Type 1 General Purpose Enclosures ❷❸

Enclosure (Box) Kit Includes:

- Hinged cover
- Backpan pre-drilled for listed arrangements (not tapped)
- (2) Ground Lugs and Symbol label
- (2) 22mm knockouts for pilot devices ❹
- CEP7-1ERA Overload Reset Adapter ❽
- MR7 Reset Kit for Cover
- (2) 22mm knockouts for Reset ❺
- Dual Conduit knockouts - Top and Bottom
  "A" Box - (2) 1/2 to 3/4" and (1) 3/4 to 1"
  "B" Box - (2) 1/2 to 3/4", (1) 1 to 1-1/4", (1) 3/4 to 1"
- (4) 8-32 x 1/2" screws for mounting controllers
  "B" Box also includes (2) 10-32 x 3/4" screws
- Does not include wire

	"A" Box Kit	*"B" Box Kit*
	Catalog Number	**Catalog Number**
	M1-1086-A	**M1-12106-B**
Optional: 35mm DIN Rail Kit with (2) 10-32 x 1/4" screws ❷	**SF-2** (2 inches long)	**SF-3** (3 inches long)
Dimensions ❻	10" x 8" x 6" Type 1 Enclosure	12" x 10" x 6" Type 1 Enclosure

For use with Controller	For use with overload			"A" Box Kit accommodates			"B" Box Kit accommodates			
	CEP7-1EE*	CEP7-1EF*	CT7N	Use with No CPT	Use with 50VA CPT ❸	Space for 2" DIN Rail ❷	Use with No CPT	Use with 50VA CPT	Use with 100VA CPT ❸	Space for 3" DIN Rail ❷
Non-reversing Contactors										
CA7-9...55	~	~	~	✔	✔	✔	✔	✔	✔	✔
CA7-60...97 ❼	~	~	~	No	No	No	✔	N/A	✔	✔
Reversing Contactors										
CAU7-9...37	~	~	~	✔	No	✔	✔	✔	✔	✔
CAU7-43...55	~	~	~	No	No	No	✔	✔	✔	✔
CAU7-60...97 ❼	~	~	~	No	No	No	No	N/A	No	No
Non-Reversing Starters										
CAT7-9...23	✔	✔	❶	✔	✔	✔	✔	✔	✔	✔
CAT7-30...55	✔	✔	❶	✔	✔	✔	✔	✔	✔	✔
CAT7-60...97 ❼	N/A	✔	❶	No	No	No	✔	N/A	✔	✔
Reversing Starters										
CAUT7-9...23	✔	✔	❶	✔	No	✔	✔	✔	✔	✔
CAUT7-30...37	✔	✔	❶	✔	No	✔	✔	✔	✔	✔
CAUT7-43...55	✔	✔	❶	No	No	No	✔	✔	✔	✔
CAUT7-60...97 ❼	N/A	No	No	No	No	No	No	No	No	No
NEMA Sized Non-reversing Starters										
CATN7-12...16	✔	✔	❶	✔	✔	✔	✔	✔	✔	✔
CATN7-37	✔	✔	❶	✔	✔	✔	✔	✔	✔	✔
CATN7-43	✔	✔	❶	✔	✔	✔	✔	✔	✔	✔
CATN7-85	N/A	✔	❶	No	No	No	✔	N/A	✔	✔

❶ Alternatively CT7N overload relay can be used which will require CT7N-RA3 Reset Adapter. Not included in the kit. Order separately.

❷ 2" DIN rail can accommodate up to (3) V7-W4 TB's or equivalent DIN rail mount timers, relays, etc. Order kit SF-2 separately.
3" DIN rail can accommodate up to (6) V7-W4 TB's or equivalent DIN rail mount timers, relays, etc. Order kit SF-3 separately.

❸ Enclosure designed for use with CPT with top mount secondary fuse, plus back pan mounted Ambus Fuseholder with (2) primary fuses. A CPT and the addition of extra terminal blocks or other control relay using the 2" DIN rail space may require a design change.

❹ This enclosure is designed for use with a D7 multi-function Start/Stop as standard plus a D7D monolithic pilot light to fit the (2) 22mm knockouts provided. Additional pilot device holes will require field drilling and may interfere with the controller or the addition of a CPT or TB's.

❺ (2) 22mm knockout locations are provided for one reset Kit to be located contingent on the type of controller used. See box Instruction sheet for mounting details of controller and reset kit.

❻ For enclosure dimensions see page C8:23

❼ CA7-97 and CAT7-97 will not fit in "B" Box because of wire bending space requirements. See Selection tables for box sizes starting on page C8:23 for dimensions.

