

REFRIGERANT APPLICATION FREQUENCY
R-290 LBP 50Hz

MODEL	Displacement		B.O.M.	Voltage / Frequency	Motor Type	LRA	Exp. Device	Lubricant			Weight		Max. Height A		Cooling Type
	cm ³	in ³						Charge cm ³	oz ³	Type	kg	lb	mm	in	
NEK2117U	4.52	0.28	861AA	220-240V 50Hz 1~	CSIR	9.6	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	S
NEK1121U	6.20	0.38	862BA	220-240V 50Hz 1~	RSIR	15.5	C	350	12.0	POE 22	10.4	22.9	187.0	7.4	S
NEK2121U	6.20	0.38	861BA	220-240V 50Hz 1~	CSIR	12.4	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	F
NEK2125U	7.28	0.44	861CA	220-240V 50Hz 1~	CSIR	12.4	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	F
NEK2125U	7.28	0.44	862DA	220-240V 50Hz 1~	CSIR	12.4	C/V	350	12.0	POE 22	10.4	22.9	200.0	7.4	S
NEK2134U	10.00	0.61	862AA	220-240V 50Hz 1~	CSIR	13.1	C/V	350	12.0	POE 22	11.0	24.3	200.0	7.9	F
NEK1150U	13.54	0.81	863BA	220-240V 50Hz 1~	RSIR	24.3	C	350	12.0	POE 22	11.6	25.5	206.0	8.1	F
NEK2150U	13.54	0.81	863AA	220-240V 50Hz 1~	CSIR	19.5	C/V	350	12.0	POE 22	11.6	25.5	206.0	8.1	F

Note: Please check Test Conditions on page 30.

REFRIGERANT APPLICATION FREQUENCY
R-290 HBP 50Hz

MODEL	Displacement		B.O.M.	Voltage / Frequency	Motor Type	LRA	Exp. Device	Lubricant			Weight		Max. Height A		Cooling Type
	cm ³	in ³						Charge cm ³	oz ³	Type	kg	lb	mm	in	
NEK6152U	5.45	0.33	861DA	220-240V 50Hz 1~	CSIR	9.6	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	F
NEK6165U	6.20	0.38	861EA	220-240V 50Hz 1~	CSIR	12.0	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	F
NEK6181U	7.28	0.44	861FA	220-240V 50Hz 1~	CSIR	12.0	C/V	350	12.0	POE 22	10.4	22.9	187.0	7.4	F
NEK6210U	8.78	0.54	862CA	220-240V 50Hz 1~	CSIR	16.0	C/V	350	12.0	POE 22	11.0	24.3	200.0	7.9	F

Note: Please check Test Conditions on page 30.

REFRIGERANT APPLICATION FREQUENCY
R-134a LBP 60Hz

MODEL	Displacement		B.O.M.	Voltage / Frequency	Motor Type	LRA	Exp. Device	Lubricant			Weight		Max. Height A		Cooling Type
	cm ³	in ³						Charge cm ³	oz ³	Type	kg	lb	mm	in	
NB1112Z	6.26	0.38	293FG	115V 60Hz / 100V 50Hz 1~	RSIR RSCR	20.0	C	350	12.0	POE 22	9.5	20.9	177.0	7.0	S
NB1116Z	8.40	0.51	294SG	115V 60Hz / 100V 50Hz 1~	RSIR RSCR	27.5	C	350	12.0	POE 22	9.8	21.6	187.0	7.4	S
NB1118Z	8.07	0.49	294UG	115V 60Hz / 100V 50Hz 1~	RSIR RSCR	28.0	C	350	12.0	POE 22	10.4	22.9	187.0	7.4	S
NB2116Z	8.40	0.51	294TG	115V 60Hz / 100V 50Hz 1~	CSIR	26.5	C/V	350	12.0	POE 22	9.8	21.6	187.0	7.4	S
NE2121Z	9.27	0.57	262BG	115V 60Hz / 100V 50Hz 1~	CSIR	29.0	C/V	350	12.0	POE 22	11.0	24.3	200.0	7.9	F
NE2130Z	12.12	0.74	262DG	115V 60Hz / 100V 50Hz 1~	CSIR	38.0	C/V	350	12.0	POE 22	11.0	24.3	200.0	7.9	F
NE2134Z	14.30	0.87	263CD	208-230V 60Hz / 200V 50Hz 1~	CSIR	20.4	C/V	350	12.0	POE 22	11.5	25.4	206.0	8.1	F
NE2134Z	14.30	0.87	262JG	115V 60Hz / 100V 50Hz 1~	CSIR	33.0	C/V	350	12.0	POE 22	11.5	25.4	200.0	7.9	F
T2134Z	19.04	1.16	203HG	115V 60Hz / 100V 50Hz 1~	CSIR	30.0	C/V	550	20.0	POE 22	13.1	28.9	201.0	7.9	F
T2134Z	19.04	1.16	203HD	208-230V 60Hz / 200V 50Hz 1~	CSIR	21.0	C/V	550	19.0	POE 22	13.1	28.9	201.0	7.9	F
T2134Z	19.04	1.16	207IQ	100V 50/60Hz 1~	CSIR	45.5	C/V	550	20.0	POE 22	13.1	28.9	201.0	7.9	F
T2140H	22.40	1.37	207HD	208-230V 60Hz / 200V 50Hz 1~	CSIR	26.0	C/V	550	20.0	POE 22	14.9	32.8	221.0	8.7	F
NJ2152Z	27.12	1.65	144LG	115V 60Hz / 100V 50Hz 1~	CSIR	59.0	C/V	750	26.0	POE 22	20.0	44.1	265.0	10.4	F

Note: Please check Test Conditions on page 30.

FREQUENCY	APPLICATION	REFRIGERANT
50Hz	LBP	R-290

Condensing Temperature °C	Cooling Capacity / Evaporating Temperature °C Subcooled condition												Drawings		MODEL	
	-40	-35	-30	-25	Rated Point -23.3°C						-20	-15	-10	External View ref.		Wiring Diagram ref.
					W	kcal/h	W input W	Current A	EER W/W kcal/hW							
54.4			133	177	188	162	158	1.24	1.19	1.03	220	274	336	DWG02	SM05	NEK2117U
45	84	111	145	192							237	294	359			
54.4			202	257	276	237	209	1.54	1.32	1.13	322	399	486	DWG03	SM03	NEK1121U
45	133	167	213	271							340	421	514			
54.4			168	225	247	212	207	1.63	1.20	1.02	293	373	465	DWG03	SM05	NEK2121U
45	106	141	187	246							317	400	495			
54.4			230	292	316	272	242	1.71	1.31	1.13	370	462	571	DWG03	SM05	NEK2125U
45	170	202	250	314							394	491	603			
54.4			215	280	300	258	232	1.75	1.30	1.12	358	445	545	DWG03	SM05	NEK2125U
45	160	195	252	325							412	515	630			
54.4			331	414	449	386	330	2.04	1.36	1.17	521	645	793	DWG03	SM05	NEK2134U
45	230	281	351	440							551	683	828			
54.4			437	557	601	517	460	3.19	1.30	1.12	697	859	1042	DWG03	SM03	NEK1150U
45	277	362	467	593							740	908	1097			
54.4			417	536	581	500	444	2.98	1.31	1.13	678	843	1031	DWG03	SM05	NEK2150U
45	264	333	441	576							723	898	1094			

