Relay, Protector & Timer

2-Pole Switching Relays

Part No 2pno	Coil Voltage
90-340	24
90-341	110/120
90-342	208/240

CONTACT RATING	POWER	
	120V	208V/250V
Full Load Amps	12	6
Resistive Amps(277 VAC)	15	15
Inrush Amps	60	35
Horsepower	1/2	1/2

SE Series Potential Relay

Part No	Continuous Coil Voitage(V)	Pick-up(V) Min.	Pick-up(V) Max.	Drop-out(V) Max.	SUPCO MODEL
SE-63	170	139	153	55	9063
SE-64	395	260	275	120	9064
SE-65	332	168	182	90	9065
SE-66	395	215	225	120	9066
SE-67	420	295	315	125	9067
SE-68	502	325	345	135	9068
SE-69	336	180	195	105	9069

Heavy Duty Fan Relays

Replaces all three electrical components to rejuvenate older refrigerators and freezers. Solid state design. Mounts with screw or clip.

Model	Contacts Voltage VAC	Amp FLA	Amp LRA	Amp Res	Control Style	Coil Voltage VAC
90-360	120	12	60	18	SPST-NO	24
	240	8	48	18		
	277	7	42	18		
90-370	120	12	60	18	SPDT	24
	240	8	48	18		
	277	7	42	18		
90-374	120	12	60	18	SPDT	208/240
	240	8	48	18		
	277	7	42	18		
90-380	120	12	60	18	SPNO-SPNC	24
	240	8	48	18		
	277	7	42	18		

QD Series Overload Protector

Part No	Horsepower (Hp)	Break Time (S)	Temperature (℃)
QD-18	1/8	7-15	25±2
QD-16	1/6	7-15	25±2
QD-15	1/5	7-15	25±2
QD-14	1/4	7-15	25±2
QD-13	1/3	7-15	25±2

RP Series Push-on Type Relay

Part No	Pick-up Current(A)	Drop-out Current(A)	Horsepower (Hp)
RP18	3.15	2.5	1/8
RP16	3.75	3	1/6
RP15	4.75	3.75	1/5
RP14	5.35	4.25	1/4
RP13	6	5.2	1/3
RP12	8.4	7	1/2

PP1100 Series Relay Protector

Part No	Resistance (Ω)	Voltage (V)	Current (A)
PP1100-1	5	110	4
PP1100-2	22	220	6

PO Series Relay

Part No	Voltage (V)	Horsepower (Hp)
PO115	115	1/12 thru 1/2
PO230	230	1/12 thru 1/2

ICA Series Relay and Overload Combination

Part No	Voltage (v)	Frequency (Hz)	Horsepower (Hp)
ICA-13	120	50/60	1/4,1/3
ICA-15	120	50/60	1/8,1/6,1/5
ICA-23	240	50/60	1/4,1/3
ICA-25	240	50/60	1/8,1/6,1/5

RO Series Relay and Overload Combination

Part No	Reference Gemline	Horsepower (Hp)	Voltage
RO-81	IC-15	1/12 thru 1/5	115
RO-41	IC-13	1/4 and 1/3	115
RO-82	—	1/12,1/10 and 1/8	230
RO-62	IC-25	1/6 and 1/5	230
RO-42	IC-23	1/4 and 1/3	230

MZ Series PTC Starting Relay with One, Two and Three Heads

PW Series Relay

Part No	Pick-up Current(A)	Drop-out Current(A)	Overload Current(A)	Break Timedelay(S)
PW4.5A	3	2.5	6.5	7--15
PW5.5A	3.7	3	7.8	7--15

PW Series Relay

Part No	Pick-up Current(A)	Drop-out Current(A)	Horsepower (Hp)
PW-S1	4.25	3.35	1/5
PW-S2	4.75	3.75	1/4
PW-S3	5.3	4.25	1/3

