

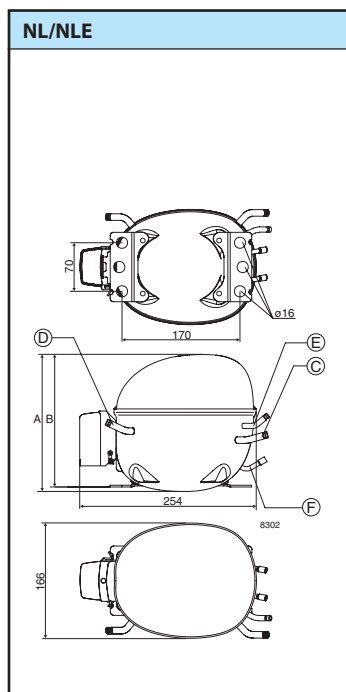
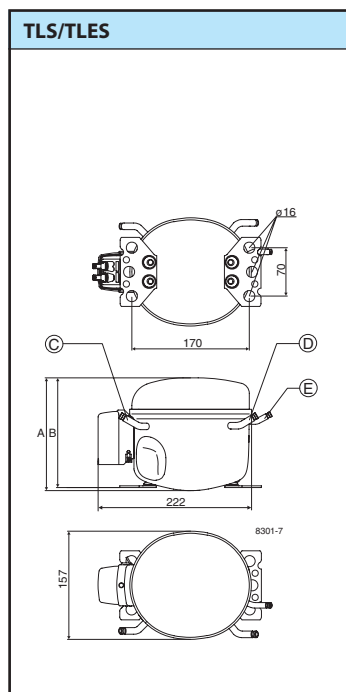
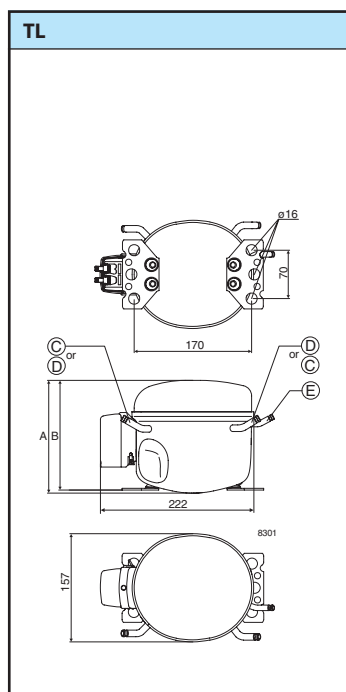
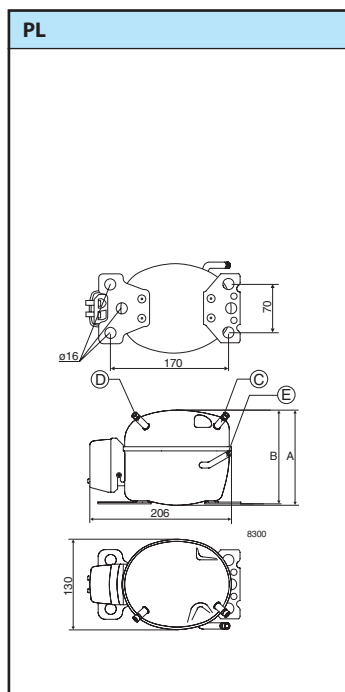


