Technical Data Sheet

ENGINEERING TOMORROW

Compressor model **GL45TB**

Voltage **220-240V 50Hz ~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	4,56 cm³
Diameter	19,09 mm
Stroke	15,93 mm
Net Weight	8,04 Kg
Oil type	ISO VG 32 ESTER
Oil charge	260 cm³

MOTOR

Nominal Power	1/6 hp
Voltage/Frequency	220-240V 50Hz
Voltage range	187-255 V
Type	CSIR
Phase number	1 PH
Locked Rotor Amps (LRA)	6,50 A
Max. Cont. Current (MCC)	2,00 A
Main W. resist. at 25ºC	22,70 Ω
Start W. resist. at 25ºC	39,50 Ω

NOMINAL PERFORMANCE

	ASHRAE	CECOMAF
Cooling Capacity	352 kCal/h	341 W
COP	1,86 W/W	1,61 W/W
EER	1,60 kCal/Wh	1,39 kCal/Wh
Input Power	220 W	212 W
Current	1,20 A	1,17 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

Starting capacitor	47- 56 µF 330 V			
Relay	Option 1			
Reference	2014 108.			
Pick-Up	2,70 A			
Drop-Out	2,30 A			
Protector	Option 1	Option 2		
Reference	MRT77AMK	T0068		
Current	5,80 A	5,80 A		
Time check	7,5-14 seg	7,5-14 seg		
Disc temp. (Open/Close)	105,00 / 61,00 ºC	105,00 / 62,00 ºC		

Technical Data Sheet

ENGINEERING TOMORROW

ASHRAE

Tc °C	Te °C	Cooling Capacity kCal/h	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	96	108	0,88	1,03	0,89
40	-20	130	116	0,90	1,30	1,12
40	-15	172	126	0,92	1,59	1,37
40	-10	221	136	0,95	1,89	1,62
40	-5	277	148	0,98	2,18	1,88
40	0	341	160	1,01	2,47	2,13
40	5	412	174	1,05	2,75	2,37
40	7,2	445	180	1,07	2,88	2,47
40	10	490	188	1,10	3,03	2,60
45	-25	88	108	0,88	0,95	0,81
45	-20	119	119	0,91	1,17	1,00
45	-15	157	130	0,93	1,40	1,21
45	-10	202	143	0,97	1,65	1,42
45	-5	255	156	1,00	1,90	1,63
45	0	315	171	1,04	2,15	1,85
45	5	382	186	1,09	2,39	2,05
45	7,2	414	193	1,11	2,49	2,14
45	10	457	203	1,14	2,62	2,25
50	-25	80	108	0,88	0,86	0,74
50	-20	107	121	0,91	1,04	0,89
50	-15	142	134	0,94	1,23	1,06
50	-10	184	149	0,98	1,44	1,23
50	-5	233	164	1,03	1,65	1,42
50	0	289	181	1,08	1,86	1,60
50	5	353	199	1,13	2,07	1,78
50	7,2	383	207	1,16	2,16	1,85
50	10	424	217	1,19	2,27	1,95
55	-25	72	108	0,88	0,78	0,67
55	-20	96	123	0,92	0,91	0,78
55	-15	127	138	0,96	1,07	0,92
55	-10	165	155	1,00	1,24	1,06
55	-5	211	173	1,05	1,42	1,22
55	0	263	191	1,11	1,60	1,38
55	5	323	211	1,17	1,78	1,53
55	7,2	352	220	1,20	1,86	1,60
55	10	391	232	1,24	1,96	1,69
60	-25	64	108	0,88	0,69	0,59
60	-20	84	125	0,92	0,78	0,67
60	-15	112	142	0,97	0,91	0,78
60	-10	146	161	1,02	1,06	0,91
60	-5	188	181	1,08	1,21	1,04
60	0	237	202	1,14	1,37	1,18
60	5	294	223	1,21	1,53	1,32
60	7,2	321	233	1,25	1,60	1,38
60	10	358	246	1,29	1,69	1,45
65	-25	56	108	0,88	0,60	0,52
65	-20	73	127	0,93	0,67	0,57
65	-15	96	147	0,98	0,77	0,66
65	-10	128	167	1,04	0,89	0,76
65	-5	166	189	1,10	1,02	0,88
65	0	212	212	1,17	1,16	1,00
65	5	264	236	1,25	1,30	1,12
65	7,2	290	247	1,29	1,37	1,18
65	10	325	261	1,35	1,45	1,25