FREQUENCY	APPLICATION	REFRIGERANT
50Hz	HBP	R-290

Condensing Temperature °C	Cooling Capacity / Evaporating Temperature °C Subcooled condition												Drawings		MODEL	
	-20	-15	-10	-5	0	+5	Rated Point +7.2°C						+10	External View ref.		Wiring Diagram ref.
							W	kcal/h	W input W	Current A	EER W/W kcal/hW					
54.4			388	473	570	679	720	620	284	1.72	2.53	2.18	799	DWG03	SM05	NEK6152U
45	299	361	439	534	644	771							914			
54.4			443	539	650	777	839	721	344	2.32	2.44	2.09	920	DWG03	SM05	NEK6165U
45	344	416	507	615	739	881							949			
54.4			500	611	737	885	949	816	386	2.44	2.46	2.12	1040	DWG03	SM05	NEK6181U
45	386	471	574	697	840	1011							1183			
54.4			611	747	905	1083	1168	1005	459	2.75	2.55	2.19	1281	DWG03	SM05	NEK6210U
45	465	574	700	850	1025	1225							1450			

FREQUENCY	APPLICATION	REFRIGERANT
60Hz	LBP	R-134a

Condensing Temperature °C	Cooling Capacity / Evaporating Temperature °C Subcooled condition												Drawings		MODEL	
	-30	-25	Rated Point -23.3°C						-20	-15	-10	-5	External View ref.	Wiring Diagram ref.		
			W	kcal/h	W input W	Current A	EER W/W kcal/hW									
54.4			152	131	156	2.00	0.98	0.84	187	247	317	397	DWG04	SM02	NB1112Z	
45	119	136	162						214	276	349	432				
54.4			183	203	175	194	2.90	1.05	0.90	247	326	418	523	DWG04	SM02	NB1116Z
45	157	209							274	352	444	548				
54.4			210	234	201	194	1.20	1.20	1.03	284	372	472	586	DWG04	SM02	NB1118Z
45	171	230							305	395	500	620				
54.4			183	203	175	198	2.90	1.03	0.89	247	326	418	523	DWG04	SM04	NB2116Z
45	157	209							274	352	444	548				
54.4			252	278	239	255	4.40	1.09	0.94	335	435	552	685	DWG04	SM04	NE2121Z
45	202	268							352	453	571	706				
54.4			332	367	315	309	4.90	1.18	1.01	440	565	709	871	DWG04	SM04	NE2130Z
45	267	350							455	580	727	895				
54.4			370	418	360	340	2.52	1.23	1.06	487	626	788	972	DWG04	SM04	NE2134Z
45	300	394							512	654	818	1006				
54.4			369	425	365	346	5.30	1.23	1.05	485	626	791	980	DWG04	SM04	NE2134Z
45	295	389							507	649	815	1006				
54.4			418	463	398	416	4.80	1.11	0.95	563	748	971	1234	DWG08	SM08	T2134Z
45	361	455							599	794	1038	1333				
54.4			418	463	398	394	3.10	1.17	1.01	563	748	971	1234	DWG08	SM08	T2134Z
45	361	455							599	794	1038	1333				
54.4			418	463	398	416	4.80	1.11	0.95	563	748	971	1234	DWG08	SM08	T2134Z
45	361	455							599	794	1038	1333				
54.4			455	512	440	425	2.90	1.21	1.04	640	873	1153	1481	DWG08	SM08	T2140H
45	382	508							692	935	1236	1596				
54.4			610	704	605	512	7.00	1.37	1.18	899	1223	1581	1974	DWG14	SM14	NJ2152Z
45	422	645							910	1215	1562	1949				

GENERAL INFORMATION

Motor Type

Type	Description
RSIR	Resistive Start Inductive Run
RSCR	Resistive Start Capacitive Run
CSIR	Capacitive Start Inductive Run
CSR	Capacitive Start and Run
PSC	Permanent Split Capacitor
THREE PHASE	Star Connection

Cooling Types

Type	Description
S	(Static cooling) - the compressor doesn't need forced cooling, but it must be installed in order to guarantee natural air circulation by convection, to avoid overheating.
F	(Fan cooling) - the compressor needs forced cooling by the use of a motor fan.
OC	(Oil Cooling) - coil positioned in the lower internal part of the housing, immersed in the lubricant. where the gas coming from the first part of the heat exchanger circuit cools the lubricant.

Conversion

1 watt	3.41 Btu/h
1 watt	0.86 kcal/h
1 kcal/h	3.97 Btu/h

Expansion Devices

Type	Description
C	Capillary
V	Expansion valve

Lubricant Used

Code	Type
AB	alkylbenzene
MO	mineral
POE	polyolester

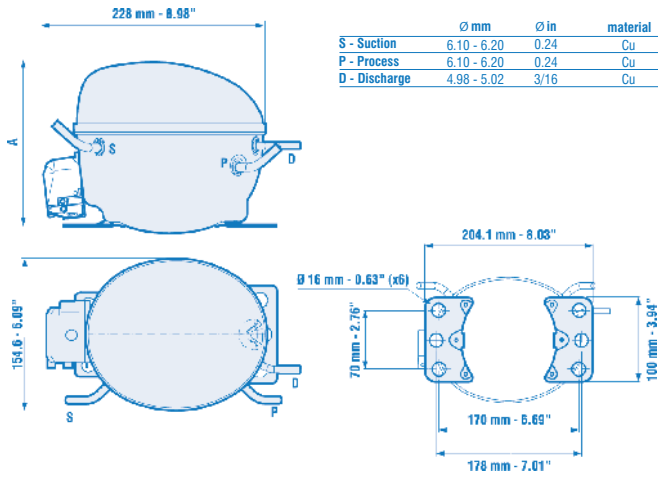
Test Conditions

Temperature	Subcooled Liquid Conditions					
	LBP		MBP-HBP		AC	
	°C	°F	°C	°F	°C	°F
Evaporating	-23.3	-10.0	7.2	45.0	7.2	45.0
Condensing	54.4	130.0	54.4	130.0	54.4	130.0
Gas & Ambient	32.2	90.0	35.0	95.0	35.0	95.0
Liquid	32.2	90.0	-	-	-	-
Liquid Subcooling	-	-	8.3	15.0	8.3	15.0

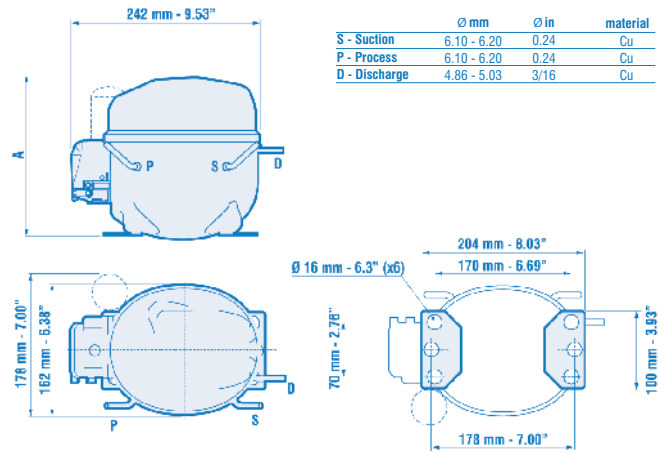
Note: After replacement, the compressor and its accessories must have proper processing, and the components must be recycled according to the material group (ferrous, non-ferrous, polymers, oils, ...) directives. These recommendations are intended to minimize the adverse impacts that may be caused to the environment.

