

# Box 1 and Box 2 non-combination enclosed control and C600M cover control kit wiring

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Box 1



Box 2



Powering Business Worldwide

### General information

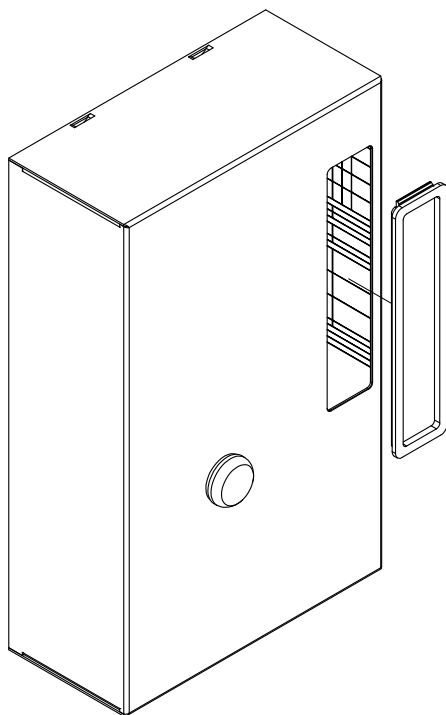
This publication is to be used for Eaton non-combination enclosures designed to accept the M22 series 22 mm cover control devices.

If the enclosure catalog number already has cover control devices mounted, the existing reverse "c" shape bracket can be reused.

If the enclosure catalog number includes a blank rectangular cover, remove it prior to installing the cover control kit (see instructions below).

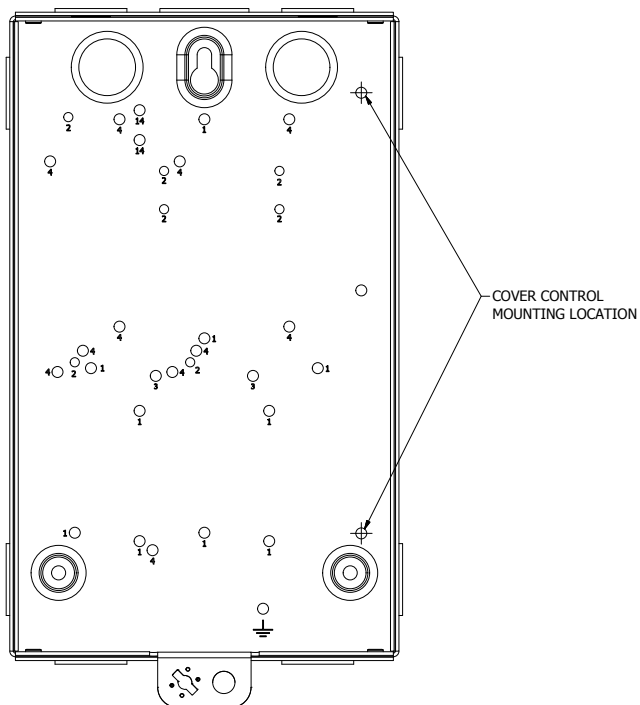
### Cover control installation

1. Remove rectangular blank cover by pushing on the blank cover from the back side.
2. Discard blank cover.

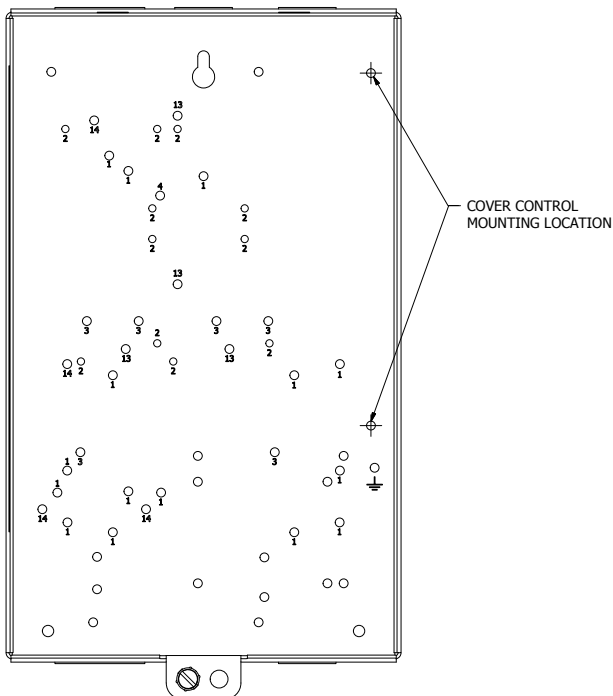


3. Using the included mounting screws, mount the C600M cover control to the base of the enclosure in the holes designated by the arrows below.
4. Terminate the wires from the M22 operators onto the starter/contactor as illustrated in "C600M Kit Wiring Instructions" (see **page 4**).