R134a

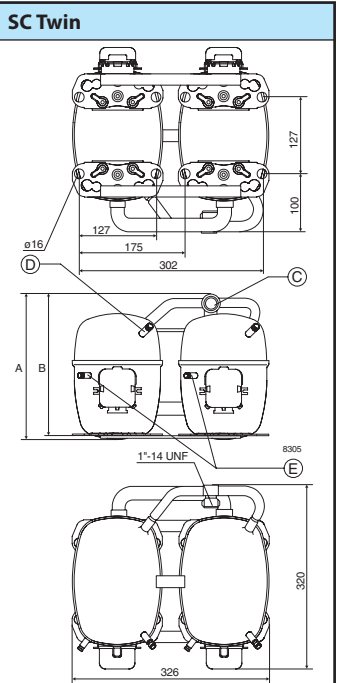
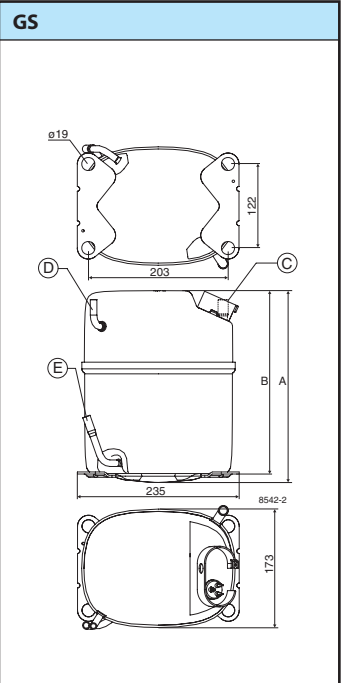
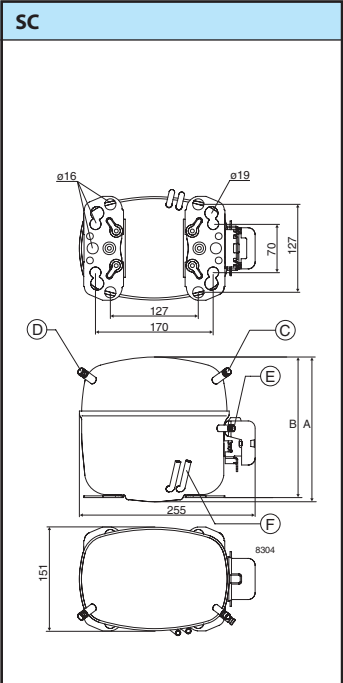
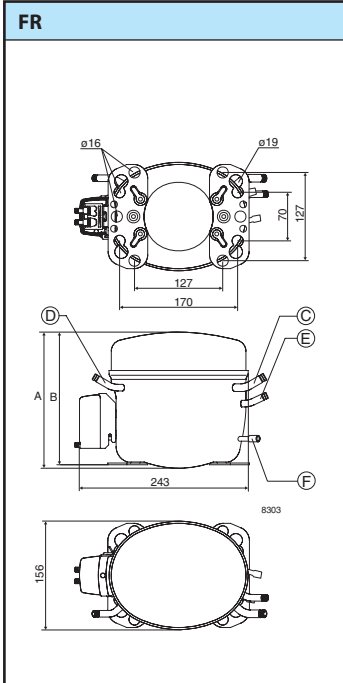
## Danfoss Compressors

220-240 V • 50 Hz & 60 Hz

Application	Compressor	Code numbers		EN 12900 (CECOMAF)														EN 12900 (CECOMAF)				
		Compressor	Compressor with oil cooling	Capacity [W]														Power consumption [W]				
	Evaporating temperature [°C]														Evaporating temp. [°C]							
				-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	
	TLES5.7FT.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	345	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							695
	GS34MFX	107B0701						958	1246	1596	1866	2013	2505	3079	3360							924
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	



Displacement temp. [°C]	Displacement [cm³]	Recommended compressor cooling at ambient temperature									Voltage and frequen- cies	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						
-10	5																			
66.6	90	2.00	S	F2	F2	S	F2	F2	S	F2	F2	1/2/3/6	103N0011	103N0018	117U6021	117U5014		103N1010	103N0491	PL35G
83.9	113	2.61	S	S	S	S	S	S	S	S	F2	1/2/3	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	2x 12.87	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6003	117U5017		103N1004	103N2009	SC12/12G
879	1190	2x 15.28	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6005	117U5017		103N1004	103N2009	SC15/15G
1014	1390	2x 17.69	F2	F2	F2	F2	F2	F2	F2	F2	F2	1			117U6019	117U5017		103N1004	103N2009	SC18/18G
1156	1581	2x 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	103N0001	103N0018	117U6021	117U5014		103N1010	103N0491	PL50F
92		3.13	S			S			S			2	103N0011	103N0018	117U6007	117U5014		103N1010	103N2010	TLS3FT
123		3.86	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TLS4FT
165		5.08	S			S			S			2	103N0011	103N0018	117U6000	117U5014		103N1010	103N2010	TLS5FT
170		5.70	S			S			S			2	103N0011	103N0018	117U6004	117U5014		103N1010	103N2010	TLESS.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
695	941	26.30		F2			F2			F2		1	Starting device (start. relay, start. & run capacitor): 117-7055			107B9100/9101/9104		○ GS26MFX		
924	1025	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	117U5019		103N1004	103N2008	SC10GH
356	487	12.87			F2			F2			F2	1/4			117U6011	117U5019		103N1004	103N2008	SC12GH
424	565	15.28			F2			F2			F2	1/4			117U6011	117U5019		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



