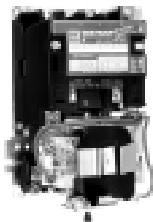


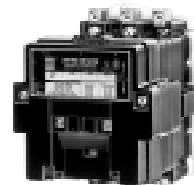
Lighting Control

Multipole Lighting Contactors, Type S – Class 8903



Features

- Electrically and mechanically held
- 30 - 800 Amp lighting ratings
- 2 thru 5 pole versions (5 poles thru 200 Amps)
- UL Listed short-circuit rating up to 100,000 Amperes
- Mixed load ratings (lighting and motor)
- Factory wired controls and clearly marked termination points
- Quick ship on most items in 5-7 days



Multipole Lighting Contactors – Type S (50-60 Hz)

Contact Ampere Ratings	No. of Poles	NEMA Type 1 General Purpose Enclosure	NEMA Type 1 Flush Mounting General Purpose Enclosure with Plaster Adjustment	NEMA Type 3R Rainproof Enclosure	NEMA Type 4 & 4X Watertight, Dusttight and Corrosion-Resistant Glass-Polyester Enclosure	NEMA Type 4 & 4X▲ Watertight and Dusttight Enclosure	NEMA Type 12‡ Dusttight and Driptight Industrial Use Enclosure	Open Type
		Type	Type	Rainproof Enclosure Type	Type	Type	Type	Type
Electrically Held▼								
30	2	SMG1*	SMF1*	SMH1*	SMW21*	SMW1*	SMA1*	SMO1*●
	3	SMG2*	SMF2*	SMH2*	SMW22*	SMW2*	SMA2*	SMO2*●
	4	SMG3*	SMF3*	SMH3*	SMW23*	SMW3*	SMA3*	SMO3*●
60	2	SPG1*	SPF1*	SPH1*	SPW21*	SPW1*	SPA1*	SPO1*●
	3	SPG2*	SPF2*	SPH2*	SPW22*	SPW2*	SPA2*	SPO2*●
	4	SPG3*	SPF3*	SPH3*	SPW23*	SPW3*	SPA3*	SPO3*●
100	2	SQG1*	SQF1*	SQH1*	SQW21*	SQW1*	SQA1*	SQO1*●
	3	SQG2*	SQF2*	SQH2*	SQW22*	SQW2*	SQA2*	SQO2*●
	4	SQG3*	....	SQH3*	....	SQW3*	SQA3*	SQO3*●
200	2	SVG1*	....	SVH1*	....	SVW1*	SVA1*	SVO1*
	3	SVG2*	....	SVH2*	....	SVW2*	SVA2*	SVO2*
	4	SVG3*	....	....	....	SVW3*	SVA3*	SVO3*
300	2	SXG1*	....	....	....	SXW1*	SXA1*	SXO1*
	3	SXG2*	....	....	....	SXW2*	SXA2*	SXO2*
	4	SYG1*	....	....	....	SYW1*	SYA1*	SYO1*
400■	2	SYG2*	....	....	....	SYW2*	SYA2*	SYO2*
	3	SZG1*	....	....	....	SZW1*	SZA1*	SZO1*
	4	SZG2*	....	....	....	SZW2*	SZA2*	SZO2*
600■	2	SJG1*	....	....	....	SJW1*	SJA1*	SJO1*
	3	SJG2*	....	....	....	SJW2*	SJA2*	SJO2*
	4	....	....	....	....	....	....	....
800■	2	....	....	....	....	....	....	....
	3	....	....	....	....	....	....	....
	4	....	....	....	....	....	....	....
Mechanically Held▼								
30	2	SMG10*	SMF10*	....	SMW31*	SMW10*	SMA10*	SMO10*●
	3	SMG11*	SMF11*	....	SMW32*	SMW11*	SMA11*	SMO11*●
	4	SMG12*	SMF12*	....	SMW33*	SMW12*	SMA12*	SMO12*●
60	2	SPG10*	SPF10*	....	SPW31*	SPW10*	SPA10*	SPO10*●
	3	SPG11*	SPF11*	....	SPW32*	SPW11*	SPA11*	SPO11*●
	4	SPG12*	SPF12*	....	SPW33*	SPW12*	SPA12*	SPO12*●
100	2	SQG10*	SQF10*	....	SQW31*	SQW10*	SQA10*	SQO10*●
	3	SQG11*	SQF11*	....	SQW32*	SQW11*	SQA11*	SQO11*●
	4	SQG12*	....	....	....	SQW12*	SQA12*	SQO12*●
200	2	SVG10*	....	....	....	SVW10*	SVA10*	SVO10*
	3	SVG11*	....	....	....	SVW11*	SVA11*	SVO11*
	4	SVG12*	....	....	....	SVW12*	SVA12*	SVO12*
300	2	SXG13*	....	....	....	SXW13*	SXA13*	SXO13*
	3	SXG14*	....	....	....	SXW14*	SXA14*	SXO14*
	4	SYG16*	....	....	....	SYW16*	SYA16*	SYO16*
400	2	SYG17*	....	....	....	SYW17*	SYA17*	SYO17*
	3	SZG18*	....	....	....	SZW18*	SZA18*	SZO18*
	4	SZG19*	....	....	....	SZW19*	SZA19*	SZO19*
600	2	SJG10*	....	....	....	SJW10*	SJA10*	SJO10*
	3	SJG11*	....	....	....	SJW11*	SJA11*	SJO11*
	4	....	....	....	....	....	....	....
800	2	....	....	....	....	....	....	....
	3	....	....	....	....	....	....	....
	4	....	....	....	....	....	....	....