### Box 1 enclosure

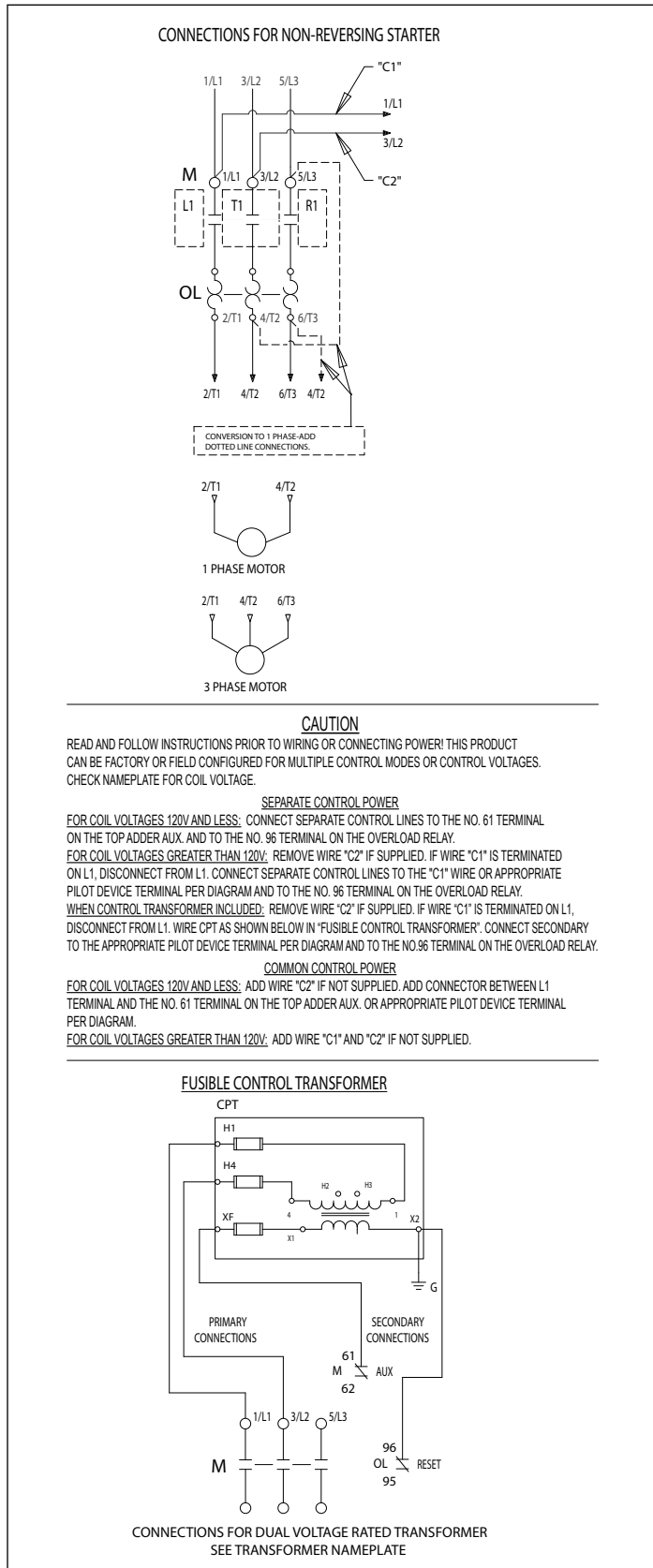


### Box 2 enclosure

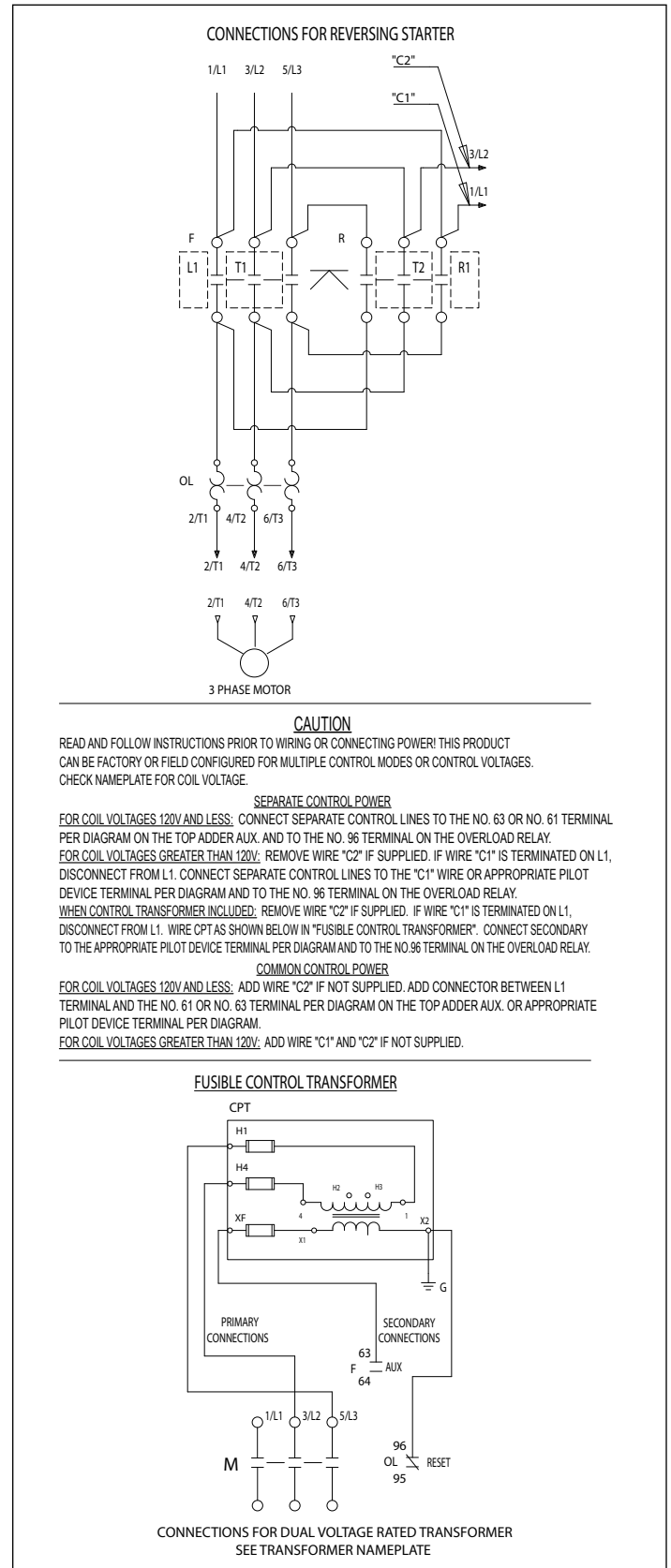


**Wiring diagrams**

**Wiring diagrams: NEMA® and IEC starters and contactors**

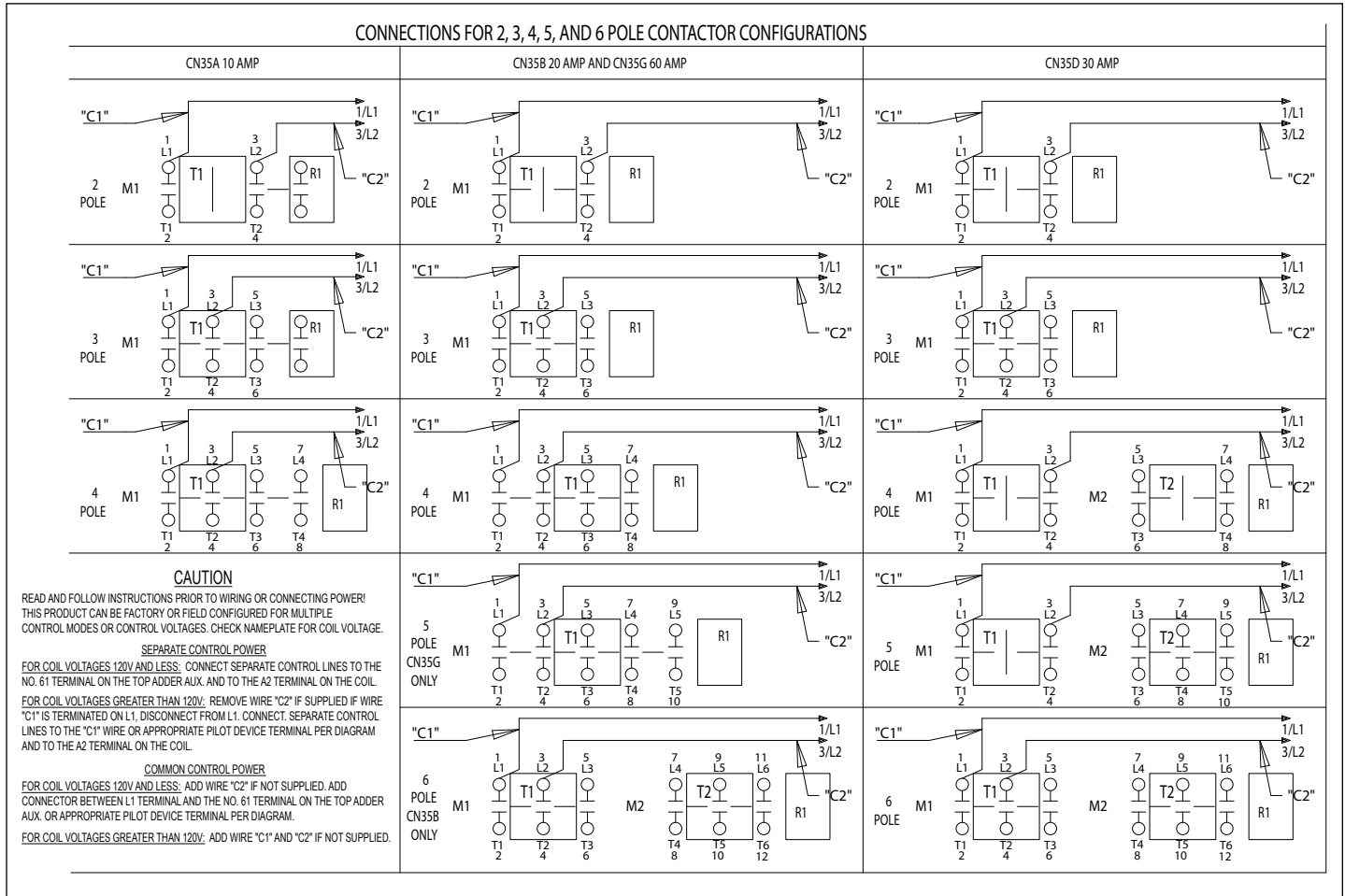


Note: CPT optional.

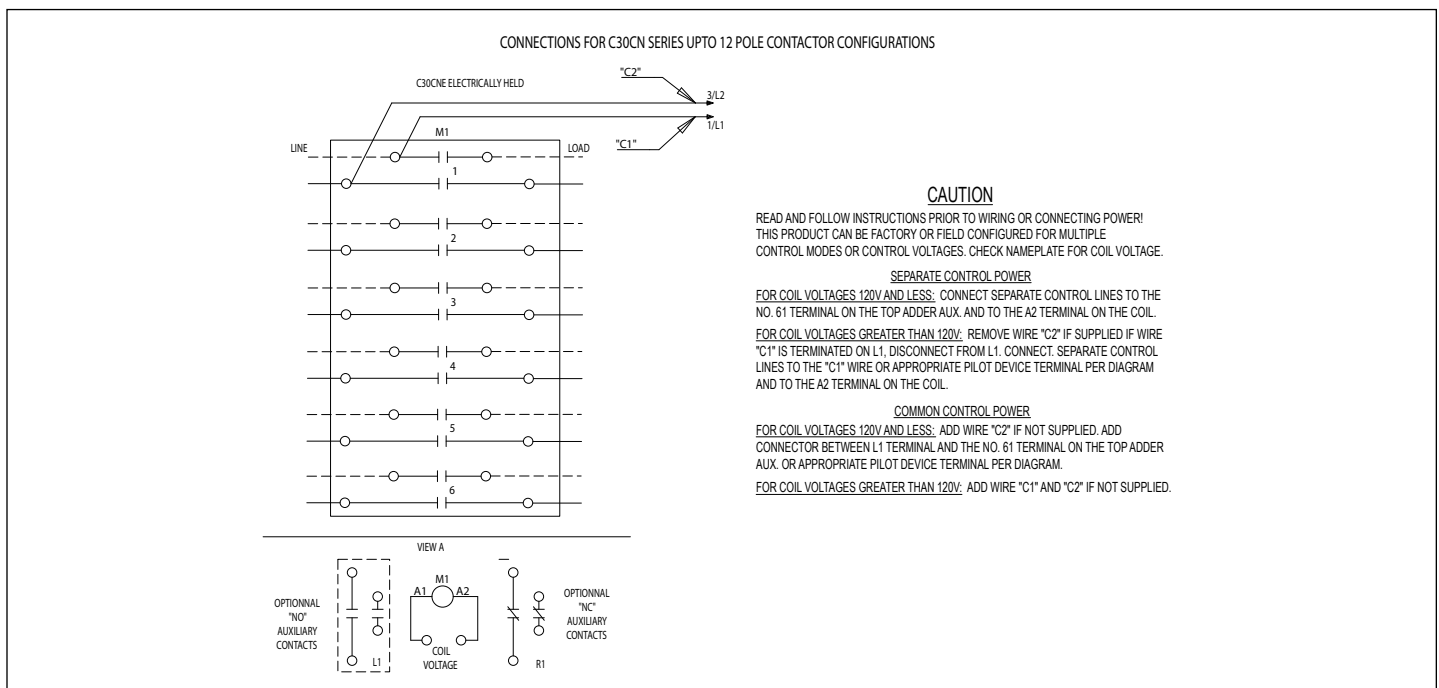


Note: CPT optional.

**Wiring diagrams: Lighting—electrically held, CN35**



**Wiring diagrams: Lighting—electrically held, C30CN**



**Wiring diagrams: Lighting—mechanically held, C30CN**

CONNECTIONS FOR C30CN SERIES UPTO 12 POLE CONTACTOR CONFIGURATIONS

**CAUTION**

READ AND FOLLOW INSTRUCTIONS PRIOR TO WIRING OR CONNECTING POWER! THIS PRODUCT CAN BE FACTORY OR FIELD CONFIGURED FOR MULTIPLE CONTROL MODES OR CONTROL VOLTAGES. CHECK NAMEPLATE FOR COIL VOLTAGE.

**SEPARATE CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: CONNECT SEPARATE CONTROL LINES TO THE NO. 61 TERMINAL ON THE TOP ADDER AUX. AND TO NO. 96 TERMINAL ON OVERLOAD RELAY.

FOR COIL VOLTAGES GREATER THAN 120V: REMOVE WIRE "C2" IF SUPPLIED. IF WIRE "C1" IS TERMINATED ON L1, DISCONNECT FROM L1. CONNECT SEPARATE CONTROL LINES TO THE "C1" WIRE OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM AND TO THE NO. 96 TERMINAL ON THE OVERLOAD RELAY.

**COMMON CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: ADD WIRE "C2" IF NOT SUPPLIED. ADD CONNECTOR BETWEEN L1 TERMINAL AND THE NO. 61 TERMINAL ON THE TOP ADDER AUX. OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM.

FOR COIL VOLTAGES GREATER THAN 120V: ADD WIRE "C1" AND "C2" IF NOT SUPPLIED.

**Wiring diagrams: Lighting—magnetically held, A202**

CONNECTIONS FOR CONTACTOR FRONT VIEW DIAGRAM

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**SEPARATE CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: CONNECT SEPARATE CONTROL LINES TO THE NO. 53 TERMINAL ON THE ADDER AUX. AND TO THE A2 TERMINAL ON THE "OFF" COIL.

