76	1,04	0,89
60	-5	370	352	5,05	1,22	1,05
60	0	466	374	5,32	1,45	1,24
60	5	575	391	5,56	1,71	1,47
60	7,2	627	397	5,64	1,84	1,58
60	10	697	402	5,72	2,02	1,73
65	-25	108	200	4,40	0,63	0,54
65	-20	144	250	4,38	0,67	0,58
65	-15	193	293	4,55	0,77	0,66
65	-10	256	331	4,83	0,90	0,77
65	-5	332	362	5,17	1,07	0,92
65	0	421	387	5,50	1,26	1,09
65	5	524	407	5,80	1,50	1,29
65	7,2	573	413	5,91	1,61	1,39
65	10	640	420	6,02	1,77	1,52

CECOMAF

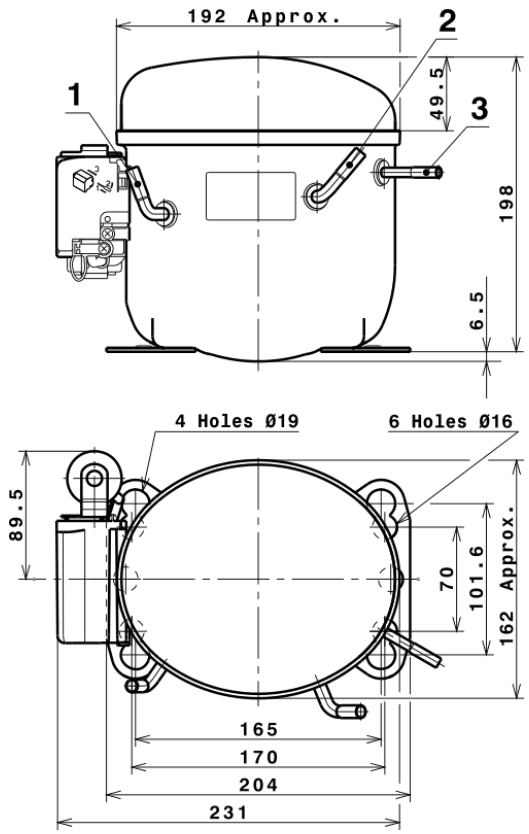
Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	189	201	4,40	0,94	0,81
40	-20	261	238	4,37	1,10	0,95
40	-15	348	269	4,43	1,30	1,12
40	-10	449	293	4,55	1,53	1,32
40	-5	564	312	4,68	1,81	1,56
40	0	693	325	4,78	2,14	1,85
40	5	837	331	4,84	2,53	2,18
40	7,2	904	332	4,85	2,72	2,35
40	10	994	332	4,84	3,00	2,59
45	-25	173	201	4,40	0,86	0,74
45	-20	239	240	4,37	0,99	0,86
45	-15	319	274	4,45	1,16	1,01
45	-10	412	301	4,60	1,37	1,18
45	-5	520	322	4,76	1,61	1,39
45	0	642	338	4,90	1,90	1,64
45	5	778	347	4,99	2,24	1,94
45	7,2	842	349	5,02	2,41	2,09
45	10	928	350	5,03	2,65	2,29
50	-25	158	201	4,40	0,79	0,68
50	-20	216	243	4,37	0,89	0,77
50	-15	289	279	4,48	1,04	0,89
50	-10	375	309	4,65	1,22	1,05
50	-5	476	333	4,85	1,43	1,24
50	0	590	351	5,04	1,68	1,45
50	5	719	362	5,17	1,98	1,71
50	7,2	780	366	5,21	2,13	1,84
50	10	862	368	5,24	2,34	2,02
55	-25	143	201	4,40	0,71	0,61
55	-20	194	246	4,38	0,79	0,68
55	-15	259	284	4,50	0,91	0,79
55	-10	338	317	4,71	1,07	0,92
55	-5	432	343	4,96	1,26	1,09
55	0	539	364	5,19	1,48	1,28
55	5	660	378	5,37	1,75	1,51
55	7,2	718	382	5,43	1,88	1,62
55	10	796	386	5,49	2,06	1,78
60	-25	128	201	4,40	0,63	0,55
60	-20	172	248	4,38	0,69	0,60
60	-15	229	289	4,53	0,79	0,68
60	-10	301	325	4,78	0,93	0,80
60	-5	387	354	5,07	1,10	0,95
60	0	488	377	5,36	1,29	1,12
60	5	602	394	5,60	1,53	1,32
60	7,2	656	399	5,68	1,64	1,42
60	10	730	405	5,76	1,80	1,56
65	-25	112	201	4,40	0,56	0,48
65	-20	149	251	4,38	0,59	0,51
65	-15	200	295	4,56	0,68	0,59
65	-10	264	332	4,85	0,80	0,69
65	-5	343	364	5,19	0,94	0,81
65	0	436	390	5,54	1,12	0,97
65	5	543	409	5,84	1,33	1,15
65	7,2	594	416	5,95	1,43	1,23
65	10	664	423	6,07	1,57	1,36

EN12900

X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	1.108,0205830309	225,8809762124	3,3512230370	18,925390568274
2	38,8815135982	-2,2329404446	-0,0250250541	0,73865613283421
3	-10,5849037382	2,6777323582	0,0336469025	-0,091891749657412
4	0,2760196588	-0,1218666598	0,0006561841	0,0079776951788833
5	-0,3001843003	0,1071092943	0,0013458761	-0,0023032739683551

