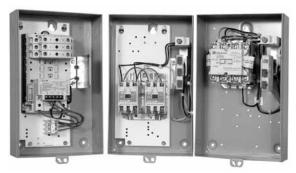
UL Rated AC Contactors



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Product Description

Eaton's lighting contactors are designed to provide a safe, convenient means for local or remote switching of tungsten (incandescent filament) or ballast (fluorescent and mercury arc) lamp loads. They are also suitable for other loads such as low pressure and high pressure sodium lamp loads and other non-motor (resistive) loads. They are not recommended for most sign flashing loads.

These lighting contactors are designed to withstand the large initial inrush currents of tungsten lamp loads without contact welding. They are fully rated and do not require derating.

Application Description Loads:

Ballast Lamps—Fluorescent, mercury vapor, metal halide sodium vapor, quartz—600 V maximum.

Filament Lamps—

Incandescent, infrared, heating—480 V maximum, line to line; 277 V maximum line to neutral.

Resistance Heating—

Radiant and convection heating, furnaces and ovens.

Standards and Certifications

Note: See **Tab 17** for additional information on Standards and Certifications that apply to all Enclosed Control products.

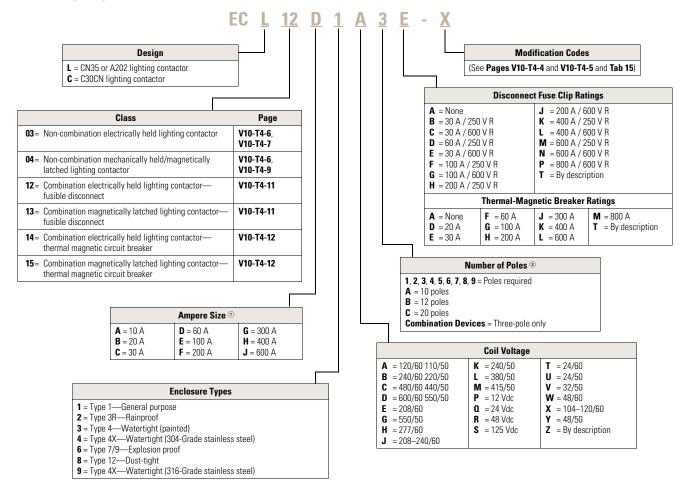
- UL Listed
- cUL Listed
- ABS Type Approved
- OSHPD Certified (OSP-0015-10)

Additional Reference

Accessories	4-13 and Tab 1 5
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Catalog Number Selection

Enclosed Lighting Contactors



Enclosures

Lighting contactors are available open or mounted in Type 1, 3R, 4, 4X, 12 or 7/9 enclosures.

Type 1 is for indoor, general purpose for personal protection. Knock-outs are provided in the top and bottom for conduit entry.

Type 3R is for outdoor applications and rated for rain, sleet and external ice buildup. Type 3R enclosures have knockouts in the bottom and provisions for a hub in the top.

Type 4 and 4X are for mounting indoor or outdoor and provide protection from splashing water, hosedirected water and windblown dust. Watertight conduit hubs are provided in the top and bottom of Type 4X enclosures. The standard Type 4X enclosures are made of 304-Grade stainless steel, providing corrosion protection. 316-Grade stainless steel construction is available as an upgrade option.

Type 12 enclosures are for indoor mounting and protect from dripping liquids, falling dirt and dust. No knockouts or hubs are provided with Type 12 enclosures.

Type 1, 3R, 4 and 12 enclosures are painted with a polyester urethane powder coat paint meeting UL requirements and the color is ANSI 61 gray. Type 1 enclosures have knockouts for cover controls. All the other types have holes plugged, ready for cover controls. Type 7/9 is also available for explosion proof applications. Please contact the factory for additional details.

- ① C30CN available in 30 A only.
- 2 For normally closed poles see Tab 15.