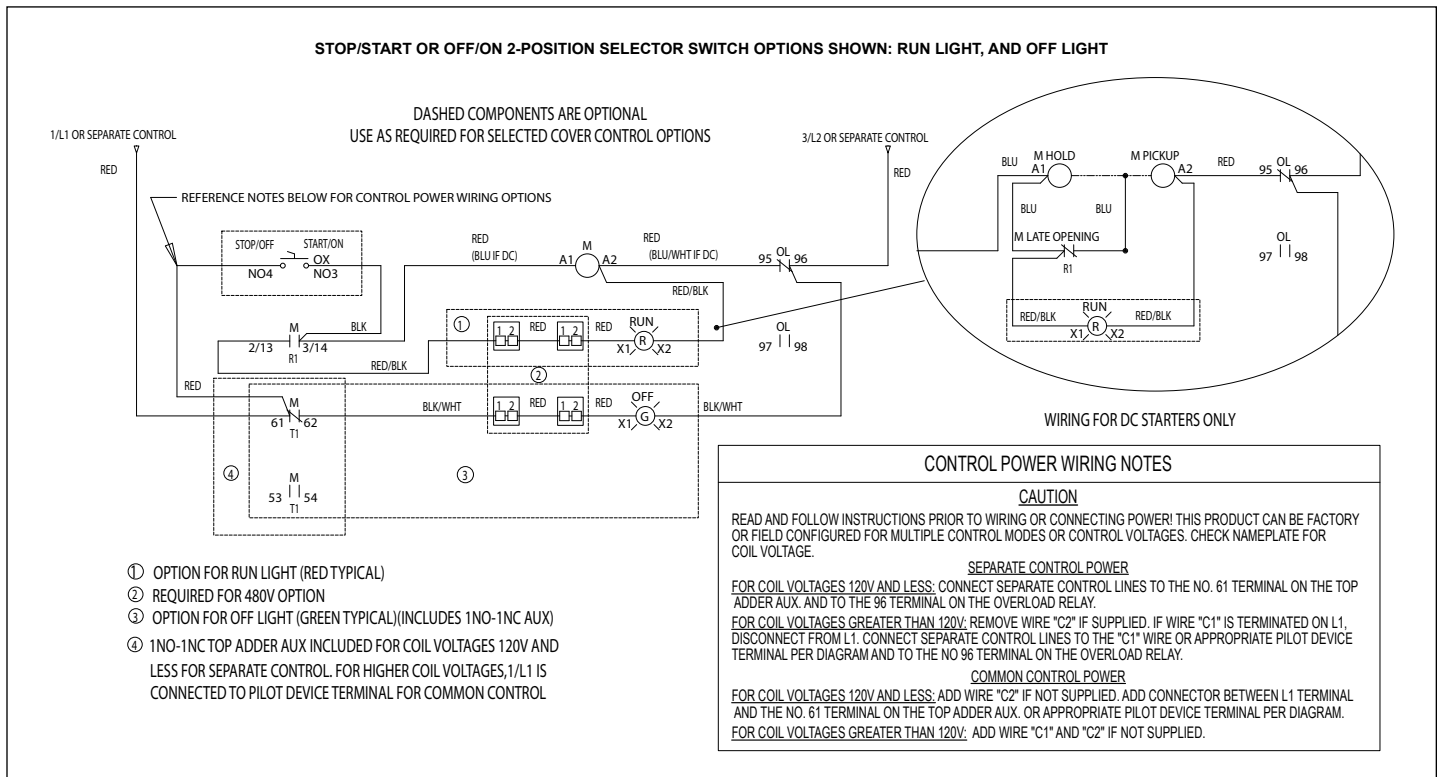
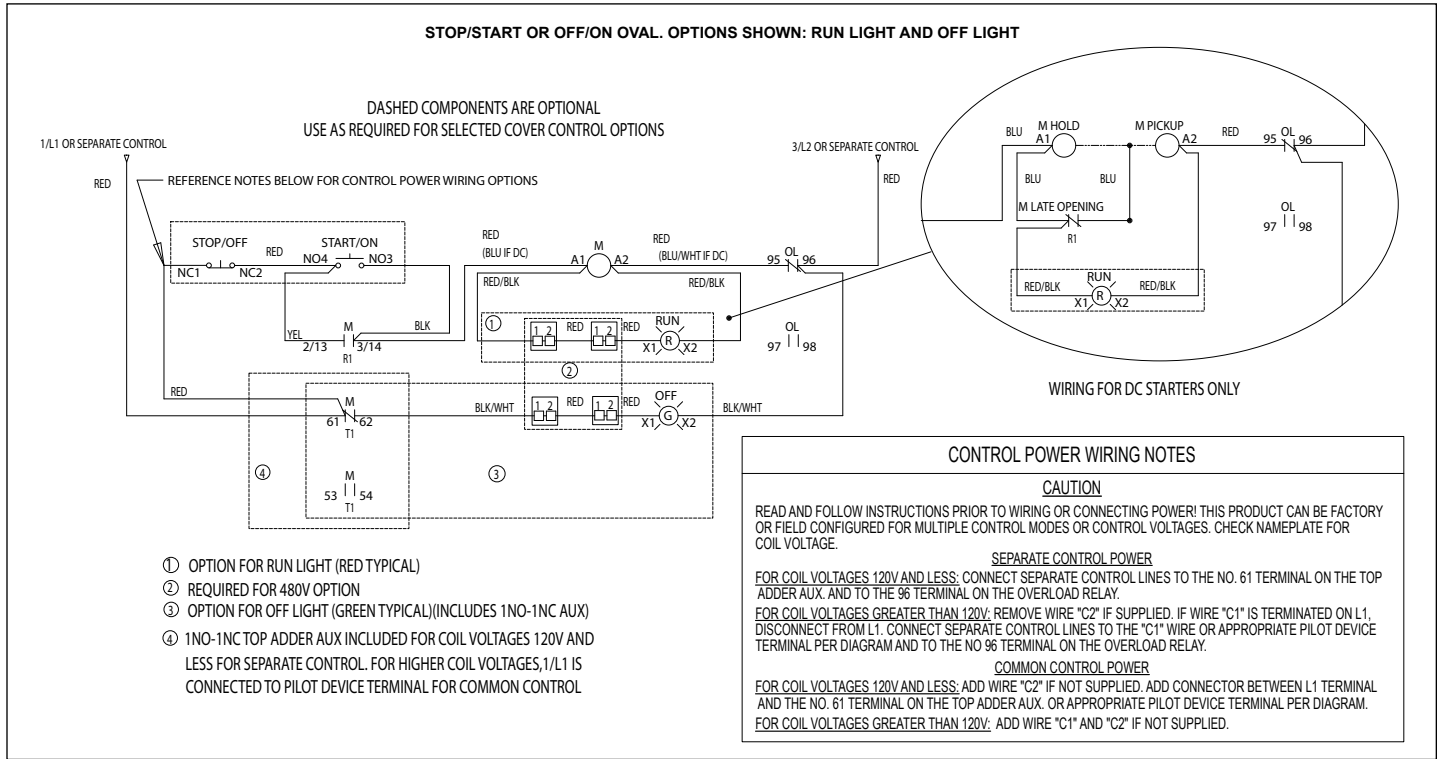
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**COMMON CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: ADD WIRE "C2" IF NOT SUPPLIED. ADD CONNECTOR BETWEEN L1 TERMINAL AND THE NO. 53 TERMINAL ON THE ADDER AUX. OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM.

FOR COIL VOLTAGES GREATER THAN 120V: ADD WIRE "C1" AND "C2" IF NOT SUPPLIED.

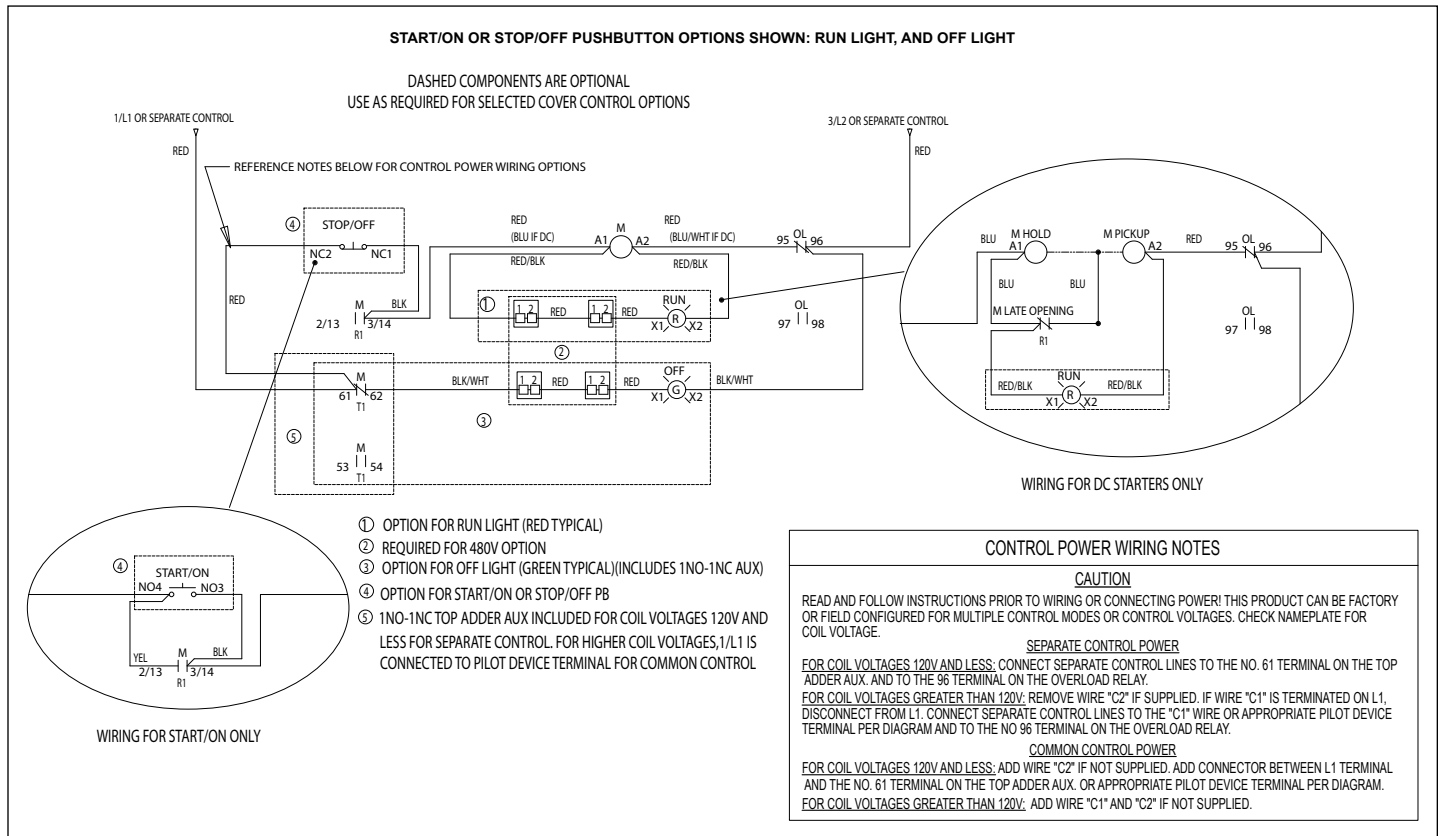
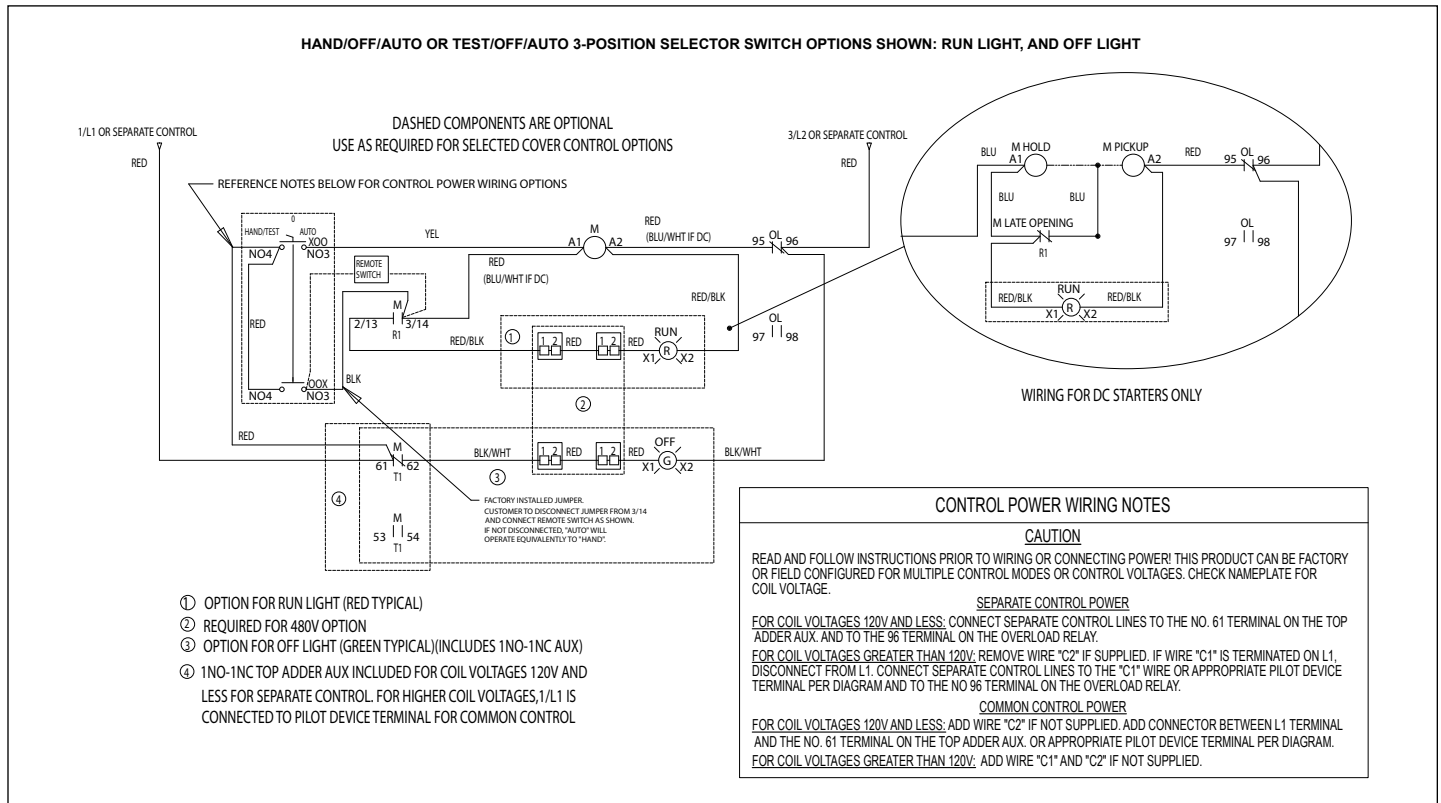
**C600M wiring kit diagrams—Box 1 and Box 2**