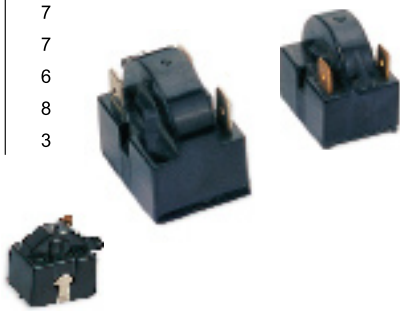
ICG Series Relay

Part No	Voltage (V)	Horsepower (Hp)
ICG-1	115	1/12 thru 1/2
ICG-220	230	1/12 thru 1/2

IC Series Solid State Relay

Part No	Voltage (V)	PTC Resistance (Ω)
IC-1	110	5±20%
IC-2	220	22±20%
IC-3	220	22±20%
IC-4	220	22±20%

Part No	Resistance at 25℃(Ω)	Voltage (V)	Recovery Time(S)	Current (A)	Power (W)
MZ-12	12	≥450	≤80	6	6
MZ-15	15	≥600	≤80	7	7
MZ-22	22	≥600	≤80	7	7
MZ-33	33	≥600	≤80	6	6
MZ-47	47	≥600	≤80	8	8
MZ-100	100	≥600	≤80	3	3



SPP Starter Pow-R-Pak

Part No	Voltage (V)	Increased Torque
SPP	115-230	210 Ounce Inches

QD-072 Delay on Break

SPECIFICATIONS

18-240 VAC/VDC

1.5 Amp.

1.5 Amp.inrush.

SPST,N.O.

Knob-Adjustable delays from

0.03 to 10 min.(1.8 to 600sec.)

QD-068 Delay on Make Timer

SPECIFICATIONS

18-240 VAC/VDC

1.5 Amp.

1.5 Amp.inrush.

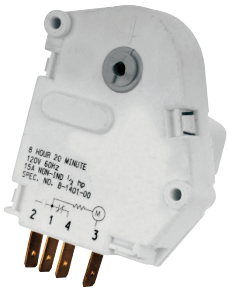
SPST,N.O.

Adjustable delays from

0.03 to 10 min.(1.8 to 600sec.)

Defrost Type Timer

Part No	Supco Part No	Defrost Frequency (Hours)	Defrost Time (Mins.)
CC904	SPB931WP	8	21
CC900	SPG1111GE	6	25
CC902	SPF1111F	8	20
CC905	SPJ111AM	8	32
CC903	SPL111W	6	25
CC901	SPN1111AD	6	21



Defrost Type Timer

Part No	Supco Part No	Defrost Frequency (Hours)	Defrost Time (Mins.)
CC922	A1401AD	6	21
CC925	B1401F	8	20
CC926	D1401AM	8	32
CC923	G1401GE	6	25
CC924	K1401GE	10	30
CC927	P1401WE	6	25

Defrost Type Thermostat

MODEL	RATED CURRENT	OPERATING TEMP.	RESET TEMP.	RESET TIME
	(A)	(℃)	(℃)	(S)
ST-3(2HEADS)	5	-2	11	15
ST-3(3HEADS)	5	-10	16	15
STH-2	5	-10	21	15

Thermostat

Temperature °F

Part	Open	Close
ML45	45	25
ML50	50	30
ML55	55	35
ML60	60	40
ML70	70	50
ML80	80	30
ML90	90	35
SLT45	45	22
SLT50	50	10
SLT80	80	15

L Series Thermostats, Single Pole-Single Throw

PART NO.	°DIFF.	OPEN °F	CLOSE °F	PART NO.	°DIFF.	OPEN °F	CLOSE °F
L120	10	120	110	L180-40	40	180	140
L125	10	125	115	L190	40	190	150
L130	15	130	115	L200	40	200	160
L135	15	135	120	L205	40	205	165
L140	20	140	120	L225	40	225	185
L145	20	145	125	L240	40	240	200
L150	20	150	130	L250	40	250	210
L155	20	155	135	L260	40	260	220
L160	20	160	140	L270	40	270	230
L165	20	165	145	L290	40	290	250
L170	20	170	150	L300	40	300	260
L175	20	175	155	L320	40	320	280
L180-20	20	180	160	L340	40	340	300

