

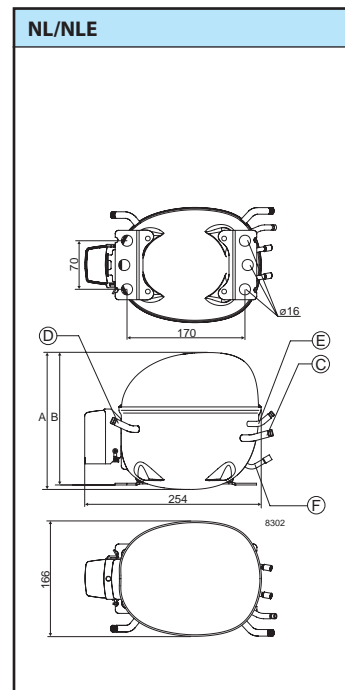
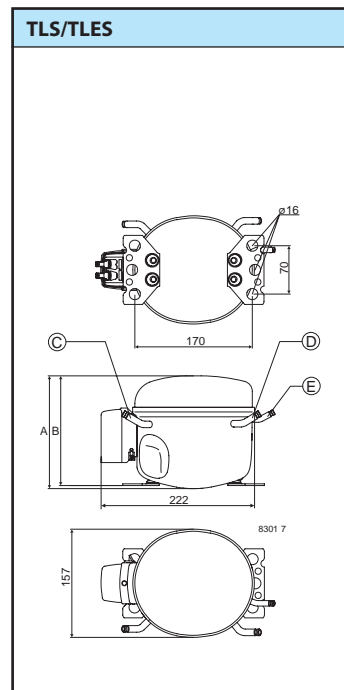
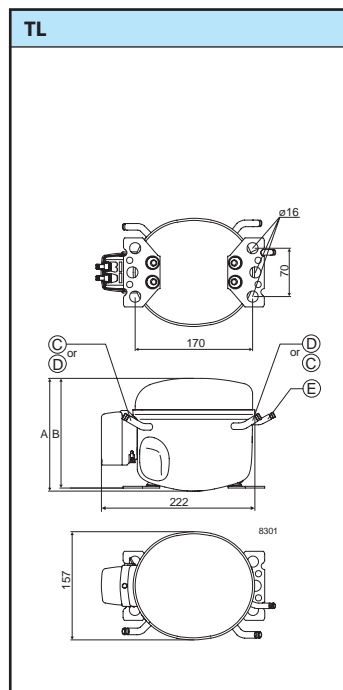
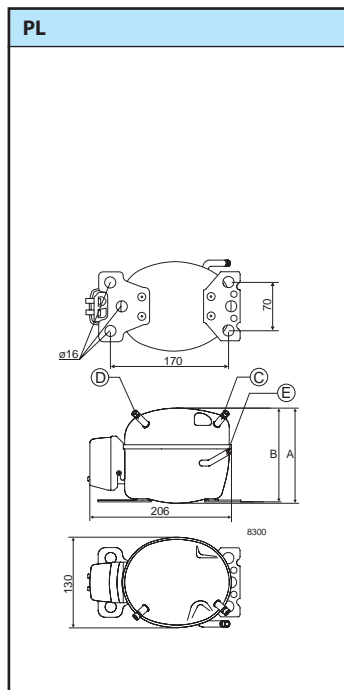