CECOMAF

Tc °C	Te °C	Cooling Capacity W	Consumption W	Current A	COP W/W	EER kCal/Wh
40	-25	103	109	0,88	0,95	0,82
40	-20	141	117	0,90	1,20	1,04
40	-15	186	127	0,92	1,47	1,27
40	-10	239	137	0,95	1,74	1,51
40	-5	299	149	0,98	2,01	1,74
40	0	367	161	1,02	2,28	1,97
40	5	443	175	1,06	2,53	2,19
40	7,2	479	181	1,08	2,64	2,28
40	10	527	189	1,10	2,78	2,40
45	-25	94	109	0,88	0,87	0,75
45	-20	128	119	0,91	1,07	0,93
45	-15	169	131	0,94	1,29	1,12
45	-10	217	143	0,97	1,52	1,31
45	-5	274	157	1,01	1,74	1,51
45	0	338	172	1,05	1,97	1,70
45	5	409	187	1,09	2,18	1,89
45	7,2	443	195	1,12	2,28	1,97
45	10	488	204	1,15	2,39	2,07
50	-25	85	109	0,88	0,79	0,68
50	-20	115	121	0,91	0,94	0,82
50	-15	151	135	0,95	1,12	0,97
50	-10	196	150	0,99	1,31	1,13
50	-5	248	165	1,03	1,50	1,30
50	0	308	182	1,08	1,69	1,46
50	5	375	200	1,13	1,88	1,62
50	7,2	407	208	1,16	1,96	1,69
50	10	450	219	1,20	2,06	1,78
55	-25	76	109	0,88	0,70	0,61
55	-20	101	123	0,92	0,82	0,71
55	-15	134	139	0,96	0,96	0,83
55	-10	174	156	1,00	1,12	0,97
55	-5	223	174	1,05	1,28	1,11
55	0	278	193	1,11	1,45	1,25
55	5	341	212	1,17	1,61	1,39
55	7,2	372	221	1,20	1,68	1,45
55	10	412	233	1,25	1,77	1,53
60	-25	67	109	0,88	0,62	0,53
60	-20	88	125	0,92	0,70	0,61
60	-15	117	143	0,97	0,82	0,70
60	-10	153	162	1,02	0,94	0,82
60	-5	197	182	1,08	1,08	0,93
60	0	248	203	1,14	1,22	1,06
60	5	308	225	1,22	1,37	1,18
60	7,2	336	235	1,25	1,43	1,24
60	10	374	248	1,30	1,51	1,31
65	-25	58	109	0,88	0,53	0,46
65	-20	75	127	0,93	0,59	0,51
65	-15	99	147	0,98	0,67	0,58
65	-10	132	168	1,04	0,78	0,67
65	-5	171	190	1,10	0,90	0,78
65	0	219	213	1,18	1,03	0,89
65	5	274	237	1,26	1,15	1,00
65	7,2	300	248	1,30	1,21	1,05
65	10	336	262	1,35	1,28	1,11