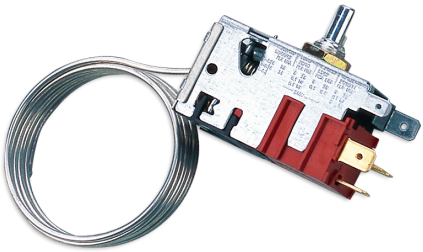
Cooling Only Thermostat
with system off,cool and
fan on/auto switch
working range:50°F -90°F
10℃-32℃

Thermostat F2000

Rating voltage:250V 50Hz/60Hz
Available temperature:-35℃~35℃
Differential:2℃~10℃

Thermostat A2000

Rating voltage:250V 50Hz/60Hz
Available temperature:-35℃~35℃
Differential:2℃~10℃



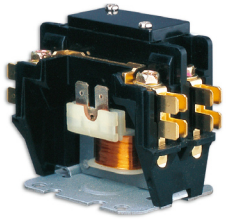
Danfoss Series Thermostat

Rating voltage:125/250VAC
Rating current:12FLA, 40LRA
Differential:-42℃~11℃
This series is applicable for refrigerator, freezer, two-temperature refrigerator, defrost refrigerator, cooler etc.

K Series Thermostat

ENDS CAPPED, IN SHRINKING WRAPPED BAG IN CARDBOARD BOX

Model	Cold ON	Operating Cold OFF	Temperature(℃) Warm ON	Warm OFF	Capillary Length (mm)
K50-P1125	-9.5	-18	8.5	--	1200
K50-P1126	-18	-24.5	-9.5	--	1200
K50-P1127	5	1.5	12.5	--	1200
K50-P1272	-17	-27	-12	-20	1200
VF3=K50-P1117	-22	-30	-7	-12	1200~2550
VA2=K50-P1174	-14	-17	-5	3	1200~2550
VB7=K50-P1118	1.8	-3.3	13	8	1200~2550
VW8=K55-L5010	18.5±1.5	16±1.5	35±2	33±2	1200~2550
VC1=K50-P1110	-14.5±1.5	-23±1.5	2±2	--	1200
K50-P1179	-10±1.5	-20±1.5	--	-10±2	800±20
K50-P1392	-22±2	-30±2	-14±1.5	-20±1.5	340±20
WL-0.5K	$2.8^{+1}_{-0.5}$	$0.5^{+1}_{-0.5}$			340±20
WL-OK	$3.5^{+1}_{-0.5}$	$0^{+1}_{-0.5}$			600±20
VS5=K54-P1102	-20±2	- 26±2	-11.5±1.5	-16±1.5	2000±20
VP4=K60-P1013	-15±2	- 24±2	-4±1.5	-11±1.5	900~1200
VT9=K59-L1102	3.5±1.5	-22±2	3.5±1.5	-12±1.5	1200±20
WDF-19K	3.5±1.5	-19±2	3.5±1.5	-9±2	800
WDF-19KA	3.5±1.5	-19±2	3.5±1.5	-9±2	800
WDF-22K	-16	-22	-5	-10	1000
WPF-1K	5	1.5	12.5	9	1000
K59-P4881	3.5	-24	3.5	-14	1130
K50-P6088	-13.5	-26	-7	-17.5	1130
K59-P6815	3.5±1.5	-22±2	3.5±1.5	-12±1.5	800±20