**Note:** Source drawing reference wiring diagrams 286979 or 288257.

**Note:** For kits with a green OFF light, an additional top added NC auxiliary is needed to be supplied by the customer.

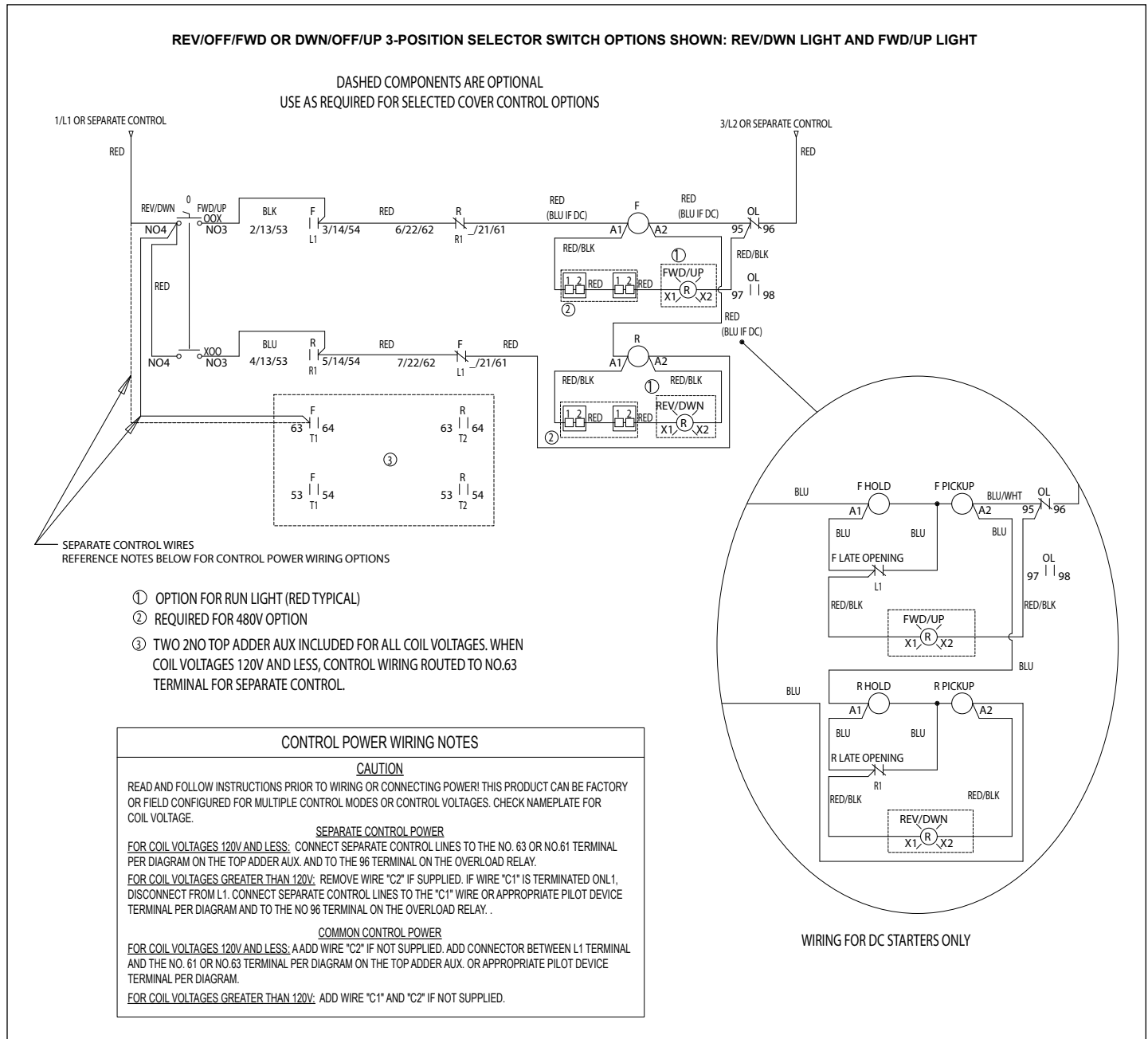
**C600M wiring kit diagrams—Box 1 and Box 2**



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**C600M wiring kit diagrams—Box 1 and Box 2**

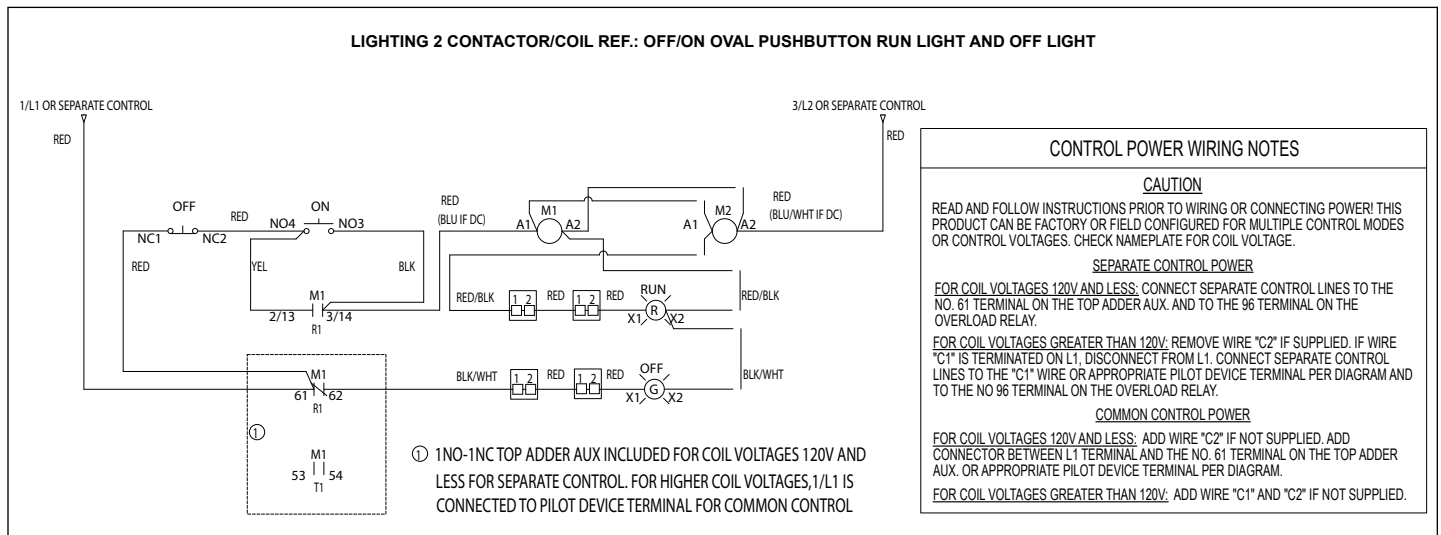
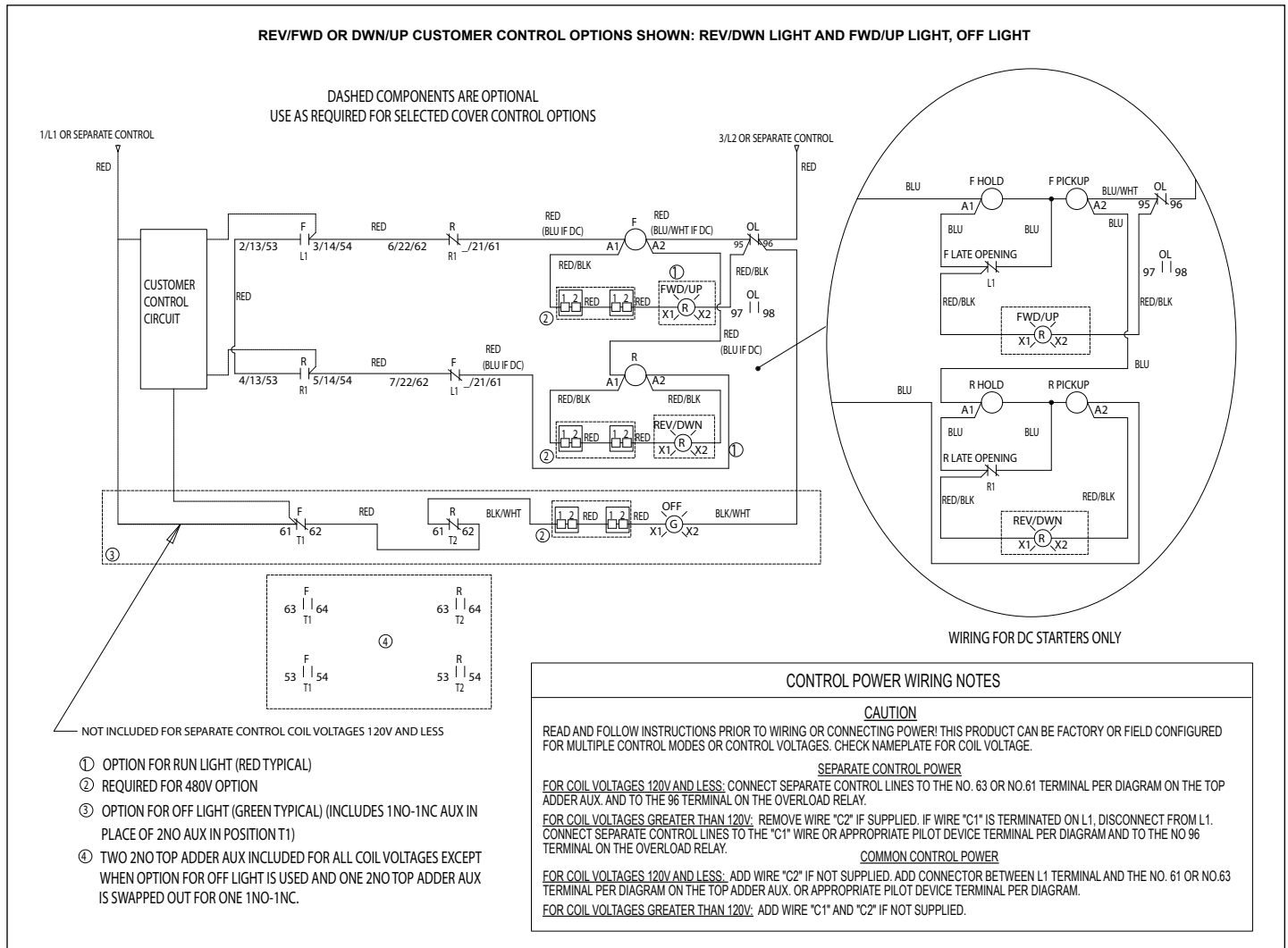