R134a

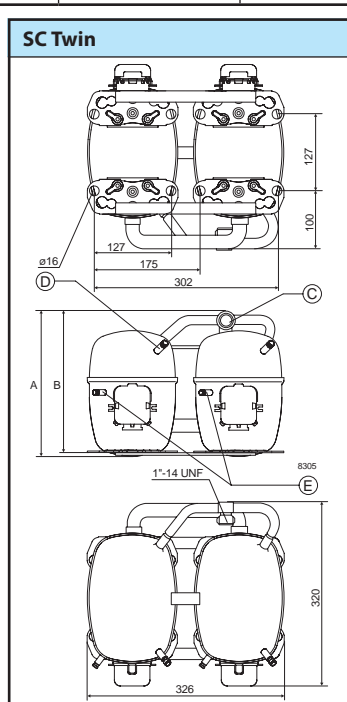
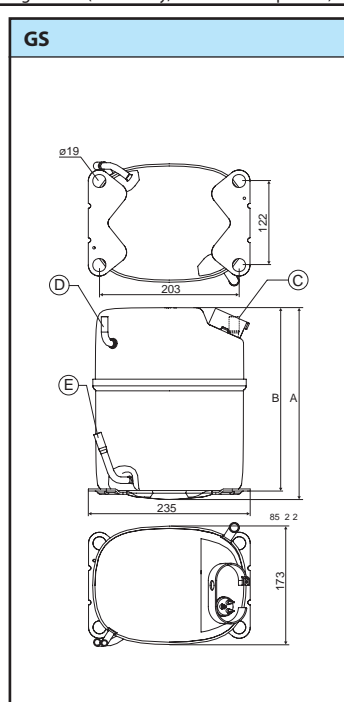
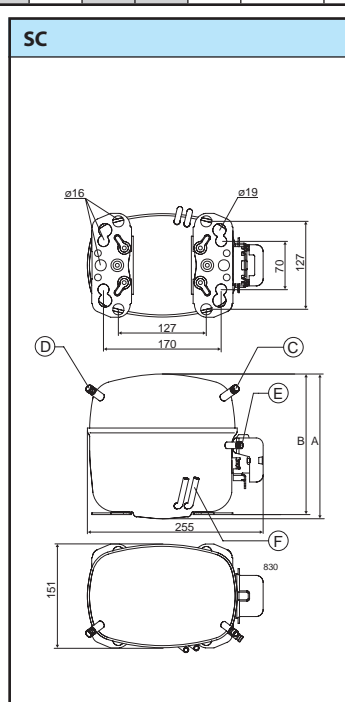
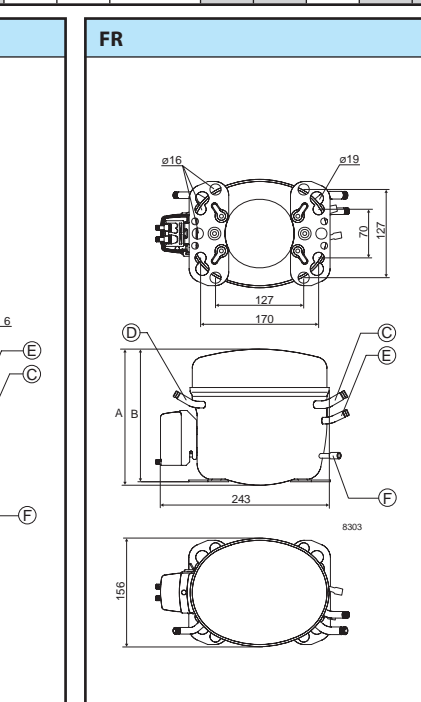
Danfoss Compressors

