

Selection Information



Class	2510, 2511, 2512	T02, T36	8502 & 8702	8536 & 8736	8538 & 8738
		NEMA Style, Full Voltage Non-Reversing and Full Voltage Reversing			
Type of Product	Manual Starters and Switches, Non-Reversing, Reversing and Two Speed	TeSys™ N Contactors and Starters	AC Magnetic Contactors	AC Magnetic Starters	Combination Magnetic Starters with Disconnect Switch
Page	page 16-4	page 16-14	8502: page 16-30 8702: page 16-61	8536: page 16-35 8736: page 16-63	8538: page 16-48 8738: page 16-68
NEMA Sizes	M-0 M-1 M-1P	00–7	00–7	00–7	8538: 0–6 8738: 0–5
Load Voltage	Type F: 277 Vac Types K & M: 600 Vac	600 Vac Max.	600 Vac Max.	600 Vac Max.	600 Vac Max.
Current Ratings (Continuous)	Type F: 16 A Types K & M: 30 A	9–810 A	9–810 A	9–810 A	8538: 18–540 A 8738: 18–270 A
Horsepower Ratings (Maximum)	Type F: 1 Type K: 20 Type M: 10	600	0.5–600	0.5–600	8538: 0.5–400 8738: 0.5–200
Overload Relay	Type F: Melting Alloy Type K: N/A Type M: Melting Alloy	Contactors: N/A Starters: Bimetallic (Size 00-2) or Solid-State	N/A	Melting Alloy Bimetallic (Size 00–2) Solid State	Melting Alloy Bimetallic (Size 0–2) Solid State
Enclosure Types	1, Flush Mount, 3R, 4, 4X, 7 & 9 and Open	Open	1, 3R, 4, 4X, 12/3R, 7 & 9 and Open	1, 3R, 4, 4X, 12/3R, 7 & 9 and Open	1, 4, 4X, 12/3R
Approvals	UL File E42243 NLRV UR File E42243 NLRV2 CSA File LR 25490	Contactors: UL File E164862 NLDX CSA LR43364 Class 3211-24 Starters: UL File E152395 NKJH CSA LR60905 Class 3211-24	UL File E78351 NLDX CSA 60905 Class 3211-04	UL File E78351 NLDX CSA 60905 Class 3211-04	UL File E152395 NKJH7 CSA LR584 Class 3211 04

Catalog Numbering System

Type S C G 3 V02

Form S

Class 8536

General Classification

8502	Contactors
8536	Starter
8538	Combination Starter with Disconnect Switch
8539	Combination Starter with Circuit Breaker
8702	Reversing Contactor
8736	Reversing Starter
8738	Reversing Combination Starter with Disconnect Switch
8739	Reversing Combination Starter with Circuit Breaker
8810	Two Speed Starter ▲
8903	Type S Lighting Contactors ▲
8940	Pumping Plant Panel ▲
8941	Duplex Controller ▲

▲Consult the Table of Contents for page numbers.

Design

Type S NEMA Contactors and Starters

NEMA Size		Rating (8903 only)	
A	Size 00		
B	Size 0	M	30 A
C	Size 1	P	60 A
D	Size 2	Q	100 A
E	Size 3	V	200 A
F	Size 4	X	300 A
G	Size 5	Y	400 A
H	Size 6	Z	600 A

Enclosure

A	NEMA 12 Industrial Use
F	NEMA 1 Flush Mounting General Purpose
G	NEMA 1 General Purpose Surface Mounting
H	NEMA 3R Rainproof
O	Open Style Device (no enclosure)
W	NEMA 4X Corrosion Resistant

Numerals

Used to designate specific physical arrangements, such as the number of poles, fuse clip size, etc.; but the numbering varies with the Class of the equipment. Consult the Digest listings for the specific device numbers.

Voltage Code

AC operated devices without control transformer

Code	Voltage/Frequency
V01	24/60
V02	120/60 or 110/50
V06	480/60 or 440/50
V07	600/60 or 550/50
V08	208/60

V81: 480V Primary, 120 V Secondary for units using a fused transformer control circuit (Form F4T)

This is only a partial listing. Consult the Digest page for each product for more options.