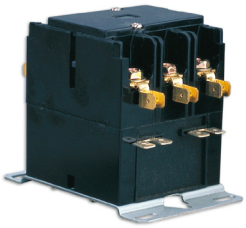
Definite Purpose Contactors

One Pole With Shunt Contactors

Full Load Amp	Coil Voltage 50/60Hz	Line Voltage	Locked Rotor Amp	ResistiveAmp Rating	Maximum HP	
					Voltage	Single Phase
			20FLA-1POLE			
20	24 120 208/240 277	240/227 480 600	120 100 80	30 30 30	120 240 -	1 2 -
25	24 120 208/240 277	240/227 480 600	25FLA-1POLE 150 125 100	35 35 35	120 240 -	1 2 -
30	24 120 208/240 277	240/227 480 600	30FLA-1POLE 150 125 100	40 40 40	120 240 -	1 2 -
40	24 120 208/240 277	240/227 480 600	40FLA-1POLE 200 160 120	50 50 50	120 240 -	2 3 -

Two Pole Contactors

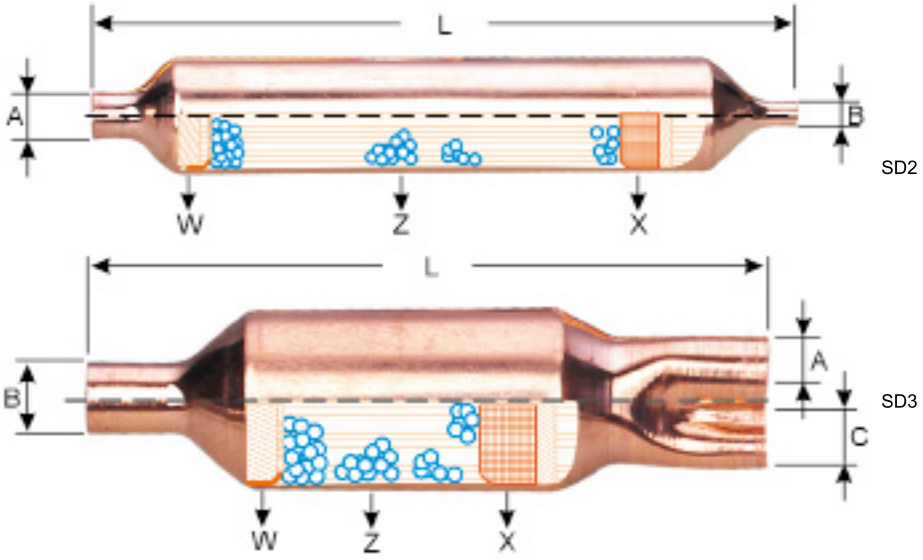
Full Load Amp	Coil Voltage 50/60Hz	Line Voltage	Locked Rotor Amp	ResistiveAmp Rating	Maximum HP	
					Voltage	Single Phase
			20FLA-2POLE			
20	24 120 208/240 277	240/227 480 600	120 100 80	30 30 30	120 240 -	2 3 -
25	24 120 208/240 277	240/227 480 600	25FLA-2POLE 150 125 100	35 35 35	120 240 -	2 3 -
30	24 120 208/240 277	240/227 480 600	30FLA-2POLE 150 125 100	40 40 40	120 240 -	2 3 -
40	24 120 208/240 277	240/227 480 600	40FLA-2POLE 200 160 120	50 50 50	120 240 -	2 3 -



Three Pole Contactors

Full Load Amp	Coil Voltage 50/60Hz	Line Voltage	Locked Rotor Amp	ResistiveAmp Rating	Voltage	Maximum HP Single Phase	Three Phase
			20FLA-3POLE				
20	24	240/227	120	30	120	1.5	-
	120	480	100	30	240/270	3	7.5
	208/240	600	80	30	480/600	-	7.5
	277						
			25FLA-3POLE				
25	24	240/227	150	35	120	2	-
	120	480	125	35	240/270	5	10
	208/240	600	100	35	480	-	15
	277				600	-	20
			30FLA-3POLE				
30	24	240/227	180	40	120	2	-
	120	480	150	40	240/270	5	10
	208/240	600	120	40	480	-	15
	277				600	-	20
			40FLA-3POLE				
40	24	240/227	240	50	120	3	-
	120	480	200	50	240/270	7.5	10
	208/240	600	160	50	480	-	20
	277				600	-	25