## 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  
**RS CR:** 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.

### 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 (CECOMAF)

**GS**  
 Application **R134a**  
 Condensing temperature 45°C  
 Ambient temperature 32°C  
 Suction gas temperature 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)

### Voltages 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

○ = preliminary data

Model designation					
Compressor design	Optimization level	Compressor size	Application range	Start characteristics	
PL	Blank Standard energy level	Nominal displacement in cm <sup>3</sup>	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

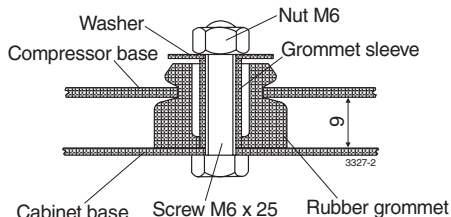
#### SC18/18 and SC21/21:

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:

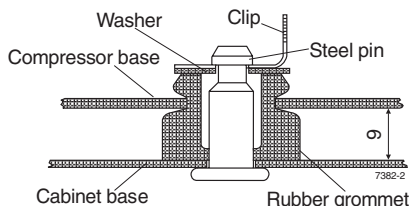
Seal ring for service valve and solder connector 118-3638  
 Time-delay relay 117N0001  
 Check valve (to be used with time-delay relay) 020-1014

### Mounting accessories



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

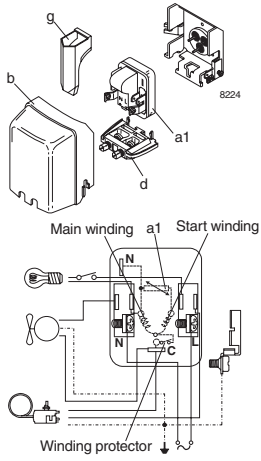
**Bolt joint for one GS compressor:** 107B9150