Cover Control

Type 1 Non-Combination Cover Control (Box 1 Only) ①

	Factory Installed Cover Control	Field Installation Kits	
Description	Modification Code Suffix	Catalog Number	
ON/OFF pushbutton	P8	C600M2	
With red RUN pilot light	P8P23	C600M201_ @	
With red RUN/green OFF lights	P8P23P25	C600M202_ @	
HAND/OFF/AUTO selector switch	\$3	C600M12	
With red RUN pilot light	S3P23	C600M121_ @	
With red RUN/green OFF lights	S3P23P25	C600M122_ @	
ON/OFF selector switch	\$12	C600M14	
With red RUN pilot light	S12P23	C600M141_@	
With red RUN/green OFF lights	S12P23P25	C600M142_ @	
Red RUN pilot light	P23	C600M9_ @	
Green OFF pilot light	P25	C600M10_ @	
Red RUN/green OFF lights	P23P25	C600M11_ ②	

Notes

 $^{\circ}$ Add code letter from the table below to catalog number for voltage. Example: C600M101**A**.

Rating	Code Letter
85–264 Vac	Α
480 Vac	С
12-30 Vac/Vdc	Т

① Box 1 offering with cover control includes CN35 lighting contactors 10 A 2–4P, 20 A 2–4P, 30 A 2–3P and 60 A 2–4P.

Type 1, 3R, 4X and 12 Cover Control Non-Combination (Non-Box 1) and Combination Cover Control

		Factory Installed Cove	r Control	Field Installatio	n Kits
Description	For Use with Lighting Contactor	Type 1, 3R, 4X and 12 Modification Code Suffix	Type 7/9 Modification Code Suffix	Type 1 ①② Catalog Number	Type 3R, 4X and 12 Non- Combination and Type 1, 3R, 4X and 12 Combination ② Catalog Number
ON/OFF pushbuttons	Electrical	P8	P8	C400GK18	C400T2
With red RUN pilot light	three-wire C30CN; CN35; A202	P8P23	P8P23	C400GK19_	_
With red RUN/GREEN off lights		P8P23P25	P8P23P25	C400GK1A_	_
ON/OFF Pushbuttons	Mechanical	P8	P8	C400GK4	C400T201
With red RUN pilot light	three-wire C30CN	P8P23	P8P23	C400GK48_	_
With red RUN/GREEN off lights		P8P23P25	P8P23P25	C400GK49_	_
ON/OFF pushbuttons	Electrical and	P8	P8	C400GK5	C400T14 3
With red RUN pilot light	mechanical two-wire C30CN:	P8P23	P8P23	C400GK52_	_
With red RUN/GREEN off lights	CN35; A202	P8P23P25	P8P23P25	C400GK55_	_
Start/stop pushbuttons	Mechanical	P7	P7	C400GK7	C400T200
With red RUN pilot light	three-wire C30CN	P7P23	P7P23	C400GK72_	_
With red RUN/GREEN off lights		P7P23P25	P7P23P25	C400GK75_	_
Start/stop pushbuttons	Electrical and	P7	P7	C400GK6	C400T13 3
With red RUN pilot light	mechanical two-wire C30CN	P7P23	P7P23	C400GK62_	_
With red RUN/GREEN off lights		P7P23P25	P7P23P25	C400GK65_	_
HAND/0FF/AUTO cover control	Electrical and	S 3	S3 ⁴	C400GK3	C400T12 3
With red RUN pilot light	mechanical two-wire C30CN:	S3P23	S3P23 ⁴	C400GK32_	_
With red RUN/GREEN off lights	CN35; A202	S3P23P25	S3P23P25 ⁴	C400GK35_	_
Red RUN pilot light	All	P23	P23	C400GK42_	C400T9_
Green OFF pilot light		P25	P25	C400GK41_	C400T10_
Red RUN/green OFF pilot light		P23P25	P23P25	C400GK46_	C400T11_

- ① For use with non-combination units (box sizes 2-4).
- ② Add code letter from table below to catalog number for voltage in place of _.

Rating	Code Letter	Rating	Code Letter	Rating	Code Letter
24 V 60 Hz	Т	240 V 60 Hz	В	480 V 60 Hz	C
120 V 60 Hz	A	277 V 60 Hz	Н	600 V 60 Hz	D
208 V 60 Hz	E	380 V 60 Hz	L		

- 3 Selector switch.
- ® With three-position selector switch, Mod C20 (two-wire control relay) must be used with magnetically latched contactor (ECL04, ECL13, ECL15).