Common Forms (factory modifications)

A	Start-Stop pushbuttons in the enclosure cover
C	Hand-Off-Auto selector switch in the enclosure cover
E	Bimetallic overload relays
F4T	Fused transformer control circuit (primary fuses only)
FF4T	Fused transformer control circuit (primary & secondary fuses)
H	Solid-state overload relay (SSOLR)
P1	Red ON pilot light in the enclosure cover
P2	Green OFF pilot light in the enclosure cover
S	Separate control circuit
X01	One normally closed auxiliary contact N.C.
X10	One normally open auxiliary contact N.O.

Consult "Factory Modifications (Forms)" for additional Form designations. When more than one Form is applied to a single device, arrange the Forms in alphanumeric order.

See [Motor Overload Protection—Factory Modifications \(Forms\)](#), page 16-120 for additional Form designations and [Solid-State Overload Relay Forms](#), page 16-120 for more information about Motor Logic SSOLRs.

Table 16.78: Coil Voltage Codes

Voltage		Code
60 Hz	50 Hz	
24 [1]	—	V01
120	110	V02
208	—	V08
240	220	V03
480	440	V06
600	550	V07
Specify	Specify	V99

NOTE: These are the common voltages, more are available. Contact Schneider Electric at www.schneider-electric.com/us/ for information about other voltage codes.

[1] 24 V coils are not available on Sizes 4–7. On sizes 00–3, **Form S** (separate control) must be specified.



Type SCO2 Size 1, 3-Pole Contactor

16

NEMA AND DEFINITE PURPOSE
CONTACTORS AND STARTERS

General Information

Class 8502 Type S magnetic contactors are used to switch heating loads, capacitors, transformers, and electric motors where overload protection is provided separately. Class 8502 contactors are available in NEMA Sizes 00–6. Type S contactors are designed for operation up to 600 Vac, 50–60 Hz.

NOTE: In Table 16.80, replace ●●● with the voltage code shown in Table 16.81.

Table 16.80: 3-Pole Polyphase—600 Vac Maximum—50–60 Hz

NEMA Size	Continuous Current Ratings	Motor Voltage	Max. Hp	Open Type	NEMA 1 General Purpose Enclosure	NEMA 4X Watertight, Dusttight Brushed Stainless Steel Enclosure ^[2]
				Type	Type	Type
00	9	200	1.5	SAO12●●●	SAG12●●●	Use Size 0
		230	1.5			
		460	2			
		575	2			
0	18	200	3	SBO2●●●	SBG2●●●	SBW12●●●
		230	3			
		460	5			
		575	5			
1	27	200	7.5	SCO2●●●	SCG2●●●	SCW12●●●
		230	7.5			
		460	10			
		575	10			
2	45	200	10	SDO2●●●	SDG2●●●	SDW12●●●
		230	15			
		460	25			
		575	25			
3	90	200	25	SEO2●●●	SEG2●●●	SEW12●●●
		230	30			
		460	50			
		575	50			
4	135	200	40	SFO2●●●	SFG2●●●	SFW12●●●
		230	50			
		460	100			
		575	100			
5	270	200	75	SGO2●●●	SGG2●●●	SGW12●●●
		230	100			
		460	200			
		575	200			
6	540	200	150	SHO2●●●	SHG2●●●	—
		230	200			
		460	400			
		575	400			

^[2] Stainless steel enclosures are shipped with hubs installed in the top and bottom of the enclosure.

Dimensions for Open Type and NEMA 1 Enclosures

NOTE: These dimensions are for reference only. If you need precise measurements, contact the Customer Care Center at 1-888-778-2733.

Table 16.99: Dimensions for Class 8502 Open Type

NEMA Size	Type	No. of Poles	Fig. No.	Dimensions, in. (Refer to Figure 1)									Wt (lb)
				A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.	I in.	
00	SAO	2-3	1	3.22	4.34	4.22	1.63	1.63	0.22	3.94	—	—	4
0	SBO	1-3	1	3.22	4.34	4.22	1.63	1.63	0.22	3.94	—	—	4
1	SCO	4-5	1	4.25	4.34	4.22	1.63	2.63	0.22	3.94	—	—	4.5
2	SDO	2-3	1	4.31	5.13	4.94	2.16	2.16	0.22	4.59	0.53	1.06	6.75
		4-5		5.63	5.13	4.94	2.16	3.47	0.22	4.59	0.53	1.06	8.25
3	SEO	2-3	1	5.47	7.09	6.5	1.88	3.53	0.31	6.03	3.25	4.75	14
		4-5		9.75	7.88	6.5	3.94	5.81	0.31	7	4.53	9.06	22
4	SFO	2-3	1	6	8.19	6.5	2.06	3.94	0.31	7	3.59	5.31	18
		4-5		9.75	8.19	6.5	3.94	5.81	0.31	7	4.53	9.06	22
5	SGO	2-3	1	8.67	12.31	8.75	3.25	5.81	0.63	11.13	4.75	7.25	45
6	SHO	2-3	1	10.55	28.06	9	3.53	7.03	5.06	18.56	4.75	7.25	80