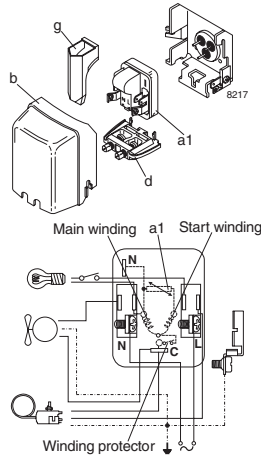
**Snap-on in quantities:** 118-1919

### LST - RSIR

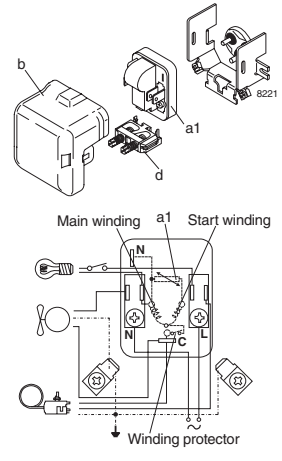
PL



TL-TLS-TLES-NL-NLE-FR

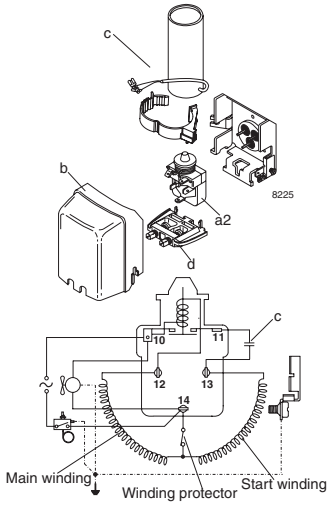


SC

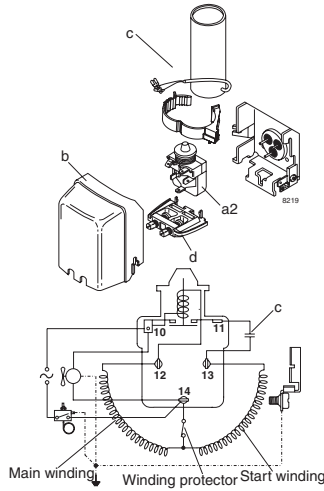


### HST - CSIR

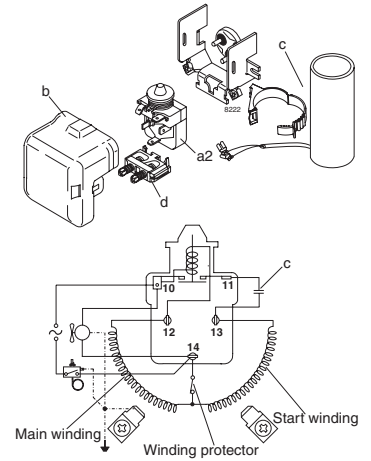
PL



TL-TLS-TLES-NL-NLE-FR

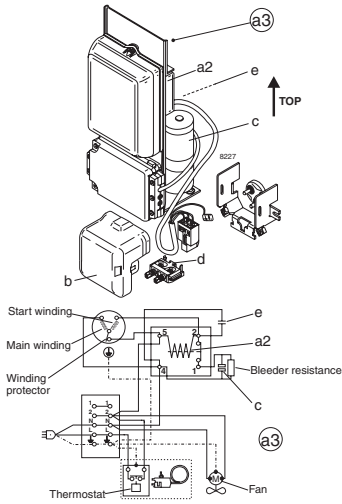


SC

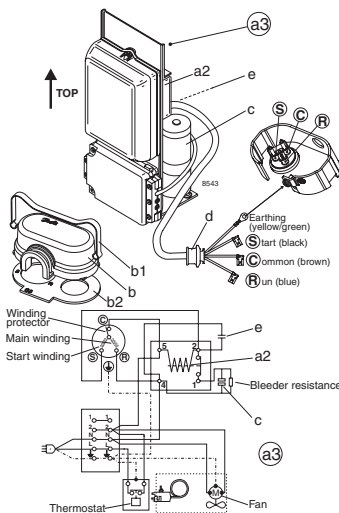


### HST - CSR

SC



GS



### Legend

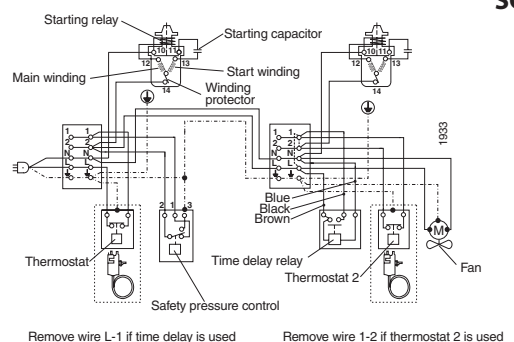
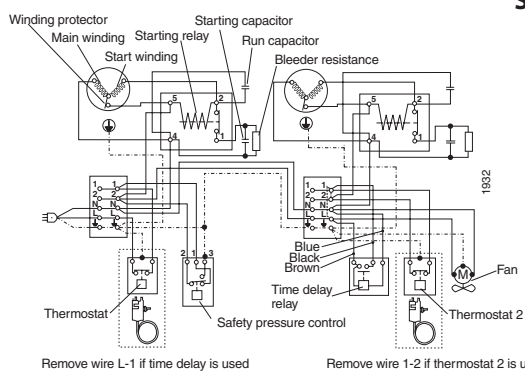
- a1: PTC starting device
- a2: Starting relay
- a3: Starting device
- b: Cover
- b1/b2: Clamp/Gasket (parts of compressor)
- c: Starting capacitor
- d: Cord relief
- e: Run capacitor
- g: Protection screen for PTC

### HST - CSR

### HST - CSIR

SC Twin

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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