Product Selection

Two-Wire and Three-Wire Control Wiring Options—Two-Wire Control Standard

Class ECC03 - Non-Combination Electrically Held Lighting Contactor - Two or Three-Wire Control

Number	Type 1	Type 3R	Type 4X ②	Type 7/9	Type 12	Component Contactor (Open)
of Poles	Catalog Number ①					
Continuou	s Amps-30					
2	ECC03C1_2A	ECC03C2_2A	ECC03C4_2A	ECC03C6_2A	ECC03C8_2A	C30CNE20_0
3	ECC03C1_3A	ECC03C2_3A	ECC03C4_3A	ECC03C6_3A	ECC03C8_3A	C30CNE30_0
4	ECC03C1_4A	ECC03C2_4A	ECC03C4_4A	ECC03C6_4A	ECC03C8_4A	C30CNE40_0
5	ECC03C1_5A	ECC03C2_5A	ECC03C4_5A	ECC03C6_5A	ECC03C8_5A	C30CNE50_0
6	ECC03C1_6A	ECC03C2_6A	ECC03C4_6A	ECC03C6_6A	ECC03C8_6A	C30CNE60_0
7	ECC03C1_7A	ECC03C2_7A	ECC03C4_7A	ECC03C6_7A	ECC03C8_7A	C30CNE70_0
8	ECC03C1_8A	ECC03C2_8A	ECC03C4_8A	ECC03C6_8A	ECC03C8_8A	C30CNE80_0
9	ECC03C1_9A	ECC03C2_9A	ECC03C4_9A	ECC03C6_9A	ECC03C8_9A	C30CNE90_0
10	ECC03C1_AA	ECC03C2_AA	ECC03C4_AA	ECC03C6_AA	ECC03C8_AA	C30CNE100_0
12	ECC03C1_BA	ECC03C2_BA	ECC03C4_BA	ECC03C6_BA	ECC03C8_BA	C30CNE120_0

Class ECC04—Non-Combination Mechanically Held Lighting Contactor—Two-Wire Control ®

Number	Type 1	Type 3R	Type 4X ②	Type 7/9	Type 12	Component Contactor (Open)
of Poles	Catalog Number ①					
Continuous	s Amps—30					
2	ECC04C1_2A	ECC04C2_2A	ECC04C4_2A	ECC04C6_2A	ECC04C8_2A	C30CNM20_
3	ECC04C1_3A	ECC04C2_3A	ECC04C4_3A	ECC04C6_3A	ECC04C8_3A	C30CNM30_
4	ECC04C1_4A	ECC04C2_4A	ECC04C4_4A	ECC04C6_4A	ECC04C8_4A	C30CNM40_
5	ECC04C1_5A	ECC04C2_5A	ECC04C4_5A	ECC04C6_5A	ECC04C8_5A	C30CNM50_
6	ECC04C1_6A	ECC04C2_6A	ECC04C4_6A	ECC04C6_6A	ECC04C8_6A	C30CNM60_
7	ECC04C1_7A	ECC04C2_7A	ECC04C4_7A	ECC04C6_7A	ECC04C8_7A	C30CNM70_
8	ECC04C1_8A	ECC04C2_8A	ECC04C4_8A	ECC04C6_8A	ECC04C8_8A	C30CNM80_
9	ECC04C1_9A	ECC04C2_9A	ECC04C4_9A	ECC04C6_9A	ECC04C8_9A	C30CNM90_
10	ECC04C1_AA	ECC04C2_AA	ECC04C4_AA	ECC04C6_AA	ECC04C8_AA	C30CNM100_
12	ECC04C1_BA	ECC04C2_BA	ECC04C4_BA	ECC04C6_BA	ECC04C8_BA	C30CNM120_

Notes

② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the seventh digit. Example: ECC03C4A2A. To order Type 4X 316-Grade stainless steel, change that digit to 9. To order Type 4 painted steel, change that digit to 3. To order non-metallic, change that digit to 5. For details on these alternate enclosures, see Tab 13.

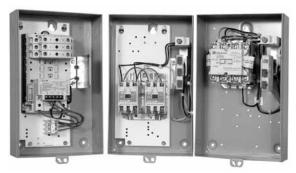
Suffix	Coil Voltage	Suffix	Coil Voltage	Suffix	Coil Voltage
A	120/60 or 110/50	D	600/60 or 550/50	T	24/60
В	240/60 or 220/50	E	208/60	V	28/60 or 24/50
C	480/60 or 440/50	Н	277/60 or 240/50	X	347/60

³ Add C18 modification code for three-wire control.

To get the C30CN lighting contactor with normally closed power poles, see Tab 15, for modification codes.