Filter Dryer



gr.	D ϕ	SD2 L	SD3 L	gr.	D ϕ	SD2 L	SD3 L	gr.	D ϕ	SD2 L	SD3 L	gr.	D ϕ	SD2 L	SD3 L
5	16	78	83	10	19	95	98	20	24	111	116	50	30	160	168
7	16	92	97	12	19	103	108	25	24	130	135	60	30	178	185
7.5	16	96	101	13	19	108	113	30	24	140	145	70	30	195	200
8	16	101	106	15	19	120	125	35	24	155	160	80	30	210	215
10	16	112	117	18	19	128	133	40	24	170	175				
				20	19	141	146	50	24	200	205				
		±2	±2			±2	±2			±2	±2			±2	±2

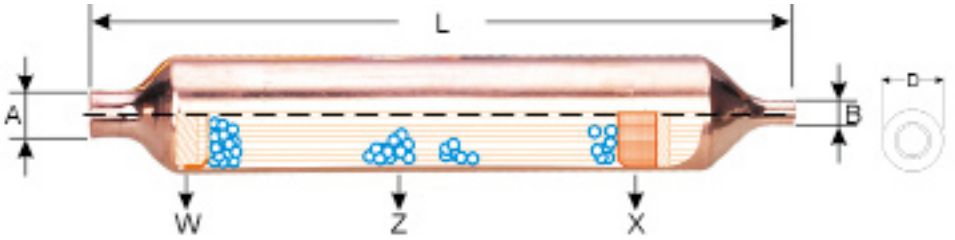
Filter's body:Copper tube thickness 0.50mm

Z=Molecular Sieve: specify the used refrigerant

W=Copper plated perforarted baffle

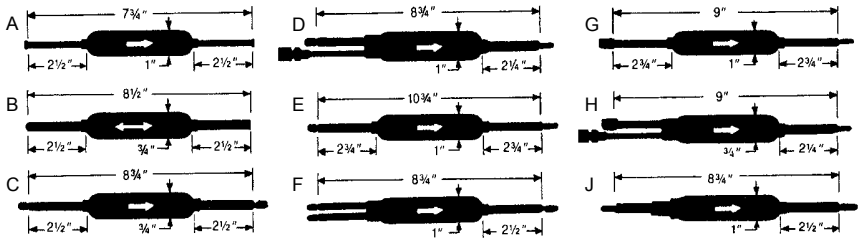
X=Phosphore-bronze wire cloth 130m

SD Series A-B-C:In and out connections protected by plastic caps.

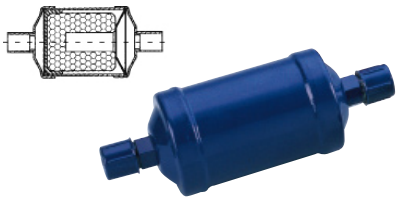


TYPE	MOLEC. SIEVE gr.	FILTER SIZES Φ(mm)	FILTER SIZES l(mm) ±3	CONNECTION L(mm) ±3	CONNECTION A(mm)	CONNECTION B(mm)
FD10	10	19	105	225	2.5	6.35
FD15	15	19	125	250	2.5	6.35
FD20	20	24	120	245	2.5	6.35
FD25	25	24	140	265	3.1	6.35
FD30	30	24	150	275	3.1	6.35
FD50	50	30	168	315	3.1	6.34