220-240 V • 50 Hz & 60 Hz

Application	Compressor	Code numbers		EN 12900 (CECOMAF) Capacity [W]													EN 12900 (CECOMAF) Power consumption					
		Compressor	Compressor with oil cooling	Evaporating temperature [°C]													Evaporating temp.					
				-35	-30	-25	-23.3	-20	-15	-10	-6.7	-5	0	5	7.2	10	15	20	-35	-25	-10	
HBP / MBP / LBP	PL35G	101G0250				28	31.6	39.3	53	69.4	82	89	112	140	153	172	209			48	66.6	
	TL2.5G	102G4251		11	22.4	35.5	40.5	50.9	69	90.4	107	116	145	179	196	219	264		47.6	59.6	83.9	
	TL3G	102G4350			25.3	40.9	46.7	59.1	80.5	106	125	136	170	211	231	258	312			65.8	96.2	
	TL4G	102G4452			40.8	58.3	65.3	80.3	107	140	165	180	226	280	306	342	413			82.7	118	
	TL5G	102G4550			55.6	79	87.9	107	139	178	208	224	278	341	372	414	497			100	149	
	FR6G	103G6660			47.7	83.3	96.5	124	171	226	267	290	365	452	494	552				109	172	
	FR7.5G	103G6680	103G6690		61.7	99	113	142	193	254	299	325	408	505	553	618				126	194	
	FR8.5G	103G6780	103G6790		84.9	123	138	171	228	298	351	381	478	592	647	722				151	231	
	FR10G	103G6880	103G6890		91.9	136	152	188	250	324	380	412	516	638	697	779				179	265	
	FR11G	103G6980			115	170	191	233	307	395	463	501	628	780						202	317	
	SC10G	104G8000			23	60	113	135	183	268	369	445	486	618	764	833	925	1100		93	181	290
	SC12G	104G8240	104G8250	64.6	113	175	199	252	348	464	553	603	768	960	1054	1182	1437		148	227	355	
	SC15G	104G8520	104G8530			164	206	290	424	568	672	728	908	1110	1207	1340	1600			233	440	
	SC18G	104G8820	104G8830			283	318	394	526	684	804	870	1087	1337	1459	1624	1950			331	507	
	SC21G	104G8140				333	370	453	606	792	934	1012	1268	1560	1700	1889	2257			382	575	
	SC12/12G	104G8280		129	226	350	399	505	696	928	1106	1206	1535	1920	2108	2364	2875		296	454	710	
	SC15/15G	104G8580				328	413	581	847	1137	1344	1457	1815	2220	2415	2679	3201			465	879	
	SC18/18G	104G8880				566	636	788	1052	1368	1607	1740	2174	2674	2918	3248	3900			662	1014	
	SC21/21G	104G8180				667	741	907	1212	1584	1868	2025	2536	3120	3400	3778	4511			771	1156	
LBP	PL50F	101G0222		14.2	26.2	40	45.1	55.8	74.1	95.2	111	120	148					43.6	60	85.6		
	TL53FT	102G4324		21	34	50	56	69	92	120									45	62	92	
	TL54FT	102G4424		27	43	63	71	88	117	152									68	87	123	
	TL55FT	102G4524		47.8	70.7	98	109	131	170	216									84.5	114	165	
	TLE5.7FT.3	102G4615		66.3	90.3	120	132	156	200	253									90	120	170	
	NL6.1FT	105G6620		60	84	115	127	152	198	253									93	123	184	
	NL7.3FT	105G6728		71	100	136	150	181	235	299									108	145	220	
	NL8.4FT	105G6865		87	120	162	178	213	275	350									127	169	252	
	NL10FT	105G6829	105G6839	115	158	210	235	274	352	444									159	215	316	
	SC12FT	104G8205	104G8215	103	163	233	259	314	408	517	599	645							184	265	380	
	SC15FT	104G8505		126	197	280	311	376	489	620	718	772							223	311	451	
	SC18FTX	104G8805		144	229	325	361	437	567	719	833	896							257	365	517	
	SC21FTX 50Hz	104G8105		192	296	415	460	553	713	901	1041	1119							296	428	613	
SC21FTX 60Hz	104G8106		240	245	470	518	620	800	1012	1173	1262							342	475	707		
MBP	NL6.1MF	105G6660					141	189	245	288	312	390	482	527	588	709				187		
	NL7.3MF	105G6772					179	236	304	356	385	480	591	645	719	867				227		
	NL8.4MF	105G6879					213	277	353	412	445	553	679	741	825	994				261		
	NL10MF	105G6885					266	346	441	513	554	687	843	919	1023	1231				323		
	NL11MF	105G6151					292	380	485	565	509	756	927	1011	1125	1354				360		
	NLE10MF	105G6888		88	137	194	216	262	343	440	513	554	688	845	922			134	198	308		
	GS26MFX	107B0700					754	989	1266	1476	1591	1970	2411	2626						696		
GS34MFX	107B0701					998	1296	1648	1918	2063	2550	3115	3392						909			
HBP	TL4GH	102G4455					104	140	167	182	230	287	315	353	429					121		
	FR7GH	103G6683	103G6692					199	255	301	327	417	525	580	655	807				192		
	SC10GH	104G8041						233	352	425	478	613	762	832	927	1113	1323			281		
	SC12GH	104G8261							429	505	577	752	957	1058	1196	1471	1787			356		
	SC15GH	104G8561							559	669	723	915	1139	1249	1398	1698	2041			424		
	SC18GH	104G8860						539	676	789	855	1077	1340	1469	1645	1990				498		
	SC18GH	104G8861						485	639	758	825	1047	1310	1440	1618	1976	2389			452		
	SC15GHH		104G8571					435	570	670	726	911	1135	1247	1405	1731				377		
GS26GHX	107B0702						937	1198	1400	1510	1880	2316	2531	2826	3417	4098				737		