 $^{^{\}scriptsize \textcircled{\scriptsize 1}}$ For first open position (coil voltage), use the table below.

UL Rated AC Contactors



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Product Description

Eaton's lighting contactors are designed to provide a safe, convenient means for local or remote switching of tungsten (incandescent filament) or ballast (fluorescent and mercury arc) lamp loads. They are also suitable for other loads such as low pressure and high pressure sodium lamp loads and other non-motor (resistive) loads. They are not recommended for most sign flashing loads.

These lighting contactors are designed to withstand the large initial inrush currents of tungsten lamp loads without contact welding. They are fully rated and do not require derating.

Application Description Loads:

Ballast Lamps—Fluorescent, mercury vapor, metal halide sodium vapor, quartz—600 V maximum.

Filament Lamps—

Incandescent, infrared, heating—480 V maximum, line to line; 277 V maximum line to neutral.

Resistance Heating—

Radiant and convection heating, furnaces and ovens.

Standards and Certifications

Note: See **Tab 17** for additional information on Standards and Certifications that apply to all Enclosed Control products.

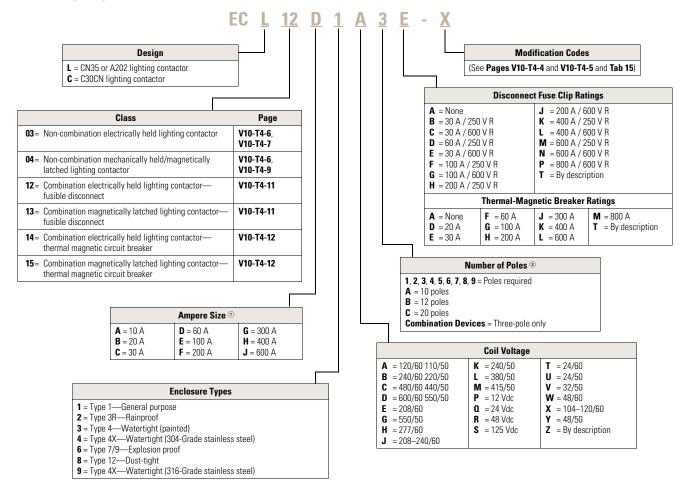
- UL Listed
- cUL Listed
- ABS Type Approved
- OSHPD Certified (OSP-0015-10)

Additional Reference

Accessories	4-13 and Tab 1 5
Cover Control	V10-T4-4
Dimensions	Tab 14
Accessories and Modifications	Tab 15
Technical Data and Specifications	Tab 17

Catalog Number Selection

Enclosed Lighting Contactors



Enclosures

Lighting contactors are available open or mounted in Type 1, 3R, 4, 4X, 12 or 7/9 enclosures.

Type 1 is for indoor, general purpose for personal protection. Knock-outs are provided in the top and bottom for conduit entry.

Type 3R is for outdoor applications and rated for rain, sleet and external ice buildup. Type 3R enclosures have knockouts in the bottom and provisions for a hub in the top.

Type 4 and 4X are for mounting indoor or outdoor and provide protection from splashing water, hosedirected water and windblown dust. Watertight conduit hubs are provided in the top and bottom of Type 4X enclosures. The standard Type 4X enclosures are made of 304-Grade stainless steel, providing corrosion protection. 316-Grade stainless steel construction is available as an upgrade option.

Type 12 enclosures are for indoor mounting and protect from dripping liquids, falling dirt and dust. No knockouts or hubs are provided with Type 12 enclosures.

Type 1, 3R, 4 and 12 enclosures are painted with a polyester urethane powder coat paint meeting UL requirements and the color is ANSI 61 gray. Type 1 enclosures have knockouts for cover controls. All the other types have holes plugged, ready for cover controls. Type 7/9 is also available for explosion proof applications. Please contact the factory for additional details.

- ① C30CN available in 30 A only.
- 2 For normally closed poles see Tab 15.

Cover Control

Type 1 Non-Combination Cover Control (Box 1 Only) ①

	Factory Installed Cover Control	Field Installation Kits	
Description	Modification Code Suffix	Catalog Number	
ON/OFF pushbutton	P8	C600M2	
With red RUN pilot light	P8P23	C600M201_ @	
With red RUN/green OFF lights	P8P23P25	C600M202_ @	
HAND/OFF/AUTO selector switch	\$3	C600M12	
With red RUN pilot light	S3P23	C600M121_ @	
With red RUN/green OFF lights	S3P23P25	C600M122_ @	
ON/OFF selector switch	\$12	C600M14	
With red RUN pilot light	S12P23	C600M141_@	
With red RUN/green OFF lights	S12P23P25	C600M142_ @	
Red RUN pilot light	P23	C600M9_ @	
Green OFF pilot light	P25	C600M10_ @	
Red RUN/green OFF lights	P23P25	C600M11_ ②	

Notes

 $^{\circ}$ Add code letter from the table below to catalog number for voltage. Example: C600M101**A**.

Rating	Code Letter
85–264 Vac	Α
480 Vac	С
12-30 Vac/Vdc	Т

① Box 1 offering with cover control includes CN35 lighting contactors 10 A 2–4P, 20 A 2–4P, 30 A 2–3P and 60 A 2–4P.

Type 1, 3R, 4X and 12 Cover Control Non-Combination (Non-Box 1) and Combination Cover Control

		Factory Installed Cover Control		Field Installation Kits	
Description	For Use with Lighting Contactor	Type 1, 3R, 4X and 12 Modification Code Suffix	Type 7/9 Modification Code Suffix	Type 1 ①② Catalog Number	Type 3R, 4X and 12 Non- Combination and Type 1, 3R, 4X and 12 Combination ② Catalog Number
ON/OFF pushbuttons	Electrical	P8	P8	C400GK18	C400T2
With red RUN pilot light	three-wire C30CN; CN35; A202	P8P23	P8P23	C400GK19_	_
With red RUN/GREEN off lights		P8P23P25	P8P23P25	C400GK1A_	_
ON/OFF Pushbuttons	Mechanical	P8	P8	C400GK4	C400T201
With red RUN pilot light	three-wire C30CN	P8P23	P8P23	C400GK48_	_
With red RUN/GREEN off lights		P8P23P25	P8P23P25	C400GK49_	_
ON/OFF pushbuttons	Electrical and	P8	P8	C400GK5	C400T14 3
With red RUN pilot light	mechanical two-wire C30CN:	P8P23	P8P23	C400GK52_	_
With red RUN/GREEN off lights	CN35; A202	P8P23P25	P8P23P25	C400GK55_	_
Start/stop pushbuttons	Mechanical	P7	P7	C400GK7	C400T200
With red RUN pilot light	three-wire C30CN	P7P23	P7P23	C400GK72_	_
With red RUN/GREEN off lights		P7P23P25	P7P23P25	C400GK75_	_
Start/stop pushbuttons	Electrical and	P7	P7	C400GK6	C400T13 3
With red RUN pilot light	mechanical two-wire C30CN	P7P23	P7P23	C400GK62_	_
With red RUN/GREEN off lights		P7P23P25	P7P23P25	C400GK65_	_
HAND/0FF/AUTO cover control	Electrical and	S 3	S3 ⁴	C400GK3	C400T12 3
With red RUN pilot light	mechanical two-wire C30CN:	S3P23	S3P23 ⁴	C400GK32_	_
With red RUN/GREEN off lights	CN35; A202	S3P23P25	S3P23P25 ⁴	C400GK35_	_
Red RUN pilot light	All	P23	P23	C400GK42_	C400T9_
Green OFF pilot light		P25	P25	C400GK41_	C400T10_
Red RUN/green OFF pilot light		P23P25	P23P25	C400GK46_	C400T11_

- ① For use with non-combination units (box sizes 2-4).
- ② Add code letter from table below to catalog number for voltage in place of _.

Rating	Code Letter	Rating	Code Letter	Rating	Code Letter
24 V 60 Hz	Т	240 V 60 Hz	В	480 V 60 Hz	C
120 V 60 Hz	A	277 V 60 Hz	Н	600 V 60 Hz	D
208 V 60 Hz	E	380 V 60 Hz	L		

- 3 Selector switch.
- ® With three-position selector switch, Mod C20 (two-wire control relay) must be used with magnetically latched contactor (ECL04, ECL13, ECL15).