Technical Data Sheet

ENGINEERING TOMORROW

Danfoss

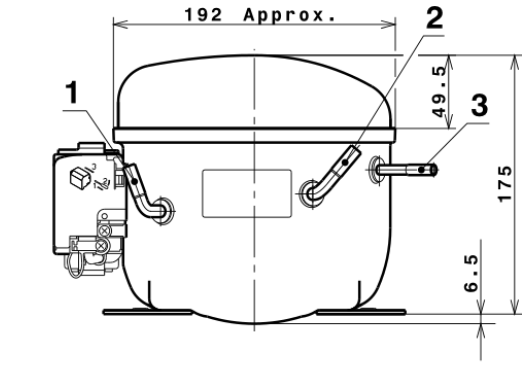
EN12900

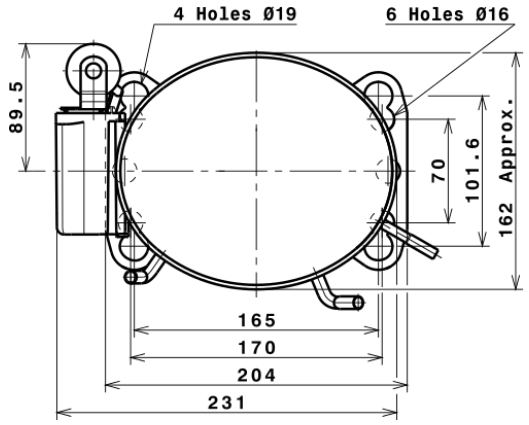
X	Cooling Capacity (W)	Consumption (W)	Current (A)	Mass Flow (kg/h)
1	606,4606541133	79,7475540728	0,7439537697	10,534537052034
2	21,0126531696	-0,6968964259	-0,0026171401	0,40392313008291
3	-6,0917432950	2,1421858866	0,0069807143	-0,061353765979711
4	0,1499819005	0,0221127372	0,0001242199	0,0043121878449157
5	-0,1704277782	0,0856874355	0,0002792286	-0,0015567142576566