EXTERNAL VIEWS

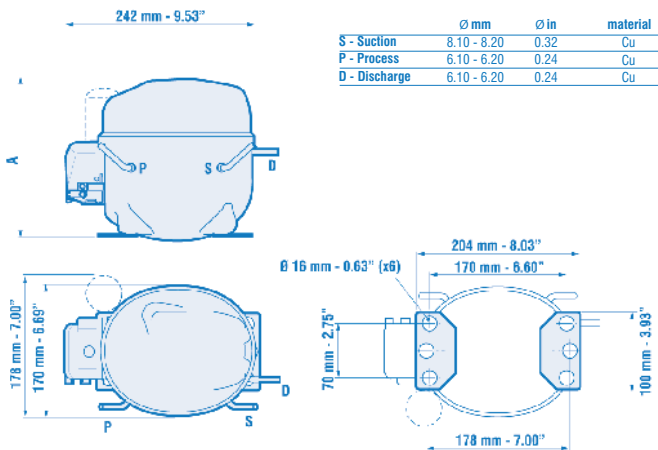
DWG 01 **EM SERIES** European Base Plate



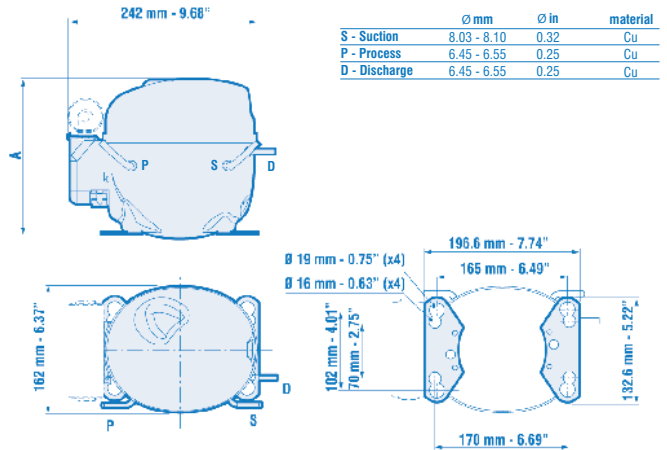
DWG 02 **NB/NE SERIES** European Base Plate



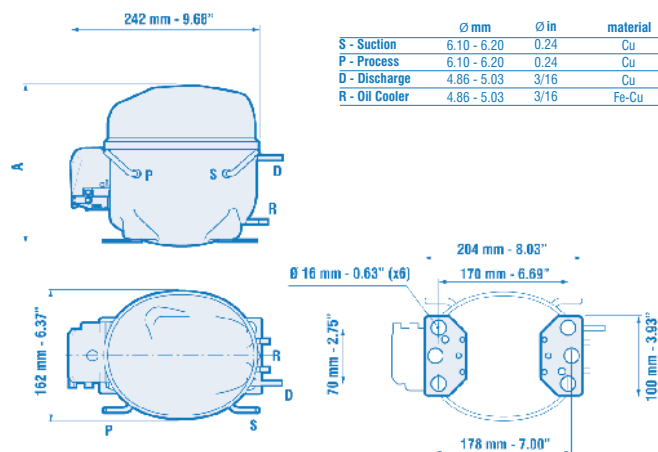
DWG 03 **NB/NE SERIES** European Base Plate



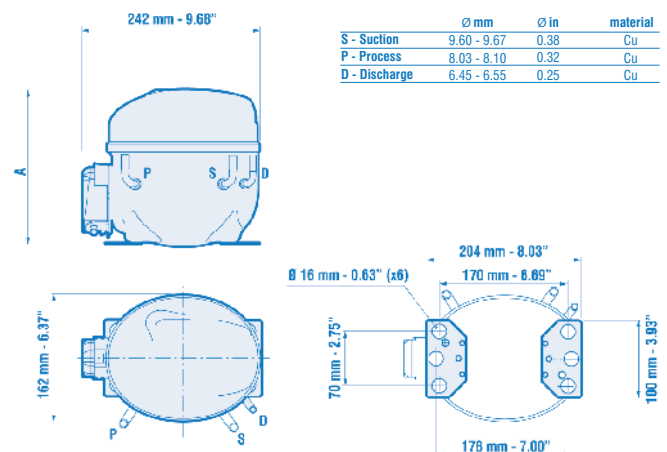
DWG 04 **NB/NE SERIES** Universal Base Plate



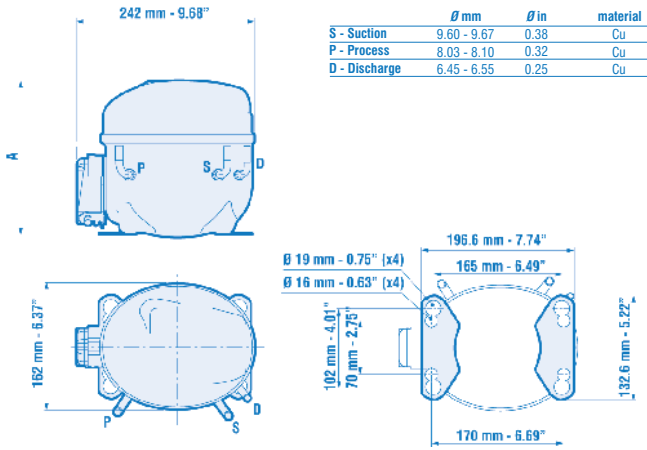
DWG 05 **NB/NE SERIES** Oil Cooler



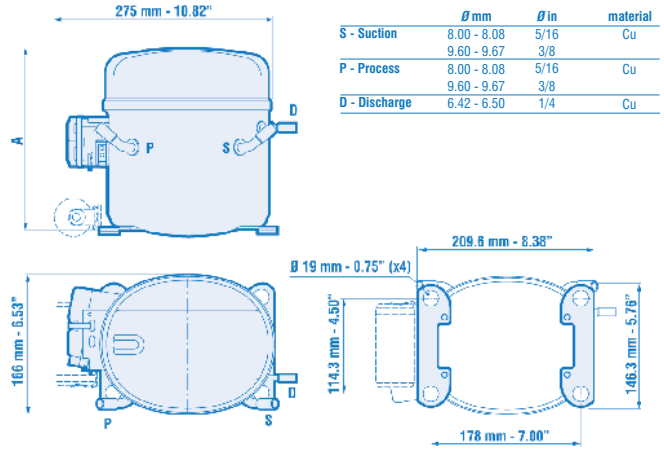
DWG 06 **NE SERIES** Air Conditioning European Base Plate