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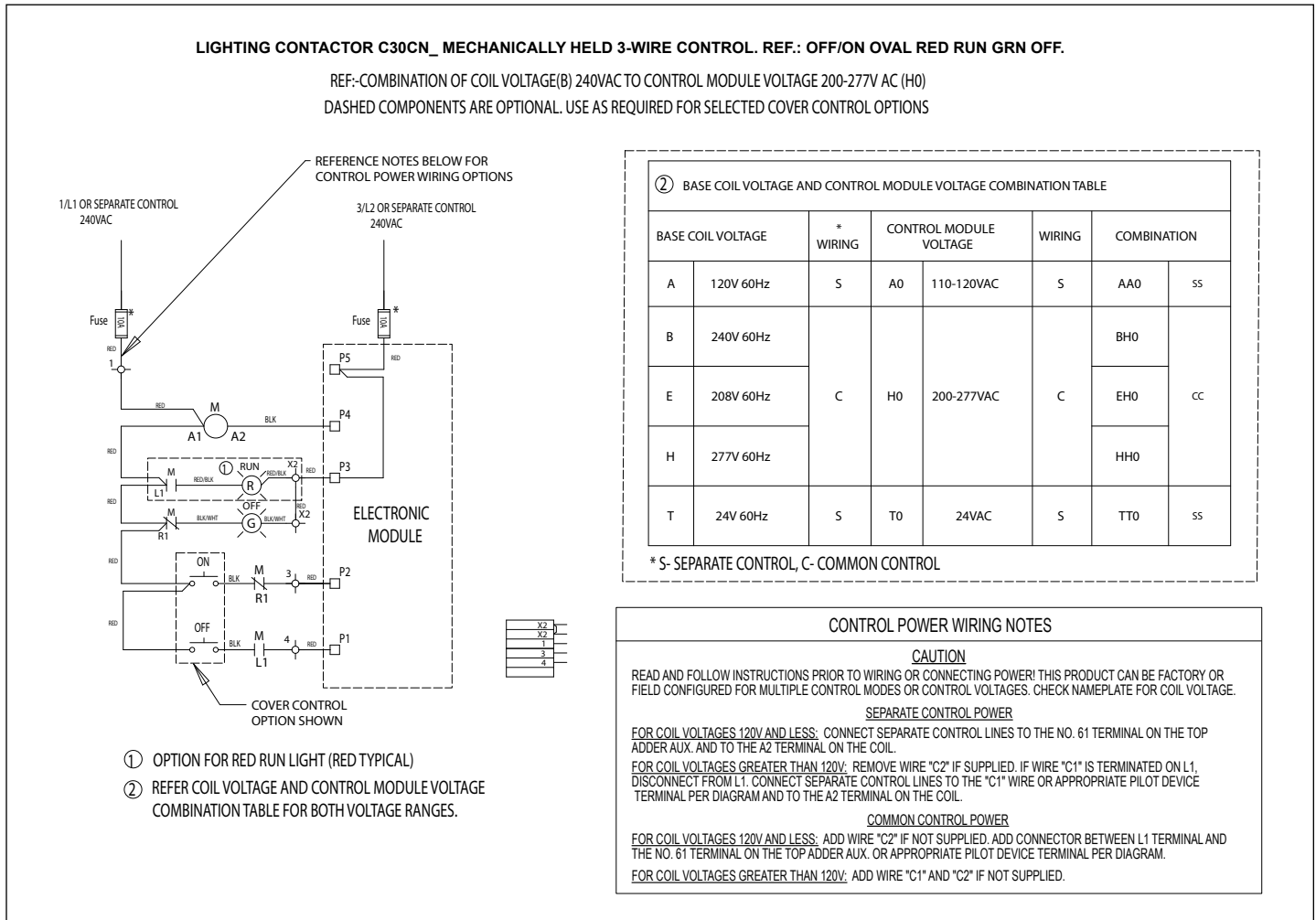
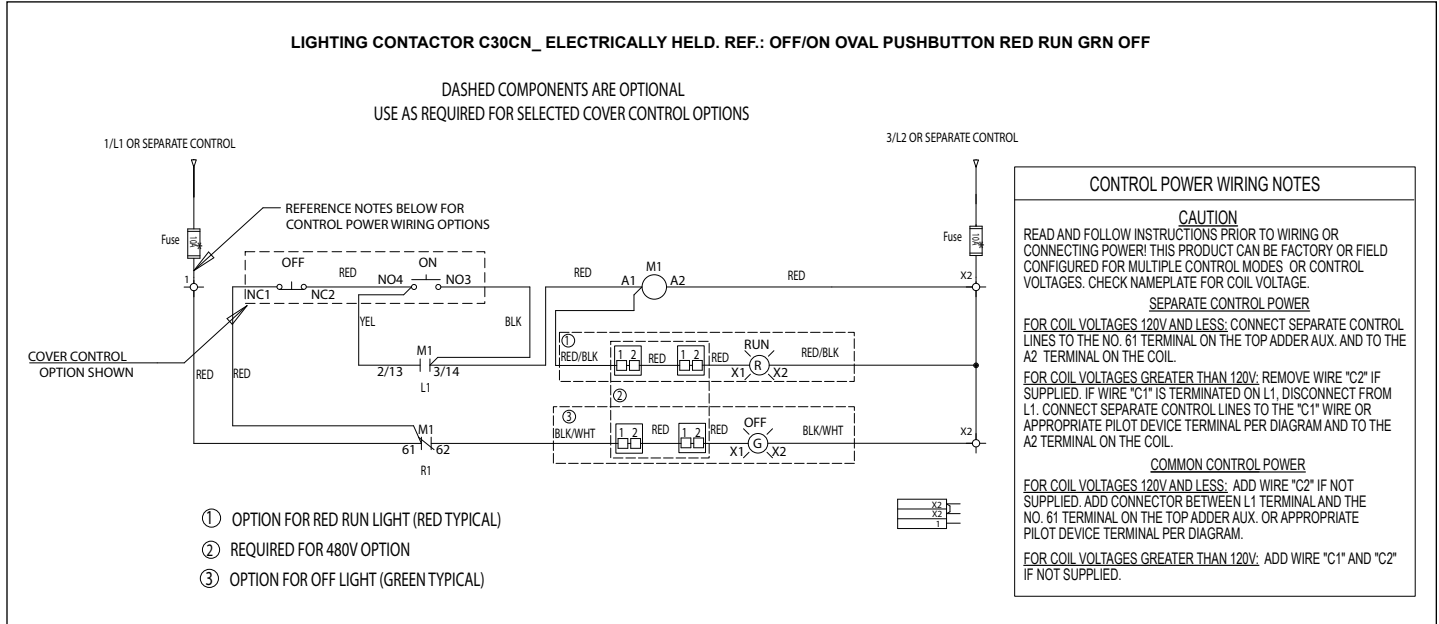
**C600M wiring kit diagrams—Box 1 and Box 2**



**Note:** Source drawing reference wiring diagrams 286979 or 288257.

**Note:** For kits with a green OFF light, an additional top added NC auxiliary is needed to be supplied by the customer.

**C600M wiring kit diagrams—Box 2**

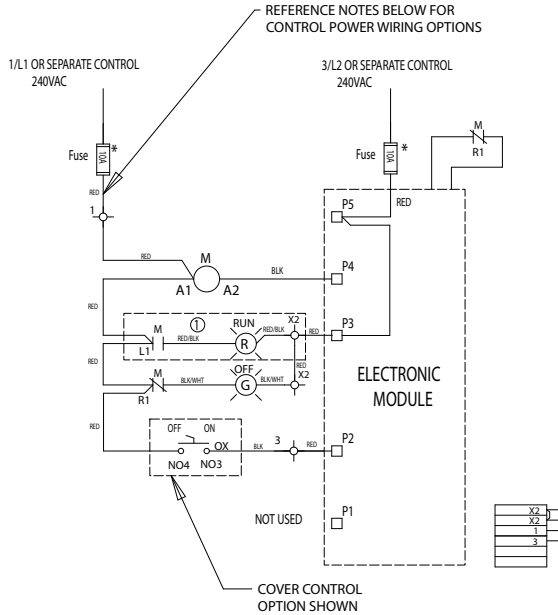


**Note:** Source drawing reference wiring diagrams 288257.

**C600M wiring kit diagrams— Box 2**

**LIGHTING CONTACTOR C30CN\_ MECHANICALLY HELD 2-WIRE CONTROL. REF.: OFF/ON 2-POSITION SELECTOR SWITCH RED RUN GRN OFF**

REF.-COMBINATION OF COIL VOLTAGE(B) 240VAC TO CONTROL MODULE VOLTAGE 200-277V AC (H0)  
DASHED COMPONENTS ARE OPTIONAL. USE AS REQUIRED FOR SELECTED COVER CONTROL OPTIONS



- ① OPTION FOR RED RUN LIGHT (RED TYPICAL)
- ② REFER COIL VOLTAGE AND CONTROL MODULE VOLTAGE COMBINATION TABLE FOR BOTH VOLTAGE RANGES.