‡ NEMA Type 12 enclosures may be field modified for outdoor applications or NEMA Type 3R separate enclosures can be ordered. See the Class 9991 Section in Catalog 9999CT9701.
 ● Separate enclosures are available for these devices. It may be possible to improve delivery by ordering an open type contactor and separate Class 9991 enclosure.
 ▲ NEMA Type 4 & 4X enclosures are brush finished stainless steel for contactors sized 30 Amp thru 300 Amp. Sizes 400 Amp thru 800 Amp are painted sheet steel.
 For electropolished finish, specify Form G16.
 ■ Form F4T is provided as standard; include line voltage when ordering. Control voltage is 120-60.
 * Voltage code must be specified to order this product. Refer to standard voltage codes below.
 ▼ All lighting contactors are provided with separate control as standard.

Coil Voltage Codes

Voltage		Code
60 Hz	50 Hz	
24♦	...	V01
120	110	V02
208	...	V08
240	220	V03
277	...	V04
480	440	V06
Specify	Specify	V99

♦ 24 volt coils are not available for 200 Amp thru 800 Amp devices. Contact local Square D Field Sales Office for additional information.

Poles for Type S Only

A single-pole or double-pole kit can be added to any 2 or 3 pole 30 or 60 Ampere Type S lighting contactor to make a 4 or 5 pole device. Factory assembled 4 and 5 pole contactors utilize the basic 3 pole device with a single or double-pole kit installed. Only one power pole can be added per contactor. Sufficient room is provided in all enclosure styles for the addition of a power pole kit.

Ampere Rating	Description	Class 9999 Type
30	One N.O.	SB6
	One N.C.	SB7
	One N.O. and One N.C.	SB8
	Two N.O.	SB9
	Two N.C.	SB10
60	One N.O.	SB21
	One N.C.	SB22*
	One N.O. and One N.C.	SB23*
	Two N.O.	SB24*
	Two N.C.	SB25*

* When power pole is added to 60 A contactor, a 4-pole coil is also required. Order from Coil Table in Catalog 9999CT9701. 60 A power poles are suitable for use with copper or aluminum wire.



Lighting Control

Class 8903 – Modifications (Forms)