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

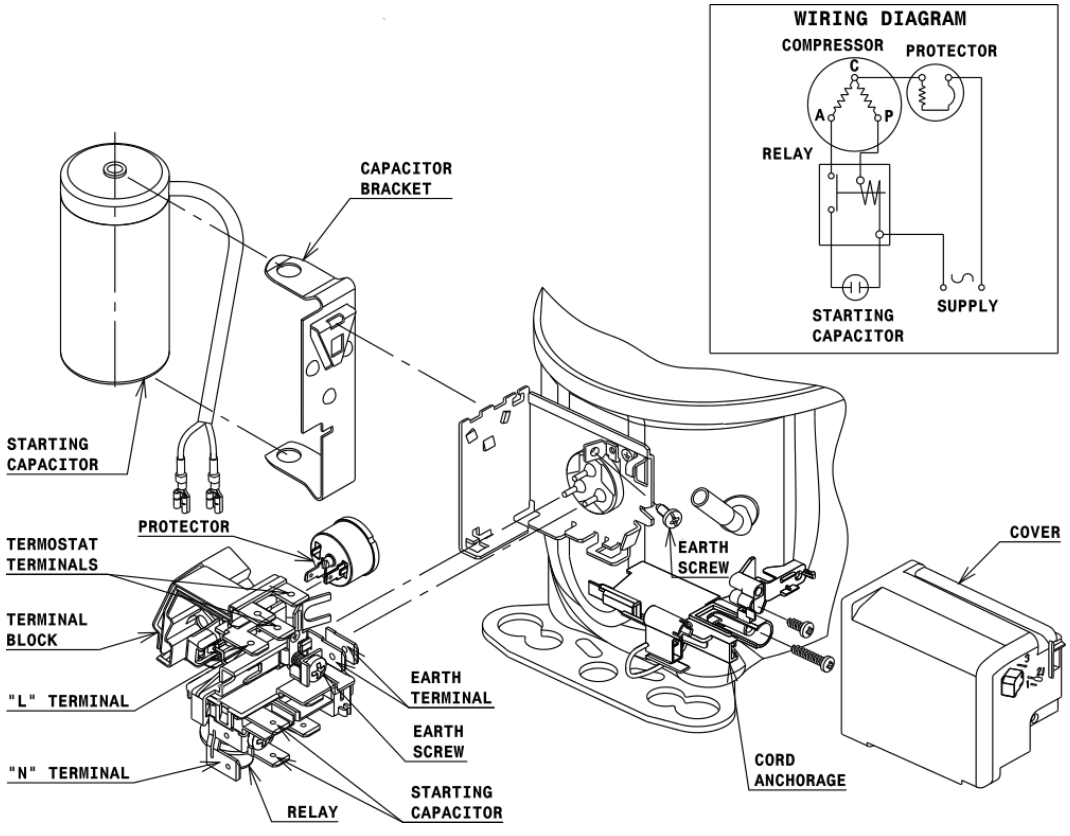
COMPRESSOR DIMENSIONS



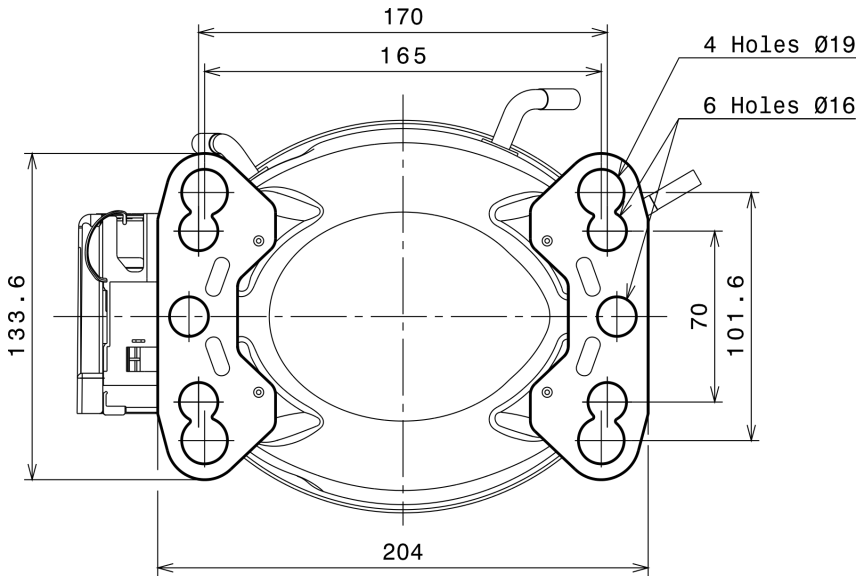
	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



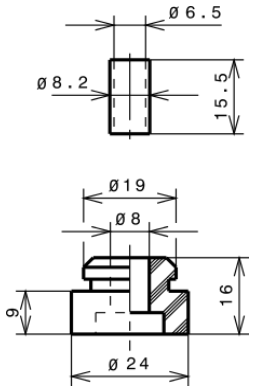
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

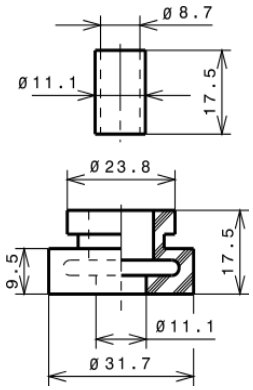
STANDARD

Ø16 holes (170x70 net)



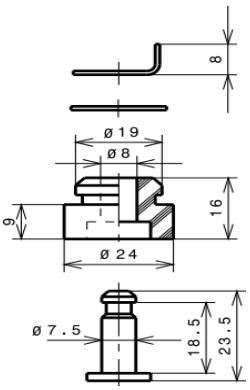
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP