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 16-28 8702: page 16-58	8536: page 16-32 8736: page 16-60	8538: page 16-45 8738: page 16-65
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 CE IEC 947-4-1 Sizes 00–5 Only	UL File E78351 NLDX CSA 60905 Class 3211-04 CE IEC 947-4-1 Sizes 00–5 Only	UL File E152395 NKJH7 CSA LR584 Class 3211 04

Catalog Numbering

Class 8536 **Type S C G 3 V02** **Form S**

General Classification	
8502	Contactor
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
J	Size 7	J	800 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)
R	NEMA 7 & 9 Hazardous Environments, Spin Top™
T	NEMA 7 & 9 Hazardous Environments, Bolted
W	NEMA 4 Watertight, 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: 480 V 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 alphanumerical order.

Table 16.80: How to Order

To Order Specify:	Catalog Number			
	Class	Type	Voltage Code	Form(s)
• Class Number • Type Number • Voltage Code • Form(s): see page 16-115	8539	SCG44	V06	AH30P1X11

Description: NEMA Size 1 (10 hp) electronic motor circuit protector (MCP) combo starter in a NEMA 1 enclosure with a 480 V coil, start/stop push button (A), trip-class selectable SSOLR (H30), red pilot light (P1), and 1 N.O. and 1 N.C. auxiliary contact (X11).

IMPORTANT: This information is intended for general interpretation of the catalog numbers. Do not use it to create catalog numbers for this product line.

For more ordering information, refer to the Product Selector at www.schneider-electric.com/us/.

NOTE: The terms *Class, Type,* and *Form* do not appear in the catalog number.

Devices are wired from the factory according to customer preference as follows:

- Common control
- Separate control (Form S)
- Control power transformer (CPT)

NOTE: TeSys T devices are unwired.

Fusible Disconnect Switch Type 3-Pole Polyphase—600 Vac Maximum—50–60 Hz

Class 8538 and 8539 Type S combination starters combine the requirements of motor overload and short circuit protection into one package. These starters are manufactured according to NEMA standards and are UL Listed (some Form numbers may not be listed —contact the Customer Care Center). Class 8538 and 8539 combination starters operate at 600 Vac maximum, 50–60 Hz, and can be provided with one of four overloaded relay styles (refer to page 16-32).

For Form H30• (special lower-FLA factory-assembled starter combinations with Motor Logic SSOLR protection), see Solid-State Overload Relay Forms, page 16-117.

Table 16.126: Class 8538 Fusible Full Voltage Type (Class H Fuse Clips), with Motor Logic SSOLR (replace ●●● with the voltage code)

Ratings			Fuse Clip Size (A)	NEMA 1 General Purpose Enclosure	NEMA 4 & 4X Watertight and Dusttight Enclosure Stainless Steel (304) (Sizes 0-5)[1]	NEMA 4X Watertight, Dusttight and Corrosion Resistant Polyester Enclosure	NEMA 12/3R[2] Dusttight and Driptight Industrial Use Enclosure	
Motor Voltage (Starter Voltage)	Max. Hp Polyphase	NEMA Size					With External Reset	Without External Reset
				Type [3]	Type [3]	Type [3]	Type [3]	Type [3]
200 (208)	3	0	30	SBG12●●●H30 [4]	SBW12●●●H30 [4]	SBW22●●●H30 [4]	SBA22●●●H30 [4]	SBA12●●●H30 [4]
	5	1	30	SCG12●●●H30 [4]	SCW12●●●H30 [4]	SCW22●●●H30 [4]	SCA22●●●H30 [4]	SCA12●●●H30 [4]
	7-1/2		60	SCG13●●●H30 [4]	SCW13●●●H30 [4]	SCW23●●●H30 [4]	SCA23●●●H30 [4]	SCA13●●●H30 [4]
	10	2	60	SDG12●●●H30 [4]	SDW12●●●H30 [4]	SDW22●●●H30 [4]	SDA22●●●H30 [4]	SDA12●●●H30 [4]
	20	3	100	SEG15●●●H30	SEW15●●●H30	SEW25●●●H30	SEA25●●●H30	SEA15●●●H30
	25		200	SEG12●●●H30	SEW12●●●H30	—	SEA22●●●H30	SEA12●●●H30
	40	4	200	SFG15●●●H30	SFW15●●●H30	—	SFA25●●●H30	SFA15●●●H30
	75	5	400	SGG15●●●H30	SGW15●●●H30	—	SGA25●●●H30	SGA15●●●H30
	150	6	600	SHG13●●●H30	SHW13●●●H30	—	SHA23●●●H30	SHA13●●●H30
230 (240)	3	0	30	SBG12●●●H30 [4]	SBW12●●●H30 [4]	SBW22●●●H30 [4]	SBA22●●●H30 [4]	SBA12●●●H30 [4]
	5	1	30	SCG12●●●H30 [4]	SCW12●●●H30 [4]	SCW22●●●H30 [4]	SCA22●●●H30 [4]	SCA12●●●H30 [4]
	7-1/2		60	SCG13●●●H30 [4]	SCW13●●●H30 [4]	SCW23●●●H30 [4]	SCA23●●●H30 [4]	SCA13●●●H30 [4]
	15	2	60	SDG12●●●H30	SDW12●●●H30 [4]	SDW22●●●H30 [4]	SDA22●●●H30 [4]	SDA12●●●H30 [4]
	25	3	100	SEG15●●●H30	SEW15●●●H30	SEW25●●●H30	SEA25●●●H30	SEA15●●●H30
	30		200	SEG12●●●H30	SEW12●●●H30	—	SEA22●●●H30	SEA12●●●H30
	50	4	200	SFG15●●●H30	SFW15●●●H30	—	SFA25●●●H30	SFA15●●●H30
	100	5	400	SGG15●●●H30	SGW15●●●H30	—	SGA25●●●H30	SGA15●●●H30
	200	6	600	SHG13●●●H30	SHW13●●●H30	—	SHA23●●●H30	SHA13●●●H30
460 (480)	5	0	30	SBG13●●●H30 [4]	SBW13●●●H30 [4]	SBW23●●●H30 [4]	SBA23●●●H30 [4]	SBA13●●●H30 [4]
	10	1	30	SCG14●●●H30 [4]	SCW14●●●H30 [4]	SCW24●●●H30 [4]	SCA24●●●H30 [4]	SCA14●●●H30 [4]
	15	2	30	SDG16●●●H301	SDW16●●●H301	SDW26●●●H301	SDA26●●●H301	SDA16●●●H301
	25		60	SDG14●●●H30 [4]	SDW14●●●H30 [4]	SDW24●●●H30[4]	SDA24●●●H30 [4]	SDA14●●●H30 [4]
	50	3	100	SEG13●●●H30	SEW13●●●H30	SEW23●●●H30	SEA23●●●H30	SEA13●●●H30
	100	4	200	SFG13●●●H30	SFW13●●●H30	—	SFA23●●●H30	SFA13●●●H30
	200	5	400	SGG13●●●H30	SGW13●●●H30	—	SGA23●●●H30	SGA13●●●H30
	400	6	600	SHG12●●●H30	SHW12●●●H30	—	SHA22●●●H30	SHA12●●●H30
575 (600)	5	0	30	SBG13●●●H30	SBW13●●●H30	SBW23●●●H30	SBA23●●●H30	SBA13●●●H30
	10	1	30	SCG14●●●H30	SCW14●●●H30	SCW24●●●H30	SCA24●●●H30	SCA14●●●H30
	15	2	30	SDG16●●●H301	SDW16●●●H301	SDW26●●●H301	SDA26●●●H301	SDA16●●●H301
	25		60	SDG14●●●H30	SDW14●●●H30	SDW24●●●H30	SDA24●●●H30	SDA14●●●H30
	50	3	100	SEG13●●●H30	SEW13●●●H30	SEW23●●●H30	SEA23●●●H30	SEA13●●●H30
	100	4	200	SFG13●●●H30	SFW13●●●H30	—	SFA23●●●H30	SFA13●●●H30
	200	5	400	SGG13●●●H30	SGW13●●●H30	—	SGA23●●●H30	SGA13●●●H30
	400	6	600	SHG12●●●H30	SHW12●●●H30	—	SHA22●●●H30	SHA12●●●H30

NOTE: Some control transformers may require the use of oversized enclosures. Refer to Table 16.155.

Table 16.127: Class 8538 Fusible Disconnect Switch Type (Class H Fuse Clips), Single Phase, [5][6] with Melting Alloy Overload Relays (see Thermal Unit Selection, page 16-130)

Motor Voltage	Max. Hp	Coil Voltage	NEMA Size	Poles	Fuse Clip Size (A)	NEMA 1 General Purpose Enclosure	NEMA 4 & 4X Watertight and Dusttight Enclosure Stainless Steel (304)	NEMA 4X Watertight, Dusttight and Corrosion Resistant Polyester Enclosure	NEMA 12/3R[2] Dusttight and Driptight Industrial Use Enclosure	
									With External Reset	Without External Reset
						Type	Type	Type	Type	Type
120	1 2 3	120	0 1 2	2	30 30 60	SBG62V02 SCG62V02 SDG62V02	SBW62V02 SCW62V02 SDW62V02	SBW65V02 SCW65V02 SDW65V02	SBA65V02 SCA65V02 SDA65V02	SBA62V02 SCA62V02 SDA62V02
240	2 3 7-1/2	240	0 1 2	2	30 30 60	SBG62V03 SCG62V03 SDG62V03	SBW62V03 SCW62V03 SDW62V03	SBW65V03 SCW65V03 SDW65V03	SBA65V03 SCA65V03 SDA65V03	SBA62V03 SCA62V03 SDA62V03

For How to Order Information, see page 16-27.

[1] Size 6 starters are NEMA 4 painted sheet steel enclosures.
[2] NEMA 12 enclosures can be field modified for outdoor non-corrosive and non–service entrance rated applications. See page 16-110 for more information.
[3] Replace the three bullets (●●●) in the catalog number with the coil voltage code. Refer to the standard coil voltage codes shown in Table 16.130
[4] **Form H30**, with the possibility of a fourth character to select a lower FLA range (for example, **H308**). See "Soiid-State Overload Relay Forms."
[5] Single-phase units require one thermal unit. They are not available with **Form H••** (solid-state overload relays).
[6] Not included in the Laser™ Delivery program.

Non-Fusible Disconnect Switch Type 3-Pole Polyphase—600 Vac Maximum—50–60 Hz

For Form H30• (special lower-FLA factory-assembled starter combinations with Motor Logic SSOLR protection), see Solid-State Overload Relay Forms, page 16-117.

Table 16.128: Class 8538 Non-Fusible Full Voltage Type, Non-Reversing, with Motor Logic SSOLR (replace ●●● with the voltage code)

Ratings			NEMA 1 General Purpose Enclosure	NEMA 4 & 4X Watertight and Dusttight Enclosure Stainless Steel (304) (Sizes 0–5)*[7]*	NEMA 4X Watertight, Dusttight and Corrosion Resistant Polyester Enclosure	NEMA 12/3R*[8]*Dusttight and Driptight Industrial Enclosure	
Motor Voltage (Starter Voltage)	Max. Hp Polyphase	NEMA Size				With External Reset	Without External Reset
			Type *[9]*	Type *[9]*	Type *[9]*	Type *[9]*	Type *[9]*
200 (208)	3	0	SBG11●●●H30 *[10]*	SBW11●●●H30 *[10]*	SBW21●●●H30 *[10]*	SBA21●●●H30 *[10]*	SBA11●●●H30 *[10]*
	7-1/2	1	SCG11●●●H30 *[10]*	SCW11●●●H30 *[10]*	SCW21●●●H30 *[10]*	SCA21●●●H30 *[10]*	SCA11●●●H30 *[10]*
	10	2	SDG11●●●H30 *[10]*	SDW11●●●H30 *[10]*	SDW21●●●H30 *[10]*	SDA21●●●H30 *[10]*	SDA11●●●H30 *[10]*
	25	3	SEG11●●●H30	SEW11●●●H30	SEW21●●●H30	SEA21●●●H30	SEA11●●●H30
	40	4	SFG11●●●H30	SFW11●●●H30	—	SFA21●●●H30	SFA11●●●H30
	75	5	SGG11●●●H30	SGW11●●●H30	—	SGA21●●●H30	SGA11●●●H30
	150	6	SHG11●●●H30	SHW11●●●H30	—	SHA21●●●H30	SHA11●●●H30
230 (240)	3	0	SBG11●●●H30 *[10]*	SBW11●●●H30 *[10]*	SBW21●●●H30 *[10]*	SBA21●●●H30 *[10]*	SBA11●●●H30 *[10]*
	7-1/2	1	SCG11●●●H30 *[10]*	SCW11●●●H30 *[10]*	SCW21●●●H30 *[10]*	SCA21●●●H30 *[10]*	SCA11●●●H30 *[10]*
	15	2	SDG11●●●H30 *[10]*	SDW11●●●H30 *[10]*	SDW21●●●H30 *[10]*	SDA21●●●H30 *[10]*	SDA11●●●H30 *[10]*
	30	3	SEG11●●●H30	SEW11●●●H30	SEW21●●●H30	SEA21●●●H30	SEA11●●●H30
	50	4	SFG11●●●H30	SFW11●●●H30	—	SFA21●●●H30	SFA11●●●H30
	100	5	SGG11●●●H30	SGW11●●●H30	—	SGA21●●●H30	SGA11●●●H30
	200	6	SHG11●●●H30	SHW11●●●H30	—	SHA21●●●H30	SHA11●●●H30
460 (480)	5	0	SBG11●●●H30 *[10]*	SBW11●●●H30 *[10]*	SBW21●●●H30 *[10]*	SBA21●●●H30 *[10]*	SBA11●●●H30 *[10]*
	10	1	SCG11●●●H30 *[10]*	SCW11●●●H30 *[10]*	SCW21●●●H30 *[10]*	SCA21●●●H30 *[10]*	SCA11●●●H30 *[10]*
	25	2	SDG11●●●H30 *[10]*	SDW11●●●H30 *[10]*	SDW21●●●H30 *[10]*	SDA21●●●H30 *[10]*	SDA11●●●H30 *[10]*
	50	3	SEG11●●●H30	SEW11●●●H30	SEW21●●●H30	SEA21●●●H30	SEA11●●●H30
	100	4	SFG11●●●H30	SFW11●●●H30	—	SFA21●●●H30	SFA11●●●H30
	200	5	SGG11●●●H30	SGW11●●●H30	—	SGA21●●●H30	SGA11●●●H30
	400	6	SHG11●●●H30	SHW11●●●H30	—	SHA21●●●H30	SHA11●●●H30
575 (600)	5	0	SBG11●●●H30	SBW11●●●H30	SBW21●●●H30	SBA21●●●H30	SBA11●●●H30
	10	1	SCG11●●●H30	SCW11●●●H30	SCW21●●●H30	SCA21●●●H30	SCA11●●●H30
	25	2	SDG11●●●H30	SDW11●●●H30	SDW21●●●H30	SDA21●●●H30	SDA11●●●H30
	50	3	SEG11●●●H30	SEW11●●●H30	SEW21●●●H30	SEA21●●●H30	SEA11●●●H30
	100	4	SFG11●●●H30	SFW11●●●H30	—	SFA21●●●H30	SFA11●●●H30
	200	5	SGG11●●●H30	SGW11●●●H30	—	SGA21●●●H30	SGA11●●●H30
	400	6	SHG11●●●H30	SHW11●●●H30	—	SHA21●●●H30	SHA11●●●H30

Table 16.129: Class 8538 Non-Fusible Disconnect Switch Type, Single Phase, with Melting Alloy Overload Relay *[11] [12]*
(see Thermal Unit Selection, page 16-130)

Motor Voltage	Max. Hp	Coil Voltage	NEMA Size	Poles	NEMA 1 General Purpose Enclosure	NEMA 4 & 4X Watertight and Dusttight Enclosure Stainless Steel (304)	NEMA 4X Watertight, Dusttight and Corrosion Resistant Polyester Enclosure	NEMA 12/3R*[8]* Dusttight and Driptight Industrial Enclosure	
								With External Reset	Without External Reset
					Type	Type	Type	Type	Type
120	1	120	0	2	SBG61V02	SBW61V02	SBW64V02	SBA64V02	SBA61V02
	2		1		SCG61V02	SCW61V02	SCW64V02	SCA64V02	SCA61V02
	3		2		SDG61V02	SDW61V02	SDW64V02	SDA64V02	SDA61V02
240	2	240	0	2	SBG61V03	SBW61V03	SBW64V03	SBA64V03	SBA61V03
	3		1		SCG61V03	SCW61V03	SCW64V03	SCA64V03	SCA61V03
	7-1/2		2		SDG61V03	SDW61V03	SDW64V03	SDA64V03	SDA61V03

NOTE: Some control transformers may require the use of oversized enclosures. Refer to Table 16.155.

Table 16.130: Coil Voltage Codes

Voltage		Code
60 Hz	50 Hz	
24 *[13]*	—	V01
120 *[14]*	110	V02
208	—	V08
240	220	V03
277	—	V04
480	440	V06
600	550	V07
Specify	Specify	V99

NOTE: For voltage codes used with control transformers, see page Table 16.320. Form S (separate control) is used when a separate source of power is available for the control (coil) voltage. Form S is available at no charge.

For How to Order Information, see page 16-27.

[7] Size 6 starters are NEMA 4 painted sheet steel enclosures.
[8] NEMA 12 enclosures can be field modified for outdoor non-corrosive and non–service entrance rated applications. See page 16-110 for more information.
[9] Replace the three bullets (●●●) in the catalog number with the coil voltage code. Refer to the standard coil voltage codes shown in Table 16.130
[10] **Form H30**, with the possibility of a fourth character to select a lower FLA range (for example, **H308**). See “Soiid-State Overload Relay Forms.”
[11] Single-phase units require one thermal unit. They are not available with **Form H••** (solid-state overload relays).
[12] Not included in the Laser™ Delivery program.
[13] 24 V coils are not available on Sizes 4–7. On Sizes 00–3, where 24 V coils are available, **Form S** (separate control) must be specified (for example, order as 8538SBG11V01S).
[14] These voltage codes must include **Form S** (furnished at no charge).
When specifying **Form S**, please include the motor voltage when ordering (for example, order as 8538SCG11V02S).