② BASE COIL VOLTAGE AND CONTROL MODULE VOLTAGE COMBINATION TABLE

BASE COIL VOLTAGE	* WIRING	CONTROL MODULE VOLTAGE		COMBINATION	
		WIRING	VOLTAGE		
A 120V 60Hz	S	A0	110-120VAC	AA0 ss	
B 240V 60Hz	C	H0	200-277VAC	BH0	
E 208V 60Hz				EH0	cc
H 277V 60Hz				HH0	
T 24V 60Hz	S	T0	24VAC	TT0 ss	

\* S- SEPARATE CONTROL, C- COMMON CONTROL

**CONTROL POWER WIRING NOTES**

**CAUTION**  
READ AND FOLLOW INSTRUCTIONS PRIOR TO WIRING OR CONNECTING POWER! THIS PRODUCT CAN BE FACTORY OR FIELD CONFIGURED FOR MULTIPLE CONTROL MODES OR CONTROL VOLTAGES. CHECK NAMEPLATE FOR COIL VOLTAGE.

**SEPARATE CONTROL POWER**  
FOR COIL VOLTAGES 120V AND LESS: CONNECT SEPARATE CONTROL LINES TO THE NO. 61 TERMINAL ON THE TOP ADDER AUX. AND TO THE A2 TERMINAL ON THE COIL.  
FOR COIL VOLTAGES GREATER THAN 120V: REMOVE WIRE "C2" IF SUPPLIED. IF WIRE "C1" IS TERMINATED ON L1, DISCONNECT FROM L1. CONNECT SEPARATE CONTROL LINES TO THE "C1" WIRE OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM AND TO THE A2 TERMINAL ON THE COIL.

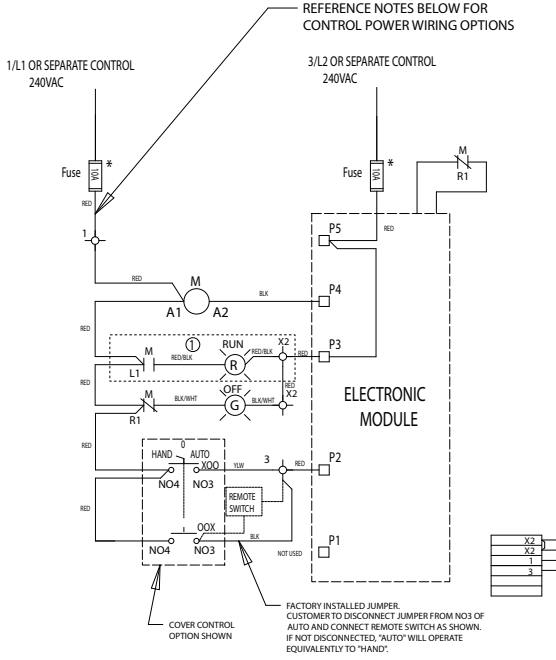
**COMMON CONTROL POWER**  
FOR COIL VOLTAGES 120V AND LESS: ADD WIRE "C2" IF NOT SUPPLIED. ADD CONNECTOR BETWEEN L1 TERMINAL AND THE NO. 61 TERMINAL ON THE TOP ADDER AUX. OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM.  
FOR COIL VOLTAGES GREATER THAN 120V: ADD WIRE "C1" AND "C2" IF NOT SUPPLIED.

**Note:** Source drawing reference wiring diagrams 288257.

**C600M wiring kit diagrams— Box 2**

**LIGHTING CONTACTOR C30CN\_ MECHANICALLY HELD 2-WIRE CONTROL. REF.: HAND/OFF/AUTO OR TEST/OFF/AUTO 3-POSITION SELECTOR SWITCH RED RUN GRN OFF**

REF.-COMBINATION OF COIL VOLTAGE(B) 240VAC TO CONTROL MODULE VOLTAGE 200-277V AC (H0)  
DASHED COMPONENTS ARE OPTIONAL. USE AS REQUIRED FOR SELECTED COVER CONTROL OPTIONS



- ① OPTION FOR RED RUN LIGHT (RED TYPICAL)
- ② REFER COIL VOLTAGE AND CONTROL MODULE VOLTAGE COMBINATION TABLE FOR BOTH VOLTAGE RANGES.

② BASE COIL VOLTAGE AND CONTROL MODULE VOLTAGE COMBINATION TABLE

BASE COIL VOLTAGE	* WIRING	CONTROL MODULE VOLTAGE	WIRING	COMBINATION
A 120V 60Hz	S	A0 110-120VAC	S	AA0 SS
B 240V 60Hz				BH0
E 208V 60Hz	C	H0 200-277VAC	C	EHO CC
H 277V 60Hz				HH0
T 24V 60Hz	S	T0 24VAC	S	TT0 SS

\* S- SEPARATE CONTROL, C- COMMON CONTROL

**CONTROL POWER WIRING NOTES**

**CAUTION**

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**SEPARATE CONTROL POWER**

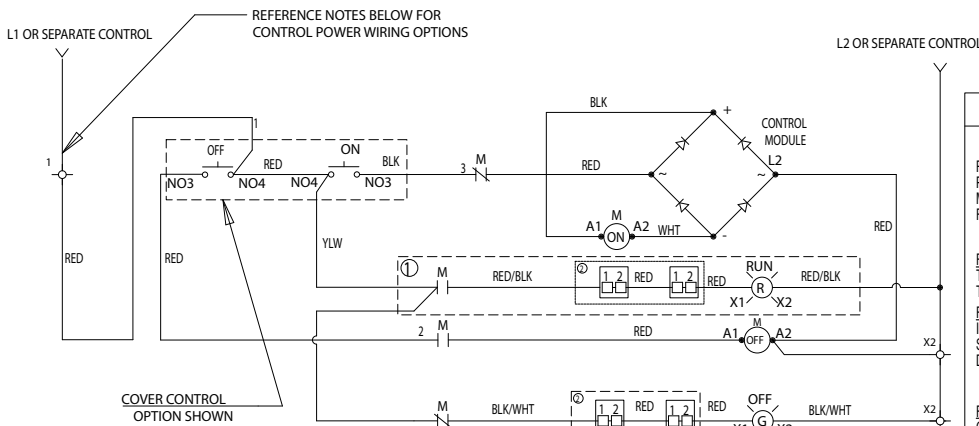
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**COMMON CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: ADD WIRE "C2" IF NOT SUPPLIED. ADD CONNECTOR BETWEEN L1 TERMINAL AND THE NO. 61 TERMINAL ON THE TOP ADDER AUX. OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM.  
FOR COIL VOLTAGES GREATER THAN 120V: ADD WIRE "C1" AND "C2" IF NOT SUPPLIED.

**LIGHTING CONTACTOR MAGNETICALLY HELD. REF.: OFF/ON OVAL PUSHBUTTON RED RUN GRN OFF**

DASHED COMPONENTS ARE OPTIONAL  
USE AS REQUIRED FOR SELECTED COVER CONTROL OPTIONS



- ① OPTION FOR RED RUN LIGHT (RED TYPICAL)
- ② REQUIRED FOR 480V OPTION

**CONTROL POWER WIRING NOTES**

**CAUTION**

READ AND FOLLOW INSTRUCTIONS PRIOR TO WIRING OR CONNECTING POWER! THIS PRODUCT CAN BE FACTORY OR FIELD CONFIGURED FOR MULTIPLE CONTROL MODES OR CONTROL VOLTAGES. CHECK NAMEPLATE FOR COIL VOLTAGE.