Compressor Consumption [W]	Displacement	Recommended compressor cooling at ambient temperature										Voltage and frequencies	Electrical Equipment						Compressor		
		32°C			38°C			43°C					LST (RSIR)		HST (CSIR)		HST (CSR)	LST/HST			
		LBP	MBP	HBP	LBP	MBP	HBP	LBP	MBP	HBP	PTC Starting device		Starting relay	Starting capacitor	Starting device	Cord relief	Cover				
		spades		spades		spades		6.3 mm		4.8 mm			6.3 mm		6.3 mm						
Temp. [°C]		[cm³]	LBP	MBP	HBP	LBP	MBP	HBP	LBP	MBP	HBP										
-10	5																				
66.6	90	2.00		F2	F2		F2	F2				1/5	103N0011	103N0018	117U6021	117U5014		103N1010	103N0491		PL35G
83.9	113	2.61	S	S	S	S	S	S	S	S	F2	1/2/3/6	103N0011	103N0018	117U6007	117U5014		103N1010	103N2011		TL2.5G
96.2	133	3.13	S	S	F2	S	S	F2	S	S	F2	1/2/3	103N0011	103N0018	117U6009	117U5014		103N1010	103N2010		TL3G
118	154	3.86	S	S	F2	S	S	F2	S	S	F2	1/2/3	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010		TL4G
149	205	5.08	S	S	F2	S	S	F2	S	S	F2	1/2/3	103N0011	103N0018	117U6000	117U5014		103N1010	103N2010		TL5G
172	241	6.23	S	S	F2	S	S	F2	S	S	F2	1/2/3	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010		FR6G
194	272	6.93	S	F2	F2	S	F2	F2	O/F1	F2	F2	1/2/3	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010		FR7.5G
231	321	7.95	S	F2	F2	O/F1	F2	F2	O/F1	F2	F2	1/2/3	103N0011	103N0018	117U6015	117U5015		103N1010	103N2010		FR8.5G
265	362	9.05	S	F2	F2	O/F1	F2	F2	O/F1	F2	F2	1/2/3	103N0011	103N0018	117U6010	117U5015		103N1010	103N2010		FR10G
317	445	11.15	F2	F2	F2	F2	F2	F2	F2	F2	F2	1/2	103N0011	103N0018	117U6010	117U5015		103N1010	103N2010		FR11G
290	383	10.29	F1	F1	F2	F1	F1	F2	F1	F1	F2	1/2/3	103N0002		117U6002	117U5017		103N1004	103N2009		SC10G
355	493	12.87	O/F1	F2	F2	O/F1	F2	F2	O/F1	F2	F2	1/2/3	103N0002		117U6003	117U5017		103N1004	103N2009		SC12G
440	595	15.28	O/F1	F2	F2	O/F1	F2	F2	O/F1	F2	F2	1/2/3			117U6005	117U5017		103N1004	103N2009		SC15G
507	695	17.69	O/F1	F2	F2	O/F1	F2	F2	O/F1	F2	F2	1/2/3			117U6019	117U5017		103N1004	103N2009		SC18G
575	789	20.95	F2	F2	F2	F2	F2	F2	F2	F2	F2	1/2/3					117-7028	103N1004	103N2009		SC21G
710	986	2 x 12.87	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6003	117U5017		103N1004	103N2009		SC12/12G
879	1190	2 x 15.28	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6005	117U5017		103N1004	103N2009		SC15/15G
1014	1390	2 x 17.69	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6019	117U5017		103N1004	103N2009		SC18/18G
1156	1581	2 x 20.95	F2	F2	F2	F2	F2	F2	F2	F2	F2	1					117-7028	103N1004	103N2009		SC21/21G
85.6		2.50	F2	F2		F2	F2					1	103N001	103N0018	117U6021	117U5014		103N1010	103N0491		PL50F
92		3.13	S			S			S			2	103N0011	103N0018	117U6007	117U5014		103N1010	103N2010		TL53FT