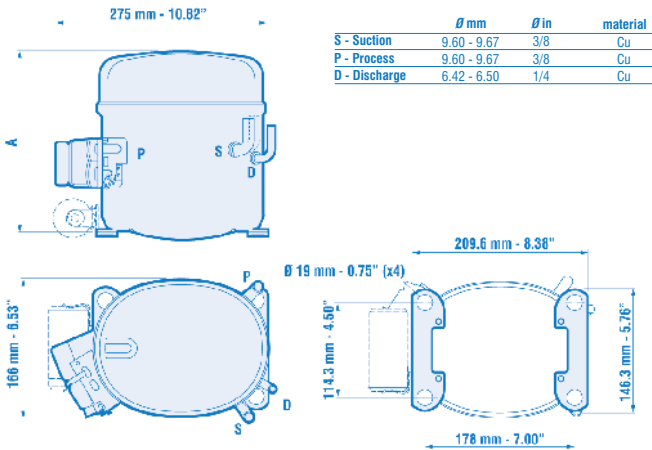
DWG 07 NE SERIES Air Conditioning Universal Base Plate



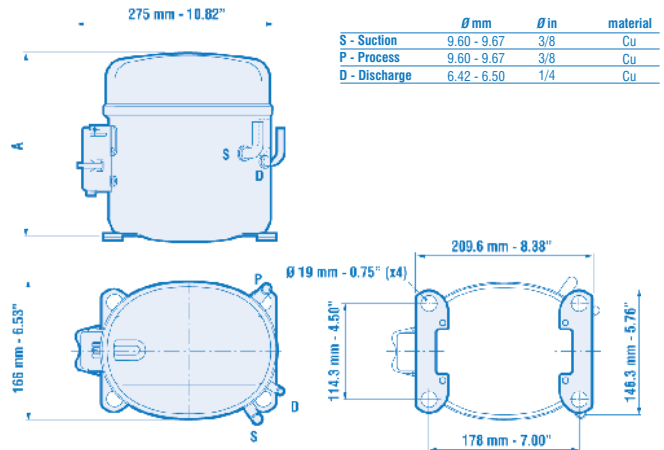
DWG 08 T SERIES Terminal Board



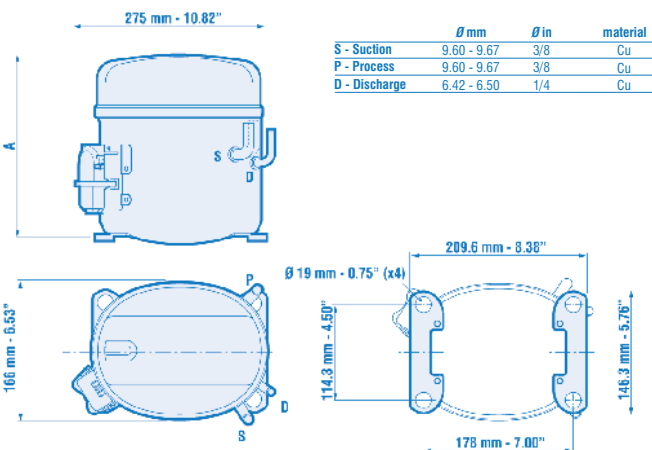
DWG 09 T SERIES Air Conditioning Terminal Board



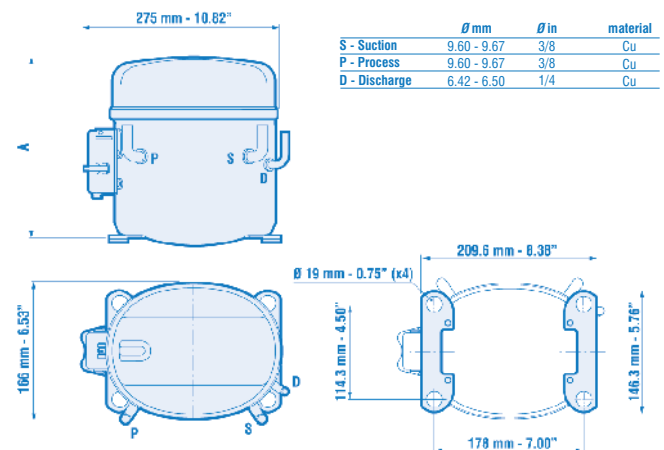
DWG 10 T SERIES Air Conditioning Standard Cover



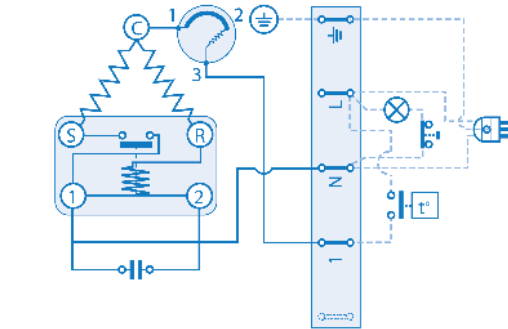
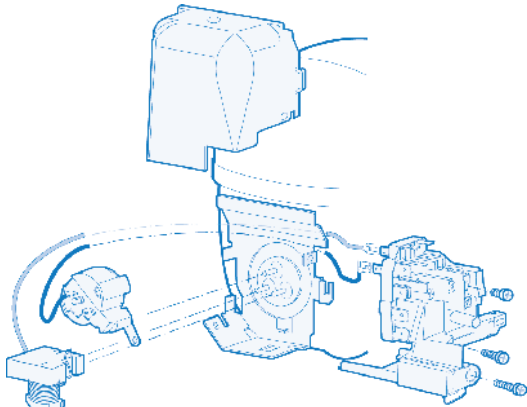
DWG 11 T SERIES Air Conditioning Standard Cover



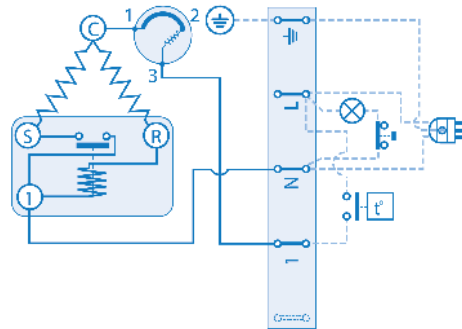
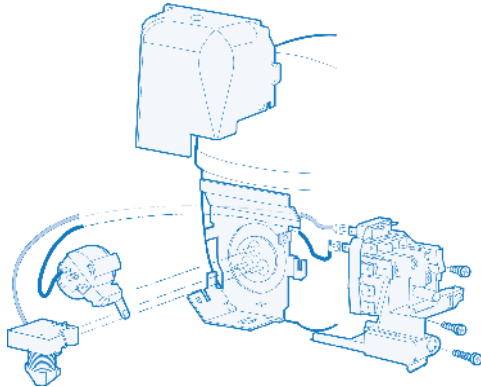
DWG 12 T SERIES Air Conditioning Standard Cover



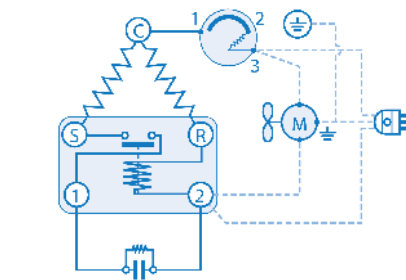
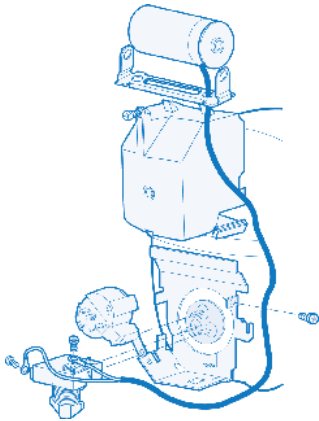
SM 01 EM - BP - NB/NE SERIES RSIR - RSCR PTC Terminal Board & Start Relay