Size Chart



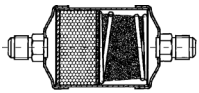
PART NO.	DESCRIPTION	INLET	OUTLET	DIMENSIONS (See chart above)
SUD 103	1" Plugged Ends	1/4" O. D.	1/4" O. D.	A
SUD 109	3/4" Non-Directional	1/4" O. D.	1/4" O. D.	B
SUD 110	3/4" Fused Ends	1/4" O.D.	1/4" O.D.	C
SUD 111	1" Charging Drier	1/4" O.D. 1/4" Flare	1/4" O.D. or Cap	D
SUD 112	1" Step Down Drier	5/16" O.D.	5/16" O.D. or Cap	E
SUD 113	1" Double Inlet	(2)1/4" O. D.	1/4" O. D.	F
SUD 114	1" Fused Ends	1/4" I.D. 1/4" O. D.	1/4" O.D. or Cap	G
SUD 115	3/4" Charging Drier	1/4" I.D. 1/4" O. D. 1/4" Flare	1/4" O. D. or Cap	H
SUD 116	1" Step Down Drier	3/16", 1/4", 5/16" I.D.	5/16" I.D. or Cap	J



SADK

Series Liquid Line Filter-Driers
(Alco Type)

JOINT TYPE: ODF or SAE
Maximun working pressure: 4.14Mpa



SEK

Series Liquid Line Filter-Driers
(Alco Type)

JOINT TYPE: ODF or SAE
Maximun working pressure: 4.14Mpa

SDML/SDCL

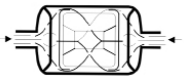
Series Liquid Line Filter Drier
(Danfoss Type)

SDML: core-100% molecular sieves recommended for HFC 'S with POE and PAG oils.
SDCL :core-80% molecular sives with 20% activated alumina recommended for HCFC's and CFC's with mineral and alkyl benzene oils.
JOINT TYPE: ODF or SAE
Maximun working pressure: 4.2Mpa

"C" Series

Liquid Line Filter Drier
(Sporlan Type)

JOINT TYPE: ODF or SAE
Maximun working pressure: 4.482Mpa



SBFK

Series Liquid Line Bi-Directional
Heat Pump
(Alco Type)

JOINT TYPE: ODF or SAE
Maximun working pressure: 4.14Mpa

SADKS

Series Liquid Line and Suction Line Filter-Driers
(Alco Type)

Replaceable core filter-drier for large commercial air conditioning and refrigeration systems
Joint Type: ODF
Maximun working pressure
Liquid Line: 3.4 Mpa
Suction Line : 2.7 Mpa

SO

Series Refrigerant oil separators
(Alco Type)

Joint Type: ODF
Maximun working pressure:
3.1 Mpa

SR

Series Refrigerant Receivers
(Asian First Type)

Joint Type: Inlet/Outlet ODF
Maximun working pressure:
4.5 Mpa

SA

Series Suction Line Accumulators
(Asian First Type or Alco Type)

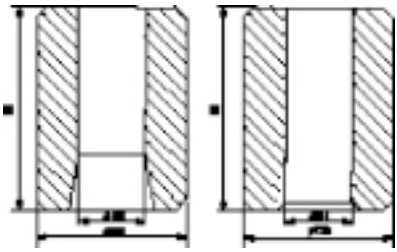
Joint Type: ODF
Maximun working pressure:
3.1Mpa

SE

Series Heat Exchanger Suction Line Accumulators
(Alco Type)

Joint Type: ODF
Maximun working pressure:
3.1Mpa

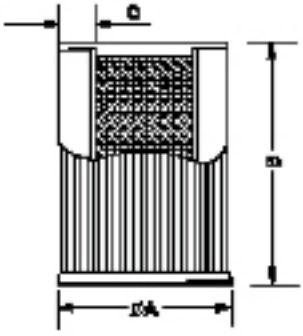
Core Filter



D48 H100

D(H) LIQUID LINE BLOCKS

TYPE	D1(in)	D2(in)	L(in)
D48	1.85	3.78	5.51
H48	1.85	3.78	5.51
H100	2.09	4.80	6.50



LX Suction Line Filter Core

TYPE	D1(in)	D2(in)	L(in)
LX48	3.74	5.51	0.79
LX100	4.69	6.54	1.10