Description	Form Letter	NEMA Enclosure Type	Used On				NIGHT-MASTER® ①
			Std.		Combo		
			Elec. Held	Mech. Held	Elec. Held	Mech. Held	
"On-off" (momentary contact) push button	A3	1		*		*	
	A3	3R, 4, 12		*		*	
"On-off" push button (with holding circuit interlock)	A12	Any	*		*		*
"HAND-OFF-AUTO" selector switch. For key operator, add Form C33, i.e. CC33	C	1	*	*	*	*	
	C	3R, 4, 12	*	*	*	*	*
"On-off" selector switch. For key operator, add Form C33, i.e. C6C33	C6	1	*	*	*	*	
	C6	3R, 4, 12	*	*	*	*	*
Control circuit fuse (1 fuse)	F	Any	*	*	*	*	*
Control circuit fuses (2 fuses)	F4	Any	*	*	*	*	*
Control circuit transformer standard capacity 50/60 Hz	F4T	Any	*	*	*	*	*
Primary (Fuses) Secondary							
2 100 Cap. 0 ③, ④ for 300 A							
2 100 Cap. 1 ③, ④ for 300 A	FF4T	Any	*	*	*	*	*
2 100 VA Add. Cap. 1 ④ for 200 and 300 A	FF4T11	Any	*	*	*	*	*
2 200 VA Add. Cap. 1 ④ for 100, 200 and 300 A	FF4T12	Any	*	*	*	*	*
2 300 VA Add. Cap. 1 ④ for 30 to 300 A	FF4T13	Any	*	*	*	*	*
Noise reduced enclosure and shock mounted panel	G4	Any		*		*	
Addition of photoelectric receptacle	G10	1, 3R, 12	*		*		*
Addition of photoelectric receptacle with photo-cell	G101	1, 3R, 12	*		*		*
Addition of photoelectric receptacle and relay (R6)	G10R6	1, 12		*		*	
With photo-cell installed	G101R6	1, 12		*		*	
Addition of terminal blocks (other than standard). "xx" Represents the number of terminals needed.	G50xx	Any					
(PER TERMINAL PRICE) WIRED			*	*	*	*	*
(PER TERMINAL PRICE) UNWIRED			*	*	*	*	*
Bracketing for internally mounted pilot device	G53	Any	*	*	*	*	*
Addition of 24 hour time clock (120-277v only)	K14	1, 4, 12	*	*	*	*	*
Addition of 24 hour time clock w/day omission (120-277v)	K141	1, 4, 12	*	*	*	*	*
Addition of 7 day time clock (120-277v)	K142	1, 4, 12	*	*	*	*	*
Addition of 8865 TC12 lighting controller to lighting contactors of any size. REQUIRES A 24V 60 Hz CONTROL CIRCUIT.	K143	1, 4, 12	*	*			
Addition of 24 hour time clock (120-277v only)	K14	3R					*
Addition of 24 hr time clock w/skip day (120-277v)	K141	3R					*
Addition of 7 day time clock (120-277v)	K142	3R					*
Addition of solid neutral terminal block	N	1, 4, 12	*	*	*	*	Std.
Red Pilot Light	P1	Any	*	*	*	*	*
Two or more lights ⑥ (each)	P	Any	*	*	*	*	*
Red Push To Test Pilot Light	P21	Any	*	*	*	*	*
Interlock necessary for pilot light one needed for each additional pilot light	②, ⑦	Any	*	*	*	*	*
Two Wire Interface for Mechanically held	R6	Any		*		*	
Three wire control for long distance applications.	R62	Any		*		*	
Auxiliary contacts (specify number of N.O. + N.C.)	X ⑦	Any	*	*	*	*	*
Addition of DC coil to Type L (7 poles max)	Y48	Any	*				
Auxiliary electrical interlock installed on disconnect switch or circuit breaker operating mechanism	Y74	Any			*	*	*
Coil Transient suppressor (120Vac Only)	Y145	Any	*		*		*
Coil Transient suppressor (120Vac Only)	Y145	Any		*		*	*
Addition of lightning arrestor	Y1532	3R, 4, 12	*	*	*	*	*
Substitute copper only lugs for standard	Y157	Any	*	*	*	*	*
Substitute Anderson VC crimp style lugs for standard – per lug adder – specify lug	Y1574	Any	*	*	*	*	*
Addition of under and overvoltage relay	Y449	Any	*	*	*	*	*
Multiple contactors in common enclosure "xx" = number of contactors needed ⑤	Y10XX	1, 4, 12	*	*			

* Available.

- ① NIGHT-MASTER maximum 200 Amps, minimum 30 Amps.
- ② DO NOT use Form X for any interlock which is wired in series with pilot light, but DO specify how pilot light and interlock are to be wired into the circuit.
- ③ Not required on 400 A through 800 A electrically held versions only, which have a control circuit requiring a 120V secondary; therefore, a transformer is supplied. The transformer comes wired to L1 and L2 unless Form "S" is called for. It is supplied with two primary and one secondary fuse.
- ④ Single primary voltage must be specified using the codes shown below:

Voltage 60 Hz	Code
120-24	V89
208-120	V84
240-24	V82
240-120	V80
277-120	V85
480-24	V83
480-120	V81
480-240	V87
600-120	V86

⑤ Limited to 16 contactors thru 60 Amps, 4 contactors thru 200 Amps.

- ⑥ For electrically-held enclosed devices, the first pilot is wired in parallel with the coil. Operating interlocks are required for all additional pilot lights. Mechanically held devices require operating interlocks for all pilot lights.
- ⑦ Electrically held 20 Amp multipole contactors cannot add interlocks. Additional poles can be used for the same function, however. Mechanically held (Type LX) provide one double throw auxiliary (or status) contact as standard.

Order Example

You have previously selected a Class 8903SMG2V02. V02 means that you need a coil voltage of 120-60/110-50 wired for separate control. You would like to add form FF4T with the transformer voltages being 480 volt primary, 120 volt secondary.

The new and complete Class, Type, Voltage Code and Form number:

Class 8903 Type SMG2 VoltageCode V81 Form♦ FF4T

♦ Form numbers should always be shown in alphabetical order.