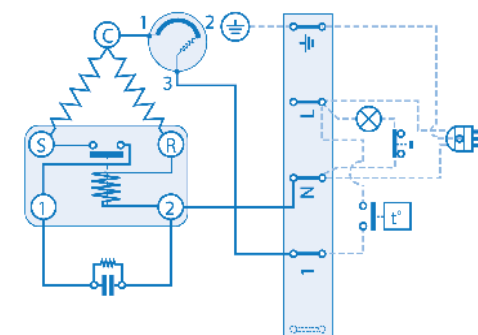
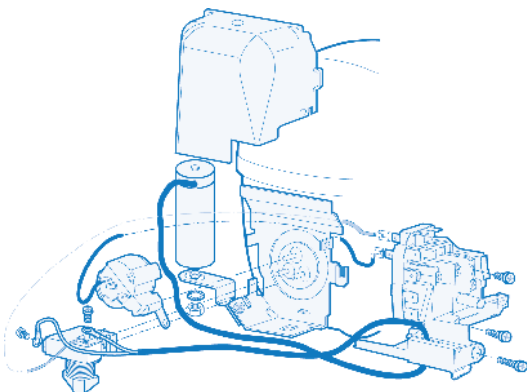
SM 03 NB/NE SERIES RSIR Terminal Board & Start Device



SM 04 NB/NE SERIES CSIR Cord Anchorage & Start Device - American Version

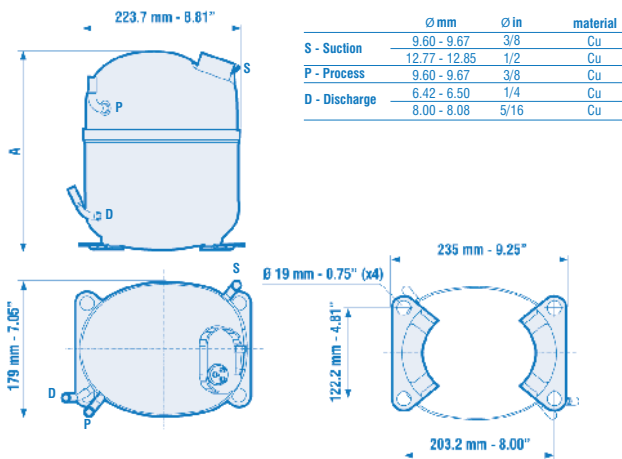


SM 05 NB/NE SERIES CSIR Terminal Board & Start Device

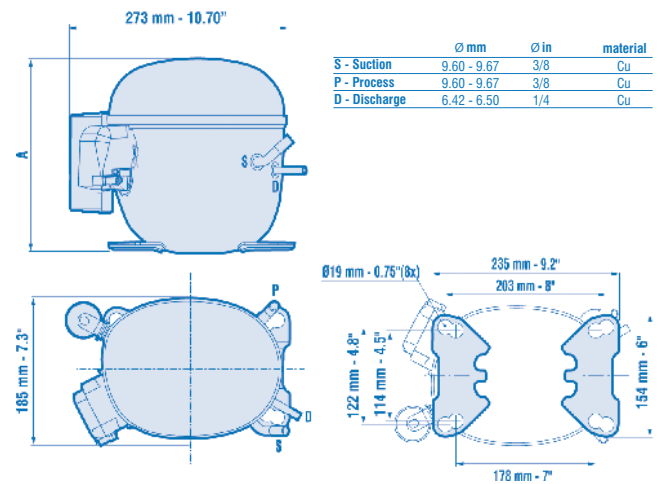


EXTERNAL VIEWS

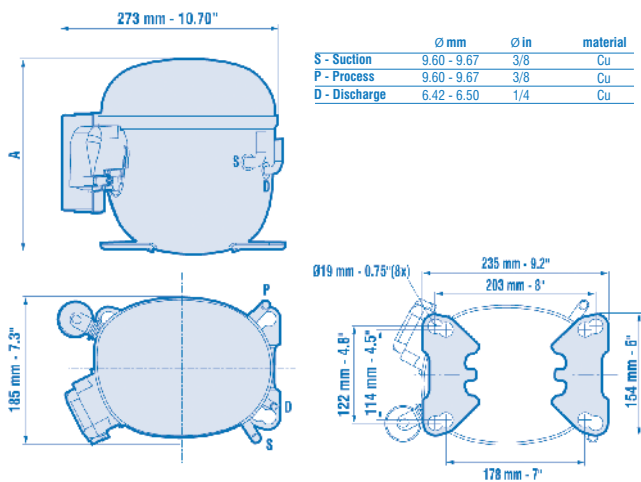
DWG 14 NJ SERIES



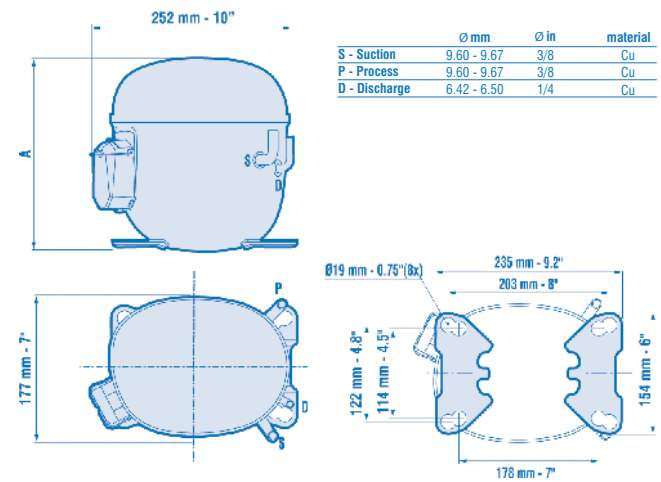
DWG 15 NT SERIES



DWG 16 NT SERIES

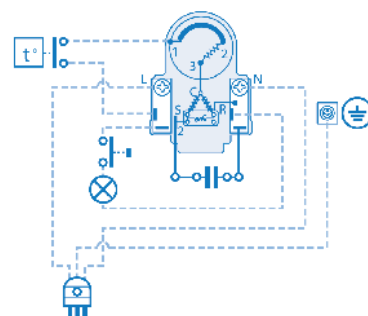
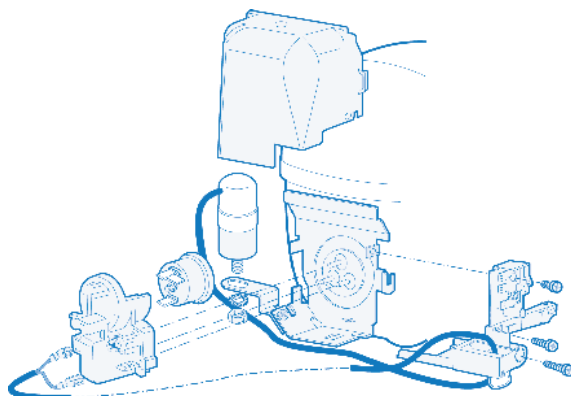