Product Selection

Two-Wire and Three-Wire Control Wiring Options—Two-Wire Control Standard

Class ECC03 - Non-Combination Electrically Held Lighting Contactor - Two or Three-Wire Control

Number	Type 1	Type 3R	Type 4X ②	Type 7/9	Type 12	Component Contactor (Open)
of Poles	Catalog Number ①					
Continuou	s Amps-30					
2	ECC03C1_2A	ECC03C2_2A	ECC03C4_2A	ECC03C6_2A	ECC03C8_2A	C30CNE20_0
3	ECC03C1_3A	ECC03C2_3A	ECC03C4_3A	ECC03C6_3A	ECC03C8_3A	C30CNE30_0
4	ECC03C1_4A	ECC03C2_4A	ECC03C4_4A	ECC03C6_4A	ECC03C8_4A	C30CNE40_0
5	ECC03C1_5A	ECC03C2_5A	ECC03C4_5A	ECC03C6_5A	ECC03C8_5A	C30CNE50_0
6	ECC03C1_6A	ECC03C2_6A	ECC03C4_6A	ECC03C6_6A	ECC03C8_6A	C30CNE60_0
7	ECC03C1_7A	ECC03C2_7A	ECC03C4_7A	ECC03C6_7A	ECC03C8_7A	C30CNE70_0
8	ECC03C1_8A	ECC03C2_8A	ECC03C4_8A	ECC03C6_8A	ECC03C8_8A	C30CNE80_0
9	ECC03C1_9A	ECC03C2_9A	ECC03C4_9A	ECC03C6_9A	ECC03C8_9A	C30CNE90_0
10	ECC03C1_AA	ECC03C2_AA	ECC03C4_AA	ECC03C6_AA	ECC03C8_AA	C30CNE100_0
12	ECC03C1_BA	ECC03C2_BA	ECC03C4_BA	ECC03C6_BA	ECC03C8_BA	C30CNE120_0

Class ECC04—Non-Combination Mechanically Held Lighting Contactor—Two-Wire Control ®

Number	Type 1	Type 3R	Type 4X ②	Type 7/9	Type 12	Component Contactor (Open)
of Poles	Catalog Number ①					
Continuous	s Amps-30					
2	ECC04C1_2A	ECC04C2_2A	ECC04C4_2A	ECC04C6_2A	ECC04C8_2A	C30CNM20_
3	ECC04C1_3A	ECC04C2_3A	ECC04C4_3A	ECC04C6_3A	ECC04C8_3A	C30CNM30_
4	ECC04C1_4A	ECC04C2_4A	ECC04C4_4A	ECC04C6_4A	ECC04C8_4A	C30CNM40_
5	ECC04C1_5A	ECC04C2_5A	ECC04C4_5A	ECC04C6_5A	ECC04C8_5A	C30CNM50_
6	ECC04C1_6A	ECC04C2_6A	ECC04C4_6A	ECC04C6_6A	ECC04C8_6A	C30CNM60_
7	ECC04C1_7A	ECC04C2_7A	ECC04C4_7A	ECC04C6_7A	ECC04C8_7A	C30CNM70_
8	ECC04C1_8A	ECC04C2_8A	ECC04C4_8A	ECC04C6_8A	ECC04C8_8A	C30CNM80_
9	ECC04C1_9A	ECC04C2_9A	ECC04C4_9A	ECC04C6_9A	ECC04C8_9A	C30CNM90_
10	ECC04C1_AA	ECC04C2_AA	ECC04C4_AA	ECC04C6_AA	ECC04C8_AA	C30CNM100_
12	ECC04C1_BA	ECC04C2_BA	ECC04C4_BA	ECC04C6_BA	ECC04C8_BA	C30CNM120_

Notes

② The catalog numbers listed in the Type 4X column are for Type 4X 304-Grade stainless steel, as indicated by the seventh digit. Example: ECC03C4A2A. To order Type 4X 316-Grade stainless steel, change that digit to 9. To order Type 4 painted steel, change that digit to 3. To order non-metallic, change that digit to 5. For details on these alternate enclosures, see Tab 13.

Suffix	Coil Voltage	Suffix	Coil Voltage	Suffix	Coil Voltage
A	120/60 or 110/50	D	600/60 or 550/50	T	24/60
В	240/60 or 220/50	E	208/60	V	28/60 or 24/50
C	480/60 or 440/50	Н	277/60 or 240/50	X	347/60

³ Add C18 modification code for three-wire control.

To get the C30CN lighting contactor with normally closed power poles, see Tab 15, for modification codes.

 $^{^{\}scriptsize \textcircled{\scriptsize 1}}$ For first open position (coil voltage), use the table below.