123		3.86	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010		TL54FT
165		5.08	S			S			S			2	103N0011	103N0018	117U6000	117U5014		103N1010	103N2010		TL55FT
170		5.70	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010		TLES5.7FT.3
184		6.13	S			S			S			2/3	103N0011	103N0018	117U6000	117U5015		103N1010	103N2010		NL6.1FT
220		7.27	S			S			F1			2	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010		NL7.3FT
252		8.35	S			F1			F1			2	103N0011	103N0018	117U6001	117U5015		103N1010	103N2010		NL8.4FT
316		10.10	S			O/F1			O/F1			2	103N0011	103N0018	117U6002	117U5015		103N1010	103N2010		NL10FT
380		12.87	O/F1			O/F1			F2*			2/3	103N0002		117U6003	117U5017		103N1004	103N2009		SC12FT
451		15.28	F1			F1			F2			2/3	103N0002		117U6005	117U5017		103N1004	103N2009		SC15FT
517		17.69	F2			F2			F2			2/3			117U6019	117U5017		103N1004	103N2009		SC18FTX
613		20.95	F2			F2			F2			2			117U6019	117U5017		103N1004	103N2009		SC21FTX
707		20.95	F2			F2			F2			8					117-7038	103N1004	103N2008		SC21FTX
187	243	6.13		F1	F1		F1	F1		F1	F1	7/8	103N0011	103N0018	117U6015	117U5015		103N1010	103N2011		NL6.1MF
227	298	7.27		F1	F1		F1	F1		F1	F1	7/8	103N0011	103N0018	117U6016	117U5015		103N1010	103N2011		NL7.3MF
261	349	8.35		F1	F1		F1	F1		F1	F1	7/8	103N0011	103N0018	117U6016	117U5015		103N1010	103N2011		NL8.4MF
323	435	10.10		F1	F1		F1	F1		F1	F1	7/8	103N0011	103N0018	117U6022	117U5018		103N1010	103N2011		NL10MF
360	495	11.15		F2	F2		F2	F2		F2	F2	7	103N0011	103N0018	117U6022	117U5018		103N1010	103N2011		NL11MF
308	426	10.10	F1	F1		F1	F1		F1	F1		1	103N0011	103N0018	117U6003	117U5015		103N1010	103N2011		NLE10MF
696	942	26.30		F2			F2			F2		1	Starting device (start. relay, start. & run capacitor): 117-7055			107B9100/9101/9104**			GS26MFX		
909	1234	33.80		F2			F2			F2		1	Starting device (start. relay, start. & run capacitor): 117-7056			107B9100/9101/9104**			GS34MFX		
121	159	3.86			F2			F2			F2	1/4			117U6000	117U5014		103N1010	103N2011		TL4GH
192	258	6.93			O/F1			O/F1			O/F1	1/4			117U6016	117U5015		103N1010	103N2011		FR7GH
281	395	10.29			F2			F2			F2	1/4			117U6005	117U5017		103N1004	103N2008		SC10GH
356	487	12.87			F2			F2			F2	1/4			117U6011	117U5017		103N1004	103N2008		SC12GH
424	565	15.28			F2			F2			F2	1/4			117U6011	117U5017		103N1004	103N2008		SC15GH
498	697	17.69			F2			F2			F2	1			117U6019	117U5017		103N1004	103N2009		SC18GH
452	605	17.69			F2			F2			F2	1/4					117-7038	103N1004	103N2008		SC18GH
377	505	15.28			O			O			O	1					117-7012	103N1004	103N2009		SC15GHH
737	970	26.30			F2			F2			F2	1	Starting device (start. relay, start. & run capacitor): 117-7070			107B9100/9101/9104**			GS26GHX		