DWG 17 NT SERIES



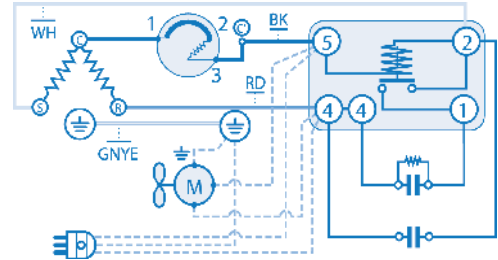
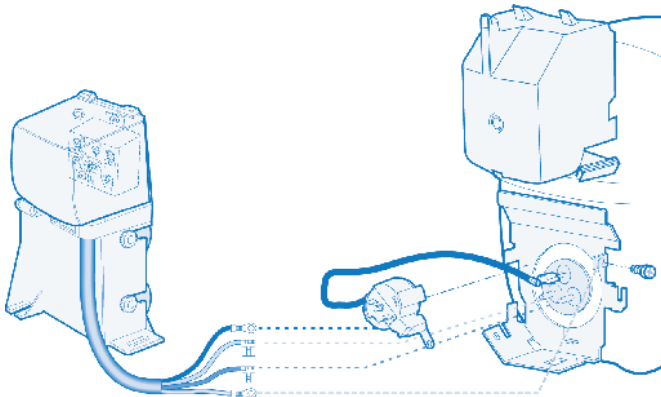
WIRING DIAGRAMS

SM 00 EM - BP - NB/NE SERIES RSIR - RSCR PTC Integrated Start Device - European Version

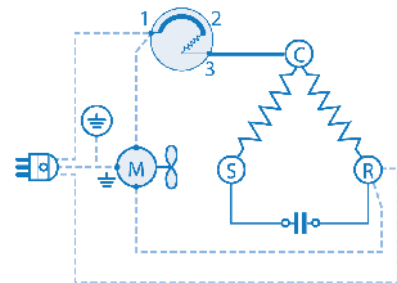
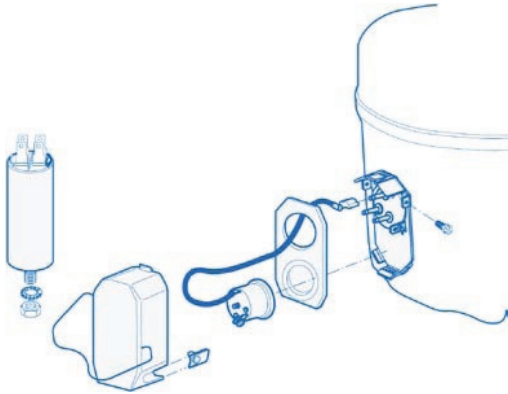


WIRING DIAGRAMS

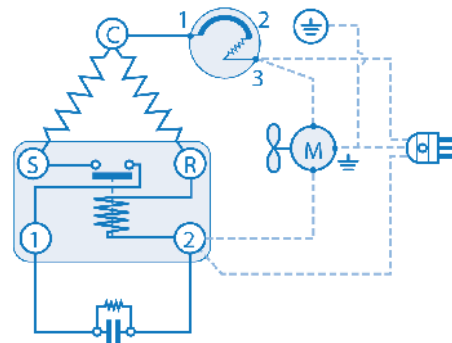
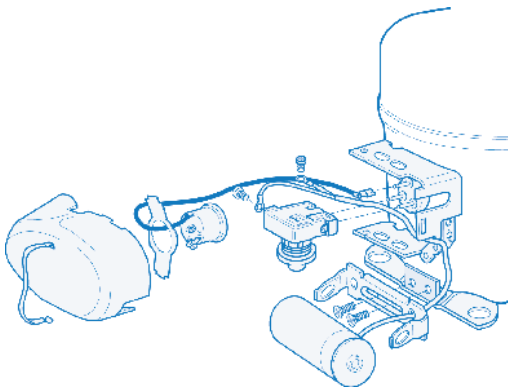
SM 06 NB/NE SERIES CSR Box



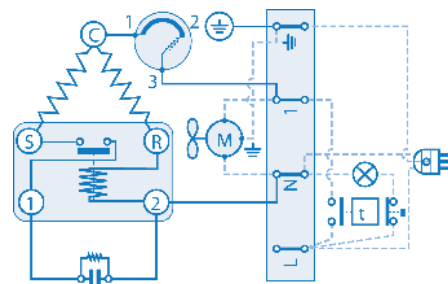
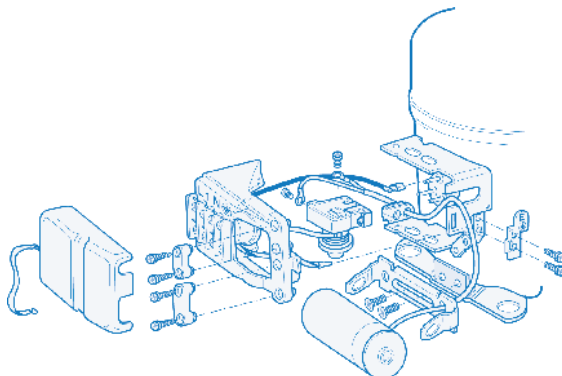
SM 07 NE SERIES PSC



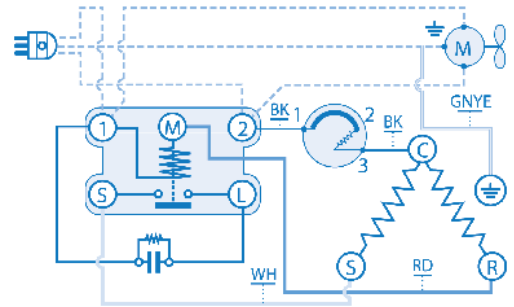
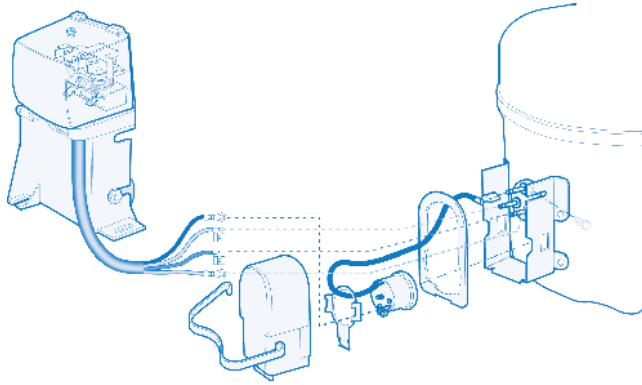
SM 08 T SERIES CSIR Standard Cover



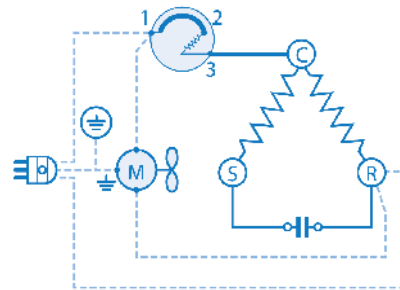
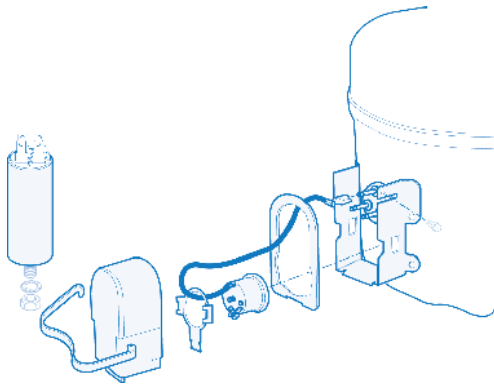
SM 09 T SERIES CSIR Terminal Board