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

Technical Data Sheet

COMPRESSOR DIMENSIONS

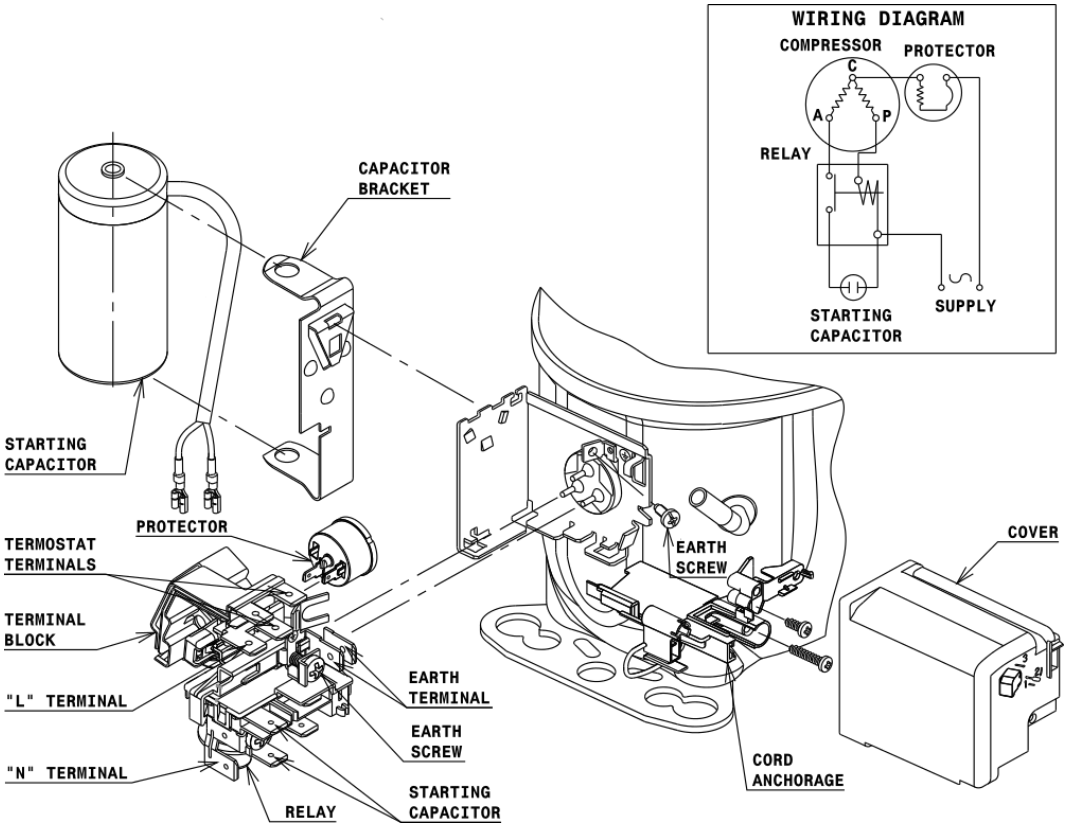




	DESIGNATION	INTERNAL DIAM.
1	Suction	6,5 mm
2	Service	6,5 mm
3	Discharge	4,9 mm

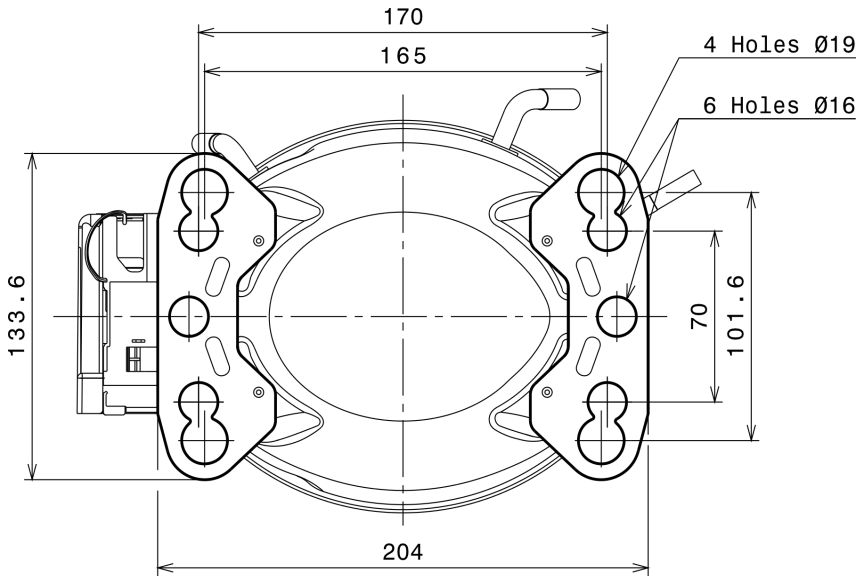
WIRING DIAGRAMS AND ELECTRICAL ASSEMBLY

CSIR CONNECTION (L, P ranges)



Technical Data Sheet

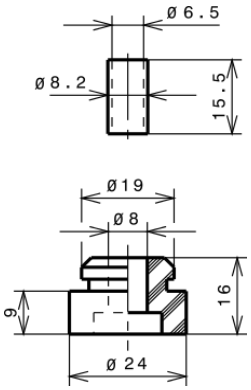
FIXINGS



SILENT BLOCKS (MOUNTING ACCESSORIES)

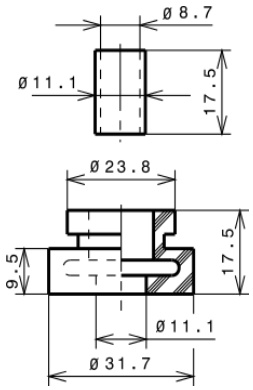
STANDARD

Ø16 holes (170x70 net)



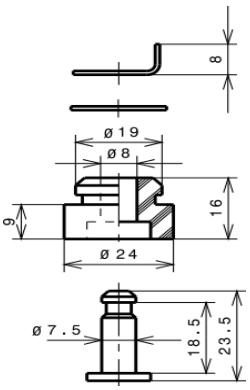
AMERICAN FEET

Ø19 holes (165x101.6 net)



SNAP-ON

Ø16 holes (170x70 net)



SOA

SOA R134a HMBP