Hermetic Compressors type PL, TL, NL, FR, SC, GS and SC Twin R134a • 220-240 V • 50 Hz & 60 Hz

Applications

- LBP:** Low Back Pressure
HBP: High Back Pressure
MBP: Medium Back Pressure

Motor types

- RSIR:** Resistant Start Induction Run
RSCR: Resistant Start Capacitor Run
CSIR: Capacitor Start Induction Run
CSR: Capacitor Start Run

Starting devices

LST: Low Starting Torque
 LST is used with capillary tube control and pressure equalizing. (Pressure equalizing may exceed 10 minutes). The PTC starting device requires 5 minutes cooling before each start.
Note: To fulfil the requirements of EN 60355-2-34 the protection screen 103N0476 must be applied to the PTC starting device.

HST: High Starting Torque
 HST consisting of relay and starting capacitor, is used for expansion valve control or for capillary tube control without pressure equalizing.

Electrical Equipment

** Cover, clamp, gasket parts of compressor

Test conditions EN 12900 (CECOMAF)

PL/TL/TLS/TLES/NL/NLE/FR/SC

Application **R134a**
 Condensing temperature 55°C
 Ambient temperature 32°C
 Suction gas temperature 32°C
 Liquid temperature 55°C
 220 V / 50 Hz

Test conditions EN 12900

GS

Application **MBP HBP**
 Condensing temperature 45°C 50°C
 Ambient temperature 32°C 32°C
 Suction gas temperature 20°C 20°C
 Liquid temperature no subcooling
 220 V / 50 Hz

1 Watt = 0.86 kcal/h
 1 Watt = 3.41 Btu/h

Compressor cooling

- S = Static cooling normally sufficient
 O = Oil cooling
 F1 = Fan cooling 1.5 m/s
 (compressor compartment temp. equal to ambient temperature)
 F2 = Fan cooling 3.0 m/s necessary
 * = O/F1 possible at 220 V nominal (187-242 V)

Voltagess and frequencies

- 1 = 198-254 V, 50 Hz
- 2 = 187-254 V, 50 Hz, LBP
- 3 = 198-254 V, 60 Hz, LBP
- 4 = 198-254 V, 60 Hz
- 5 = 198-254 V, 60 Hz, MBP
- 6 = 207-254 V, 60 Hz, HBP
- 7 = 187-254 V, 50 Hz
- 8 = 187-254 V, 60 Hz

Dimensions					
Height [mm]		Connectors location/l.D. [mm]			
A	B	Suc-tion C	Pro-cess D	Dis-charge E	Oil cooler F
137	135	6.2	6.2	5.0	
163	159	6.2	6.2	5.0	
163	159	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
196	191	8.2	6.2	6.2	
196	191	8.2	6.2	6.2	6.2
196	191	8.2	6.2	6.2	6.2
196	191	8.2	6.2	6.2	6.2
199	193	8.2	6.2	6.2	
209	203	8.2	6.2	6.2	6.2
209	203	10.2	6.2	6.2	6.2
219	213	10.2	6.2	6.2	6.2
219	213	10.2	6.2	6.2	
249	244	12	6.2	6.2	
249	244	12	6.2	6.2	
259	254	16	6.2	6.2	
259	254	16	6.2	6.2	
137	135	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
173	169	6.2	6.2	5.0	
188	182	6.2	6.2	5.0	
188	182	6.2	6.2	5.0	
190	184	6.2	6.2	5.0	
203	197	8.2	6.2	6.2	6.2
209	203	8.2	6.2	6.2	6.2
209	203	10.2	6.2	6.2	6.2
219	213	10.2	6.2	6.2	
219	213	10.2	6.2	6.2	
190	184	8.2	6.2	6.2	
197	191	8.2	6.2	6.2	
197	191	8.2	6.2	6.2	
203	197	8.2	6.2	6.2	
203	197	8.2	6.2	6.2	
203	197	8.2	6.2	6.2	
259	247	12.9	6.5	8.2	
259	247	12.9	6.5	8.2	
173	169	6.2	6.2	5.0	
196	191	8.2	6.2	8.2	8.2
199	193	10.2	6.2	8.2	
209	203	10.2	6.2	8.2	
209	203	10.2	6.2	8.2	
219	213	10.2	6.2	8.2	
209	203	10.2	6.2	8.2	8.2
259	247	12.9	6.5	8.2	