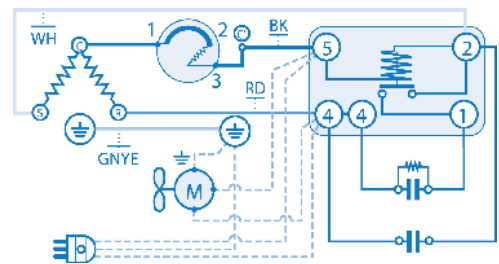
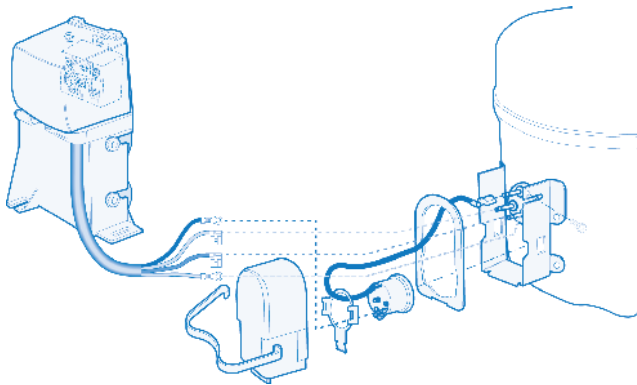
SM 10 T SERIES CSIR Box



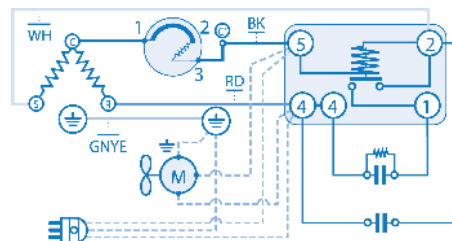
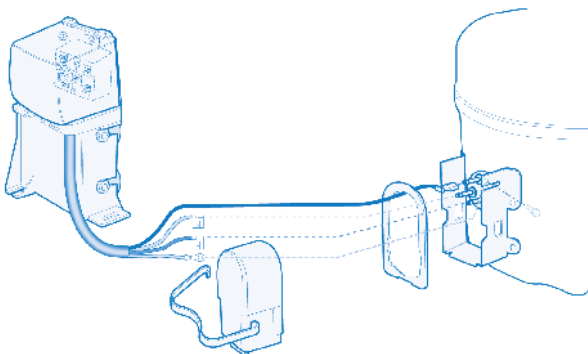
SM 11 T SERIES PSC



SM 12 T SERIES CSR Box

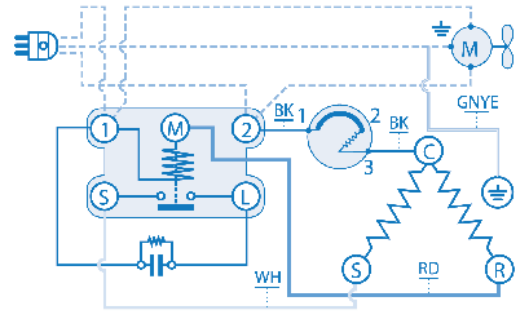
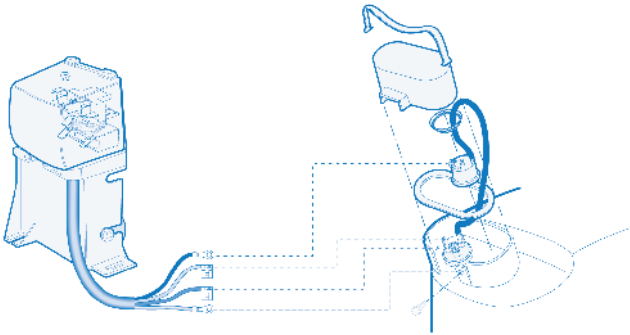


SM 13 T SERIES CSR Box (Internal Overload Protector)

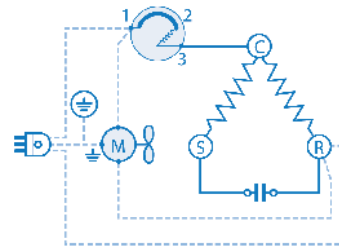
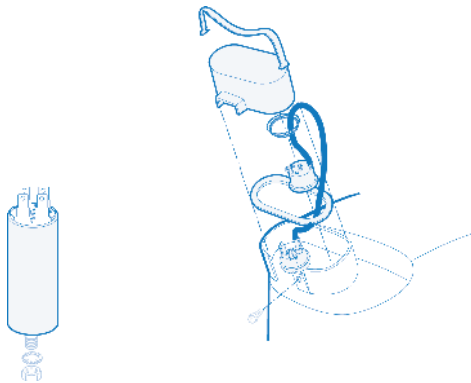


WIRING DIAGRAMS

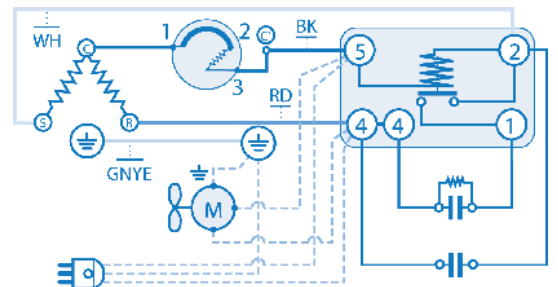
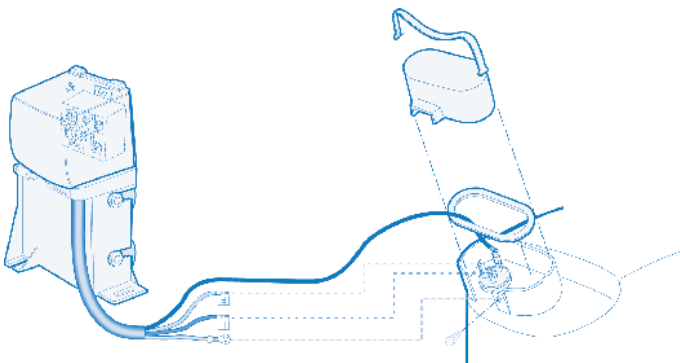
SM 14 NJ SERIES CSIR Box



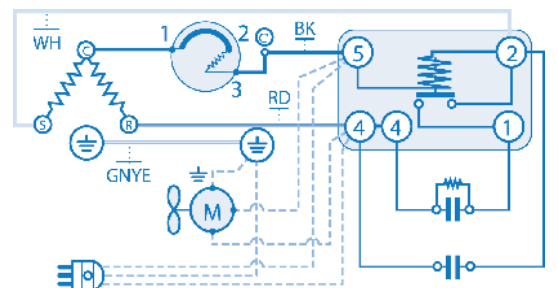
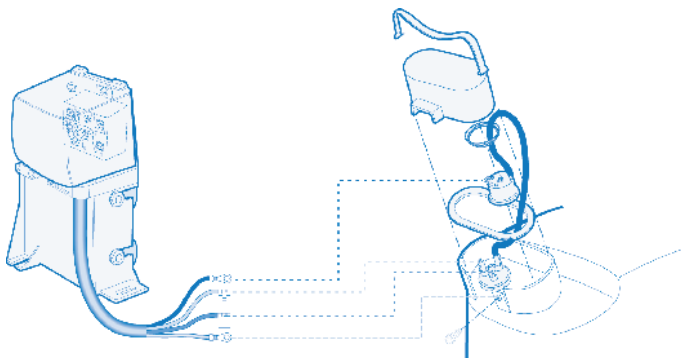
SM 15 NJ SERIES PSC