Table 16.100: Dimensions for 8536 Open Type

NEMA Size	Type	No. of Poles	Fig. No.	Dimensions, in. (Refer to Figure 2)									Wt (lb)
				A in.	B in.	C in.	D in.	E in.	F in.	G in.	H in.	I in.	
00, 0, 1, 1P	SAO - SCO	2-3	2	3.5	6.77	4.22	0.5	1	1.61	0.2	6.25	3.97	5
0, 1	SBO - SCO	4	2	4.53	6.77	4.22	0.5	1	2.67	0.2	6.25	3.97	5.5
2	SDO	2-3	2	4.31	7.81	4.94	0.5	1	2.16	0.2	7.34	4.06	7.75
		4		5.63	7.81	4.94	0.5	1	3.47	0.2	7.34	4.06	9.25
3	SEO	2-3	2	5.47	11.09	6.5	0.88	1.75	3.59	0.31	10.19	5.75	17
		4		9.75	12.13	6.5	1.81	1.75	5.81	0.31	11.19	5.75	25
4	SFO	3	2	6	12.88	6.5	1.81	1.75	3.94	0.31	11.19	5.75	22
		4		9.75	12.88	6.5	1.81	1.75	5.91	0.31	11.19	5.75	25
5	SGO	3	2	8.56	17.56	8.75	4.75	7.25	5.38	0.63	16.38	6	62
6	SHO	3	2	12.34	28.06	9	4.75	7.25	5.78	5.06	18.56	8.69	85

Table 16.101: Dimensions for NEMA 1 General Purpose Enclosure

NEMA Size	Type	No. of Poles	Fig. No.	Dimensions, in.												
				A	B	C		D	E	F	G	H	I	J	K	L
						8502	8536									
00	SAG	All	3													
0	SBG	All	3	6	10	5.28	5.56	3	0.88	8.13	1	0.94	4.13	5	—	—
1	SCG	All	3													
2	SDG	All	3	7.81	12.69	6.03	6.31	—	1.09	10.5	1.09	1.09	5.63	5.75	1.09	5.63
3	SEG	All	3	11.44	21.81	8	8.38	—	1.53	18.75	1.53	1.53	8.38	7.75	1.53	8.38
4	SFG	All	5	11.25	25.16	9	9	8.59	1.25	1.25	22.31	1.44	0.44	—	—	—
5	SGG	All	5	17.22	44.22	12.81	12.94	13	2.13	2.13	40	2.13	0.56	—	—	—
6	SHG	All	4	65.75	20.22	13.13	13.13	—	11	64.5	2.31	5.5	—	—	—	—

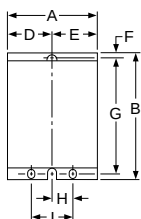


Figure 1
Class 8502

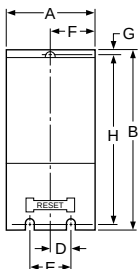


Figure 2
Class 8536

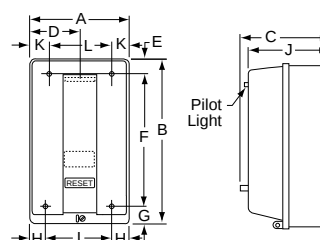


Figure 3

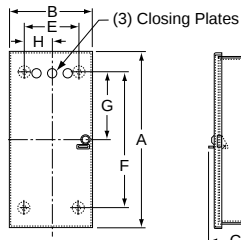


Figure 4

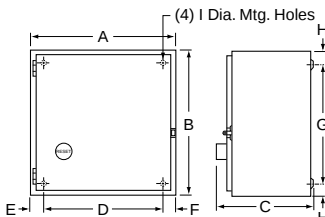


Figure 5