**SEPARATE CONTROL POWER**

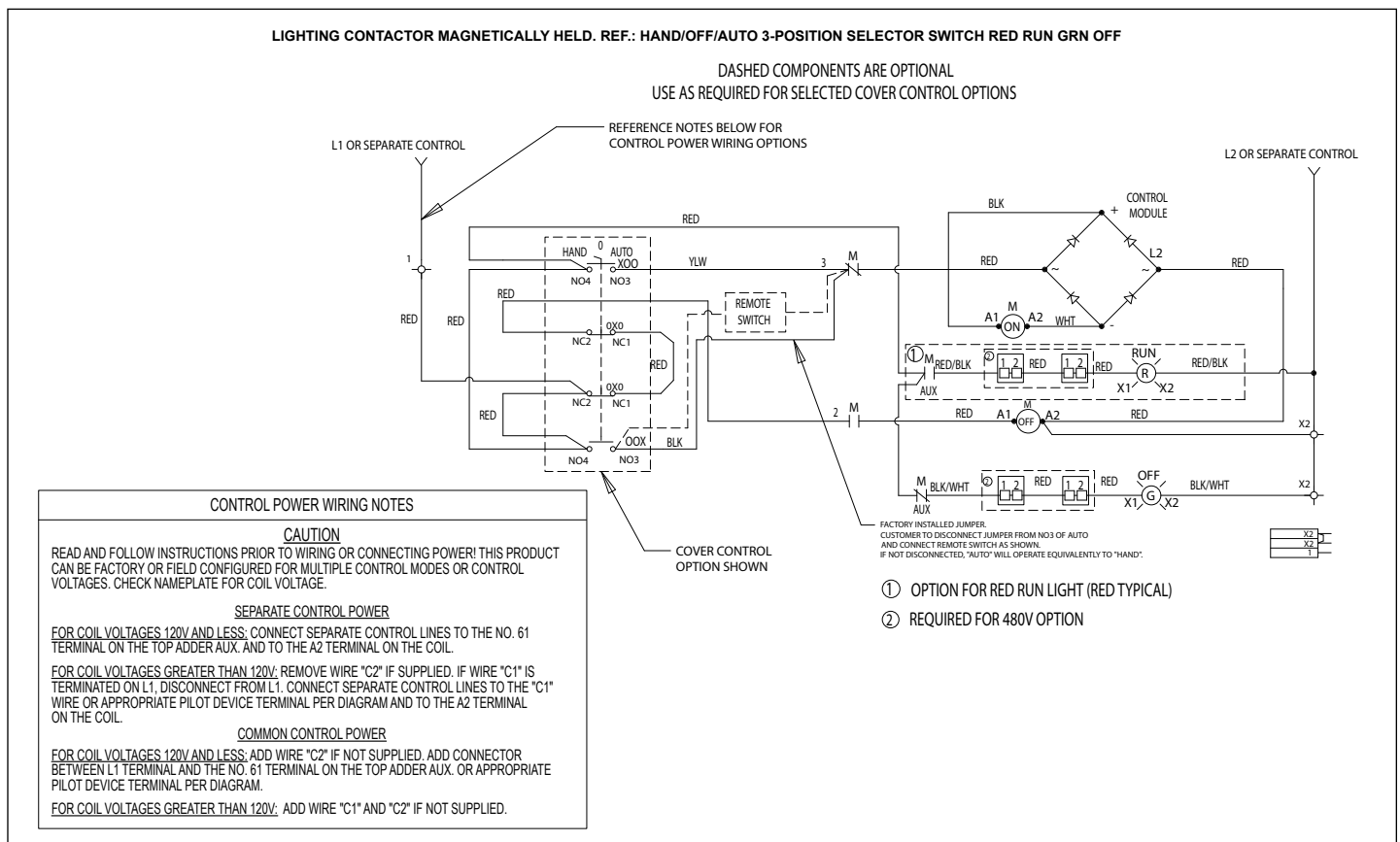
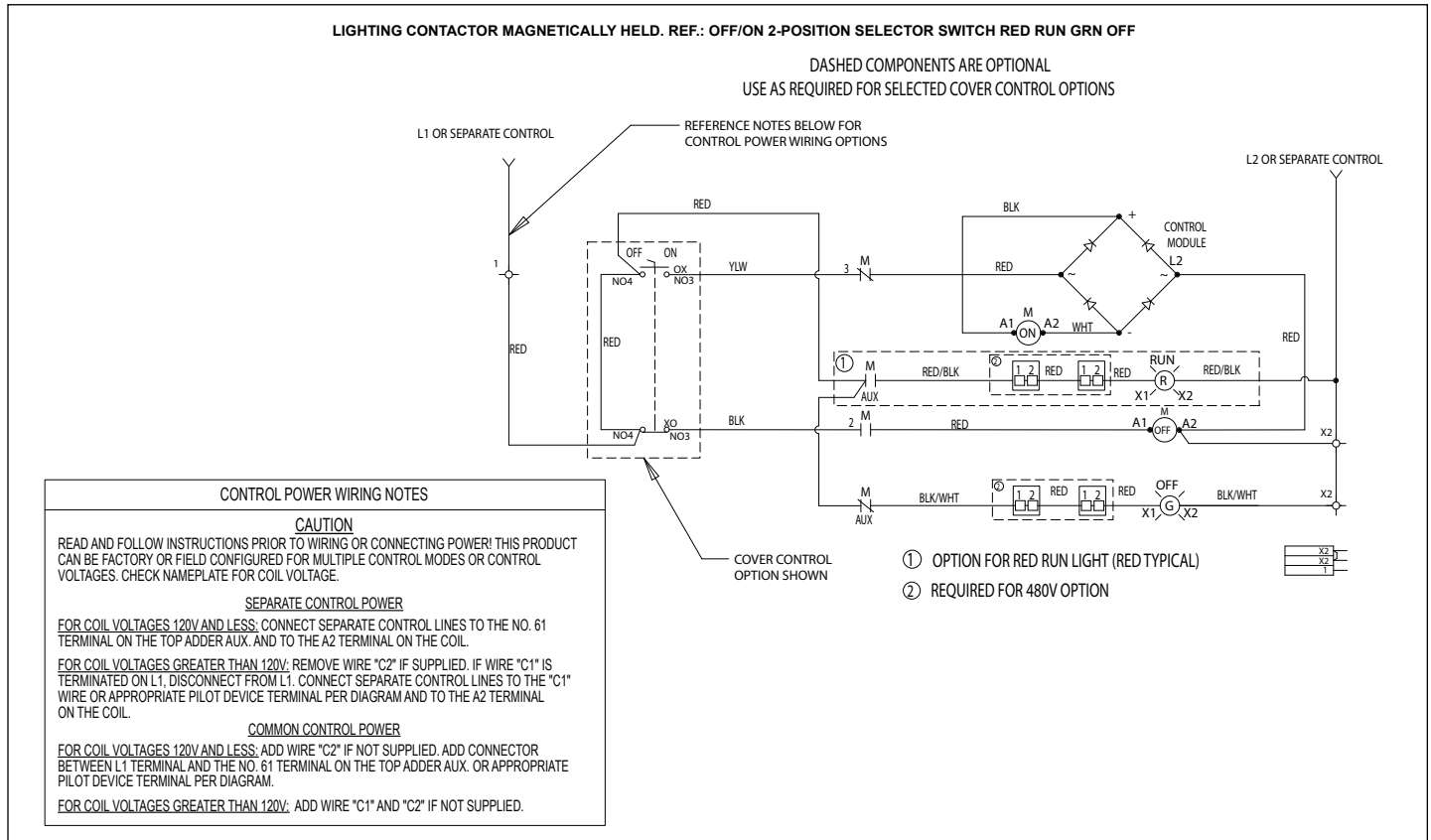
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**COMMON CONTROL POWER**

FOR COIL VOLTAGES 120V AND LESS: ADD WIRE "C2" IF NOT SUPPLIED. ADD CONNECTOR BETWEEN L1 TERMINAL AND THE NO. 61 TERMINAL ON THE TOP ADDER AUX. OR APPROPRIATE PILOT DEVICE TERMINAL PER DIAGRAM.  
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**Note:** Source drawing reference wiring diagrams 288257.

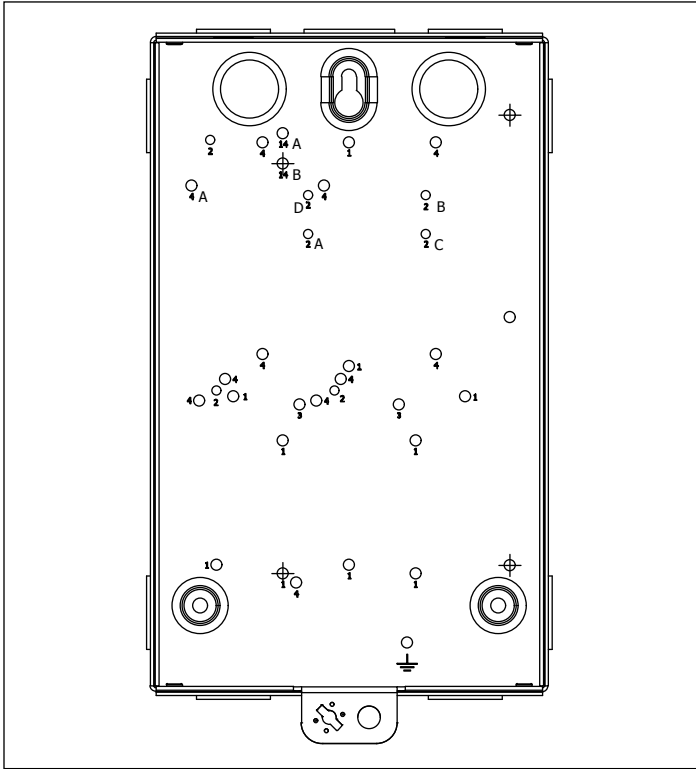
C600M wiring kit diagrams—Box 2



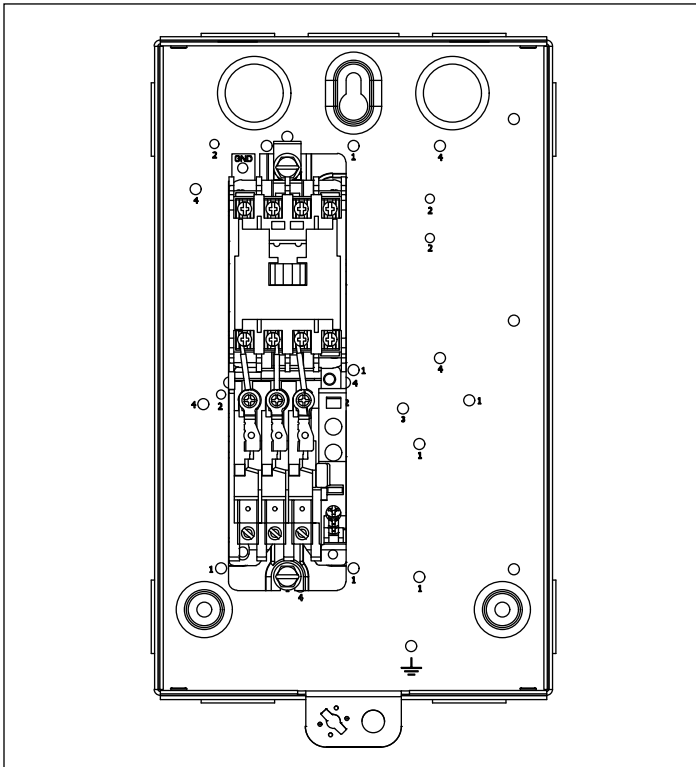
Note: Source drawing reference wiring diagrams 288257.

## Box 1 starter/contactor mounting locations

### Box 1 mounting locations



### Box 1 mounting location example



**Example:** If you want to mount a AN16AN, you would put the top hole in the 14B location.

Table 1. Box 1 mounting locations

Family	Starter/contactor	Size	Top location
<b>ECN</b>			
ECN01	CN15AN	00	1
	CN15BN	0	1
	CN15DN	1	1
	CN15GN	2	1
ECN02	CN55AN	00	1
	CN55BN	0	1
ECN05	AN16AN	00	14B
	AN19AN	00	14B
	AN16BN	0	14B
	AN19BN	0	14B
	AN16DN	1	14A
	AN19DN	1	14A
	AN19GN	2	14A
<b>ECL</b>			
ECL03	CN35AN	2-4 P	1
	CN35BN	2-4 P	1
	CN35DN	2-3 P	1
	CN35GN	2-4 P	1
<b>DP</b>			
DP	A25/B25	15-30 A	14A
	A27/B27	15-45 A	4A
<b>ECX</b>			
ECX09	XTCE	B	2C
	XTCE	C	2E
ECX10	XTCR	B	2D, 2B
	XTCR	C	2A, 2C

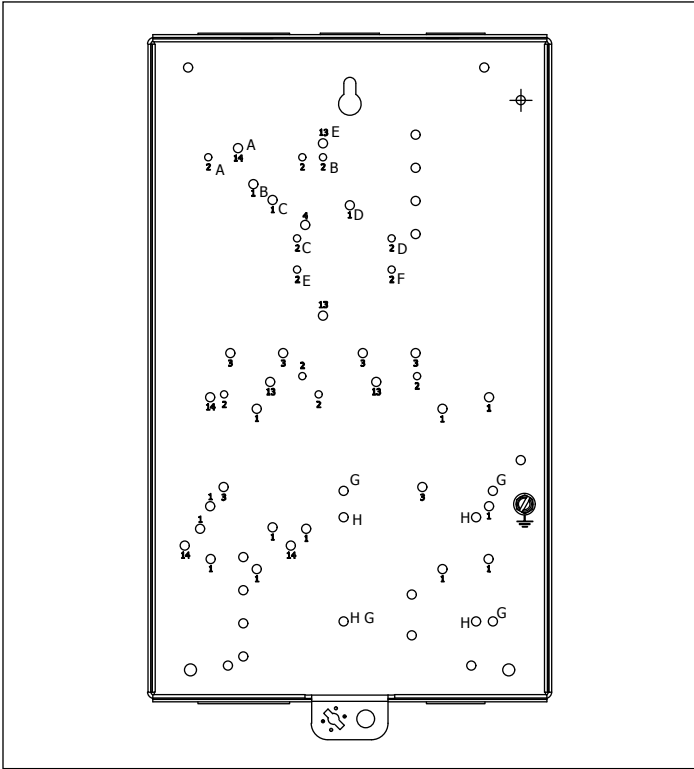
**Notes:** All indicated mounting holes represent contactor or starter top or top left mounting location. Additional screws are required for full contactor or starter assembly.