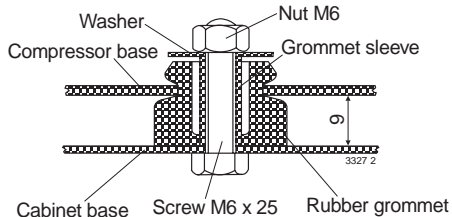
Model designation				
Compressor design	Optimization level	Compressor size	Application range	Start characteristics
PL	Blank Standard energy level	Nominal displacement in cm ³	F R134a LBP/(MBP)	Blank => universal (principal rule)
TL			FT R134a LBP/(MBP) tropical	
NL	S Semi-direct intake	Exception: For PL compressors the capacity at rating point is stated.	G R134a LBP/MBP/HBP	X = HST characteristics (expansion valve)
FR	E Energy-optimized (optimized motor)		GH R134a Heat pumps GHH R134a Heat pumps (opt.)	
SC			MF R134a MBP	
GS				

Examples

TL	S	4	FT	
NL	E	10	MF	
SC		15	GHH	
GS		26	MF	X

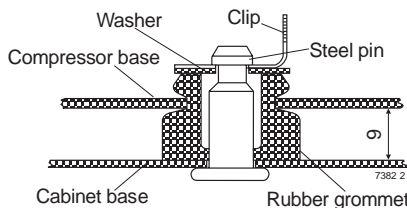
Accessories for SC Twin	
SC10/10, SC12/12 and SC15/15:	
Service valve for 12 mm tube	118-7350
Solder connector for 12 mm tube	104B0584
SC18/18 and SC21/21:	
Service valve for 16 mm tube	118-7351
Solder connector for 16 mm tube	118-7405
SC10/10, SC12/12, SC15/15, SC18/18 and SC21/21:	
Seal ring for service valve and solder connector	118-3638
Time-delay relay	117N0001
Check valve (to be used with time-delay relay)	020-1014

Mounting accessories



Bolt joint for one compressor: 118-1917
in quantities: 118-1918

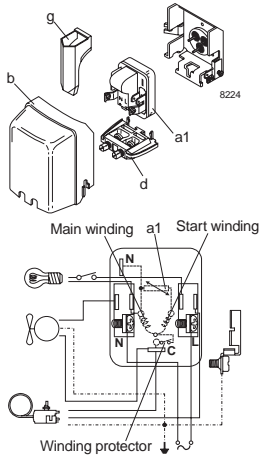
Bolt joint for one GS compressor: 107B9150