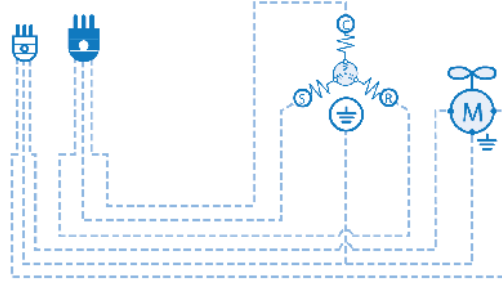
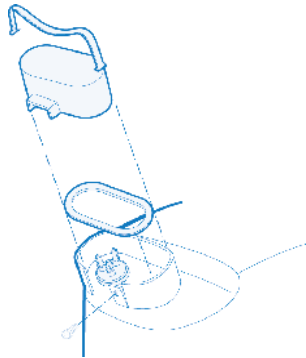
SM 16 NJ SERIES CSR Box (Internal Overload Protector)



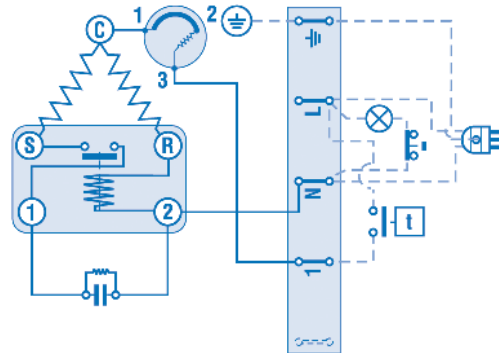
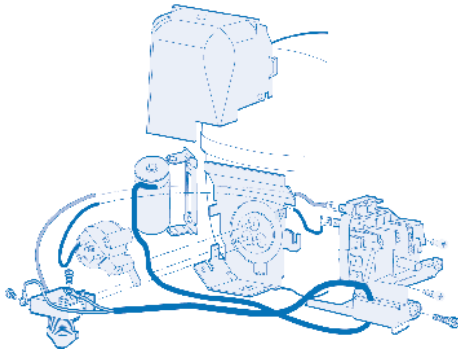
SM 17 NJ SERIES CSR Box



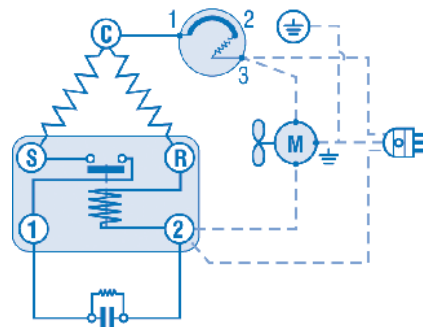
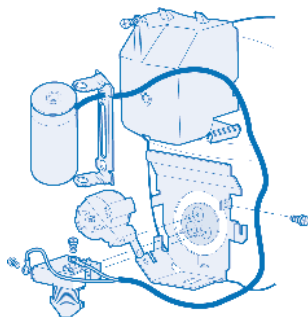
SM 18 NJ SERIES 3-Phase



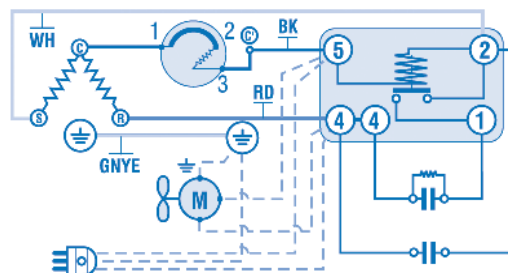
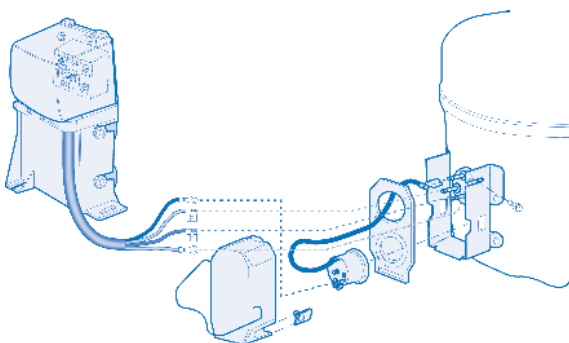
SM 19 NT SERIES CSIR Terminal Board



SM 20 NT SERIES CSIR Simple Cover

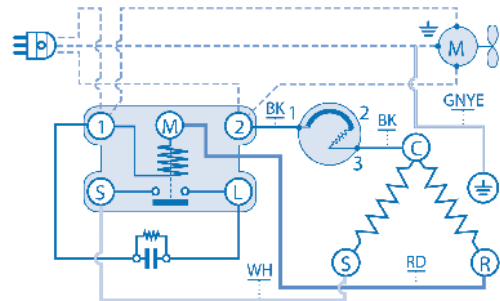
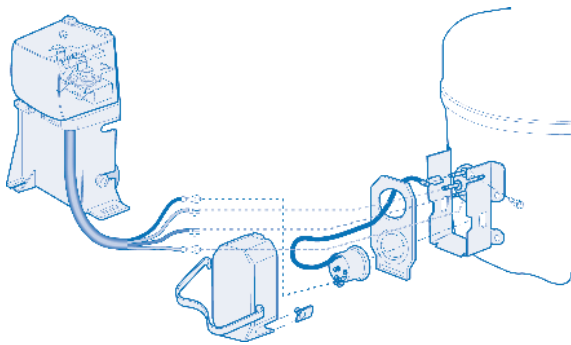


SM 21 NT SERIES CSR Box

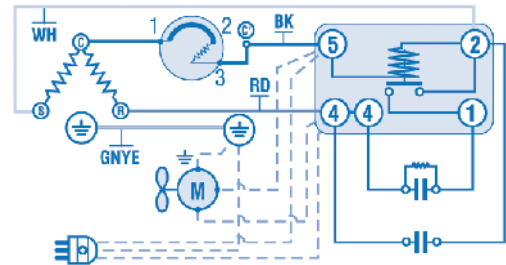
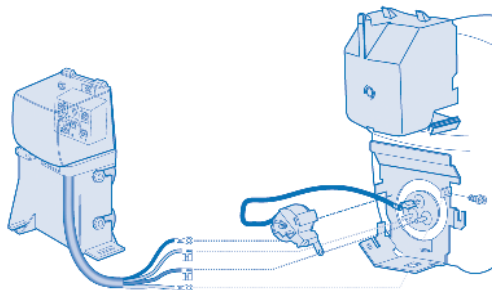


WIRING DIAGRAMS

SM 22 NT SERIES CSIR Box



SM 23 NT SERIES CSR Box



Notice: In order to increase the safety of our product, Embraco proposes the connection of the overload protector to the phase wire (Power Supply). The neutral wire must be connected at the starting relay.