Cover control bracket mounting holes are on the far right of the base.

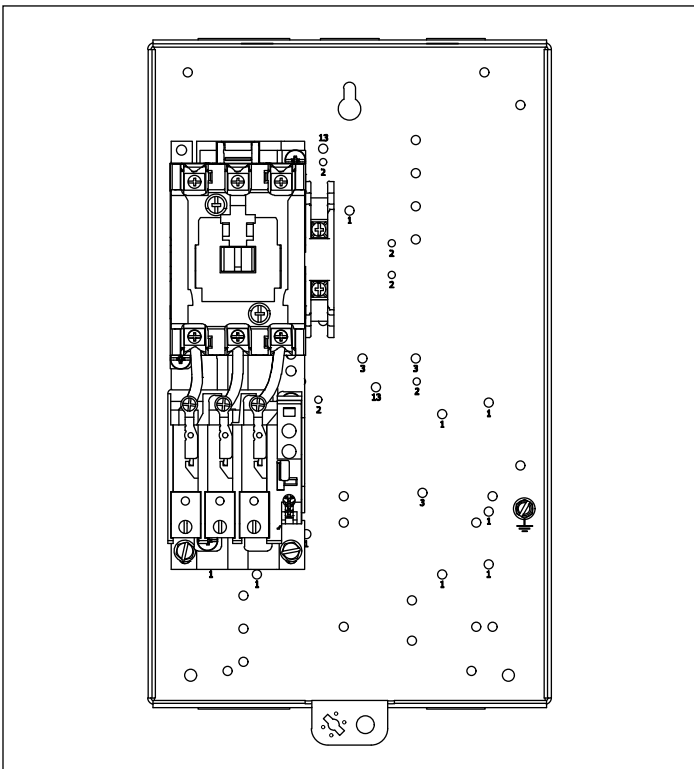
Letters are not stamped in the box.

## Box 2 starter/contactor mounting locations

### Box 2 mounting locations



### Box 2 mounting location example



**Example:** If you want to mount an AN16GN (ECN05), you would put the top hole in the 14A location.

**Table 2. Box 2 mounting locations**

Family	Starter/contactor	Size	Top location
<b>ECN</b>			
ECN01	CN15AN	00	13E
	CN15BN	0	13E
	CN15DN	1	13E
	CN15GN	2	13E
ECN02	CN55AN	00	1D
	CN55BN	0	1D
	CN55DN	1	1D
	CN55GN	2	1D
ECN05	AN16GN	2	14A
ECN06	AN56AN	00	1D
	AN59AN	00	1D
	AN56BN	0	1D
	AN59BN	0	1D
	AN56DN	1	1D
	AN59DN	1	1D
	AN56GN	2	1D
	AN59GN	2	1D
	ECN07	AN16AN	00
AN19AN		00	1C
AN16BN		0	1C
AN19BN		0	1C
AN16DN		1	1B
AN19DN		1	1B
AN16GN		2	1B
AN19GN		2	1B
<b>ECC</b>			
ECC03	C30CN	1–12 P	13E
ECC04	C30CN	1–12 P	13E
ECL03	CN35AN	2–4 P	13E
	CN35BN	2–6 P	13E
	CN35DN	2–6 P	13E
	CN35GN	2–5 P	13E
ECL04	A202K1	2–5 P	13E
	A202K2	2–5 P	13E
<b>DP</b>			
DP	A25 & B25	40–50 A	14A
<b>ECX</b>			
ECX09 & ECX11	XTCE	B	2E
	XTCE	C	2C
	XTCE	D	2A
ECX10	XTCR	B	2E, 2F
	XTCR	C	2C, 2D
	XTCR	D	2A, 2B
<b>CPT</b>			
CPT	C0050	50 VA	H
	C0100	100 VA	G

**Notes:** All indicated mounting holes represent contactor or starter top or top left mounting location. Additional screws are required for full contactor or starter assembly.

Cover control bracket mounting holes are on the far right of the base.

Letters are not stamped in the box.

## Enclosures

**Table 3. Enclosures without starters or contactors**

Rod shaft length	Catalog number	Starter size	Description
None	<b>C899B001</b>	N/A	Empty Box 1 enclosure without reset (includes blank cover on reset hole)
	<b>C899B2001</b>	N/A	Empty Box 2 enclosure without reset (includes blank cover on reset hole)
0.43	<b>C899B043</b>	ECN05 SSOL Size 00–2	Empty Box 1 enclosure with 0.43 inch reset rod length
	<b>C899B2043</b>	ECN06 SSOL Size 00–0 w/CC, 1–2 w/out CC ECN07 Size 00–2	Empty Box 2 enclosure with 0.43 inch reset rod length
0.74	<b>C899B093</b>	ECX09 SSOL Size B–C	Empty Box 1 enclosure with 0.93 inch reset rod length
		ECX10 SSOL Size B–C, w/out CC	
	<b>C899B2093</b>	ECX09 SSOL Size D	Empty Box 2 enclosure with 0.93 inch reset rod length
		ECX10 SSOL Size B–C, w/CC ECX10 SSOL Size D ECX11 SSOL Size B–D	
1.30	<b>C899B130</b>	ECX09 fixed OL Size C	Empty Box 1 enclosure with 1.30 inch reset rod length
		ECX10 fixed OL Size C, w/out CC	
	<b>C899B2130</b>	ECX10 fixed OL Size C, w/CC ECX11 fixed OL Size B–D	Empty Box 2 enclosure with 1.30 inch reset rod length
1.37	<b>C899B137</b>	A27/B27 fixed OL, 30–45 A	Empty Box 1 enclosure with 1.37 inch reset rod length
1.45	<b>C899B2145</b>	ECX09 fixed OL Size D	Empty Box 2 enclosure with 1.45 inch reset rod length
		ECX10 fixed OL Size D	
		ECX11 fixed OL Size D	
1.56	<b>C899B156</b>	A27/B27 fixed OL, 15–25 A	Empty Box 1 enclosure with 1.56 inch reset rod length
1.68	<b>C899B168</b>	ECN05 bi-metallic OL Size 00–1	Empty Box 1 enclosure with 1.68 inch reset rod length
		A25/B25 bi-metallic OL, 25–30 A	
	<b>C899B2168</b>	ECN05 bi-metallic OL Size 2	Empty Box 2 enclosure with 1.68 inch reset rod length
		ECN06 bi-metallic OL Size 00–0, 1–2 w/out CC ECN07 bi-metallic OL 00–2 A25/B25 bi-metallic OL, 40–50 A	
1.74	<b>C899B174</b>	ECX09 fixed OL Size B	Empty Box 1 enclosure with 1.74 inch reset rod length
		ECX10 fixed OL Size B	
	<b>C899B2174</b>	ECX11 fixed OL Size B	Empty Box 2 enclosure with 1.74 inch reset rod length

**Note:** CC stands for cover control. CPT stands for control power transformer.

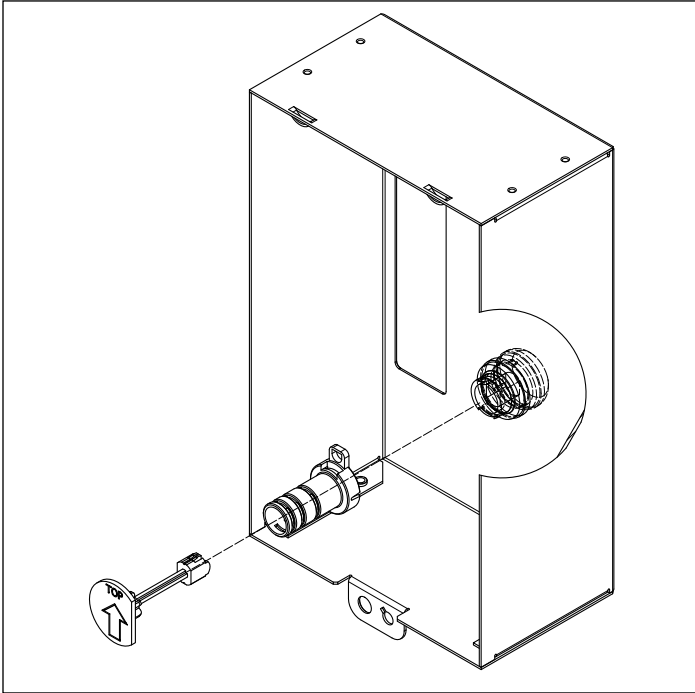
## Reset rods

**Table 4. Reset rod kits**

Item	Reset
Lighting contactors	No reset
NEMA Size 00–2, SSOL	0.43
IEC frame Size B–D, SSOL	0.74
IEC frame Size C, bi-metallic	1.30
A27/B27 DP 30–45 A	1.37
IEC frame Size D, bi-metallic	1.45
A27/B27 DP 15–25 A	1.56
NEMA Size 00–2, bi-metallic; A25/B25 DP, 25–50 A	1.68
IEC frame Size B, bi-metallic	1.74



## Reset rod installation



1. From the top of the box cover, insert the M22 button into the box cover.
2. From the bottom of the cover, tighten the nut onto M22 button.
3. From the bottom of the cover, snap the shroud (if supplied) cut to the appropriate length for the reset rod into the M22 button.
4. If the reset paddle is not already assembled to the required reset rod (see Reset rod kits table on previous page), assemble as shown by inserting reset rod into reset paddle.
5. From the bottom of the cover, snap the required reset rod into M22 button. The flat side of the paddle should face away from the box cover's rectangular opening with the
6. "Up" arrow facing toward the top of the box.





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