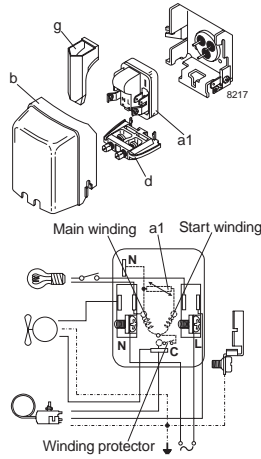
Snap-on in quantities: 118-1919

LST - RSIR

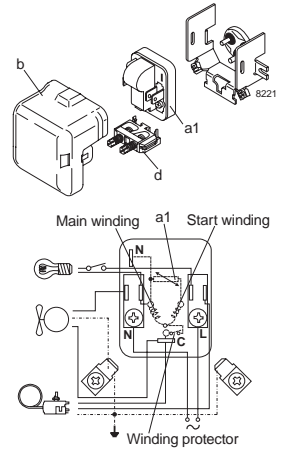
PL



TL-TLS-TLES-NL-NLE-FR

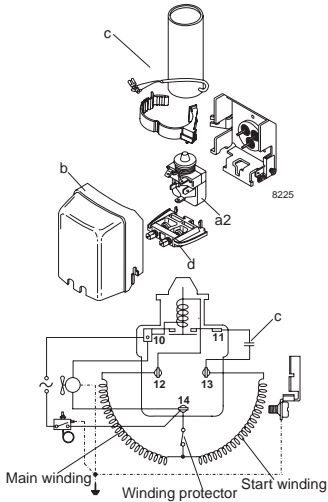


SC

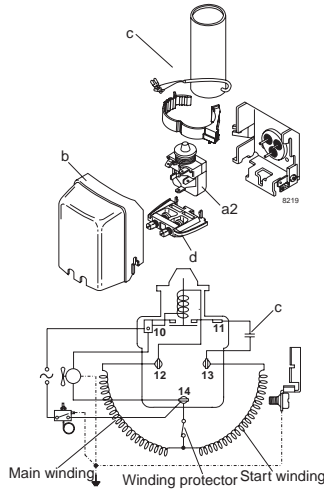


HST - CSIR

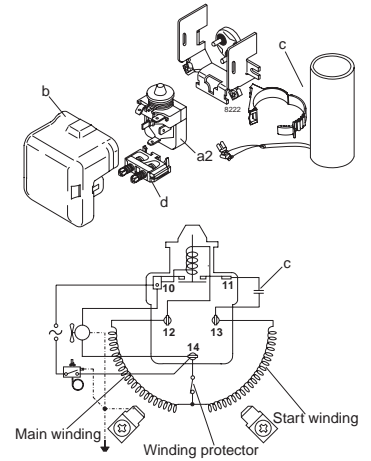
PL



TL-TLS-TLES-NL-NLE-FR

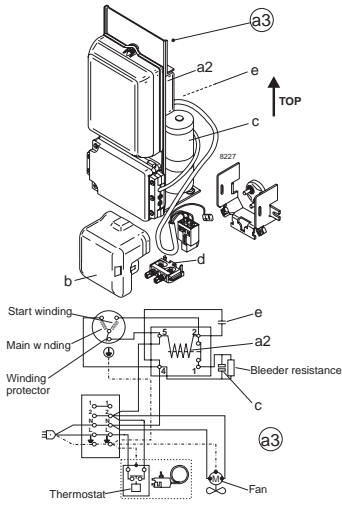


SC

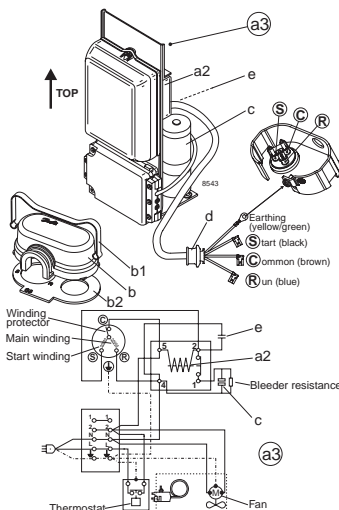


HST - CSR

SC



GS

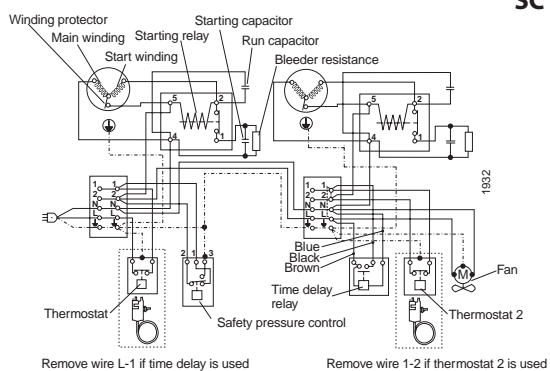


Legend

- a1: PTC starting device
- a2: Starting relay
- a3: Starting device
- b: Cover
- b1/b2: Clamp/Gasket (parts of compressor)
- c: Starting capacitor
- d: Cord relief
- e: Run capacitor
- g: Protection screen for PTC

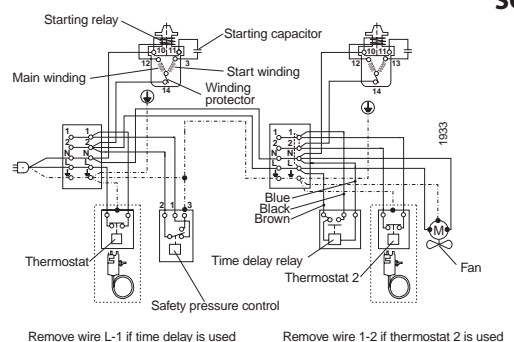
HST - CSR

SC Twin



HST - CSIR

SC Twin





Applications

This new compressor range will perfectly fit various applications like:

- Laboratory and medical equipment
- Clip-on units and condensing units
- Compressed air dryers
- Glass door merchandisers
- Bakery refrigeration equipment
- Ice cream cabinets
- Display cabinets
- Vending machines
- Soft ice cream machines
- Ice making machines
- Slush/frozen beverage makers
- Small coolers for trucks, working only stationary
- Heat pumps
- Bottle coolers

Refrigeration Controls programme consists of:



Hermetic filter drier with solid core



Direct or servo operated solenoid valve



Sight glass with moisture indicator

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