❽ The CEP7-1ERA reset adapter is a 3rd generation accessory only compatible to 3rd generation CEP7-1 overloads

Pilot Device Kits – All applications *(except Kwikstarters and Explosion Proof enclosures)* ❶

Kits	Description	Contact Blocks included NO	Contact Blocks included NC	For Use With Enclosure...	Catalog Number
	Multi-Function Pushbutton kit ❷ **START-STOP** Non-illuminated, Standard for "A" and "B" Box Kits.	1	1	Type 1, 12, 3R, 4, 4X, 13	**SS6-D7P**
				Type 1, 12, 3R, 4, 13	**SS6-D7M**
	Multi-Function Pushbutton kit ❷ **FORWARD-STOP-REVERSE** Non-illuminated, Standard for "A" and "B" Box Kits.	2	3	Type 1, 12, 3R, 4, 4X, 13	**SS5-D7P**
				Type 1, 12, 3R, 4, 13	**SS5-D7M**
	STOP and START Two button pushbutton kit	1	1	Type 1, 12, 3R, 4, 4X, 13	**SS1-D7P**
				Type 1, 12, 3R, 4, 13	**SS1-D7M**
	FORWARD, REVERSE and STOP Three button pushbutton kit	2	3	Type 1, 12, 3R, 4, 4X, 13	**SS7-D7P**
				Type 1, 12, 3R, 4, 13	**SS7-D7M**
	HAND-OFF-AUTO selector switch kit Name plate included.	2	0	Type 1, 12, 3R, 4, 4X, 13	**SS2-D7P**
				Type 1, 12, 3R, 4, 13	**SS2-D7M**
	FWD-OFF-REV selector switch kit Name plate included.	2	0	Type 1, 12, 3R, 4, 4X, 13	**SS9-D7P**
				Type 1, 12, 3R, 4, 13	**SS9-D7M**
	OFF-ON selector switch kit Name plate included.	1	0	Type 1, 12, 3R, 4, 4X, 13	**SS4-D7P**
				Type 1, 12, 3R, 4, 13	**SS4-D7M**
	Monolithic Pilot Light kit LED Lamp and lens cap Does not include nameplate	~		Type 1, 12, 3R, 4, 4X, 13 — Green LED 24V AC/DC	**D7D-P3N3**
				Red LED 24V AC/DC	**D7D-P4N3**
				Green LED 120V AC	**D7D-P3N5**
				Red LED 120V AC	**D7D-P4N5**
				Green LED 240V AC	**D7D-P3N7**
				Red LED 240V AC	**D7D-P4N7**

Example of pushbutton kits on an "A" Box

❶ Pilot Device Kits do not include control wires. See instruction sheet for installation.
❷ Multi-function START/STOP pushbutton are standard for General Purpose Type 1(M1) dimensions A and B enclosures.

A.C. Coil Codes & Voltage Ranges ❶❺

All catalog numbers, list prices and enclosure dimensions in the previous section reflect contactors with AC coils. If necessary, add the appropriate price adder to the list price for each coil required as shown in the online catalog. Remember that reversing applications require two coils. Price Adder x 2.

A.C. Coil Codes (Replace "✱" in cat.# with coil code)	CA7-9 thru CA7-97 CAN7-12...85	
	50 Hz	60 Hz
24Z	24V	24V
120	110V	120V
220W ❷	200-220V	208-240V
277	240V	277V
415	400-415V	~
480	440V	480V
600	550V	600V

D.C. Coil Codes & Voltage Ranges ❶❺

For starters with DC coils, select Coil Code from the table below. Remember that reversing applications require two coils (Price Adder x 2). Starter catalog numbers must be modified when using DC coils. For example: For **CAT7-9...55** contactors, add an "E" to catalog number for Electronic DC Coils. i.e.: CAT7-9... becomes CAT7-9**E**... For **CAT7-60...97** contactors, add a "D" to catalog number. i.e.: CAT7-60... becomes CAT7-60**D**...

D.C. Coil Codes (Replace "✱" in cat.# with coil code)	❻ CA7-9E..37E CAN7-12E...37E	❻ CA7-43E ...55E CAN7-43E	❹ CA7-60D...97D CAN7-85D
CA7 Code	Voltage	Voltage	Voltage
12E	12VDCE	12VDCE	~
24E	24VDCE	24VDCE	~
24DD	~	~	24VDC
36E	36-48VDCE	36-48VDCE	~
48E	48-72VDCE	48-72VDCE	~
110E	110VDCE	110VDCE	~
110DD	~	~	110VDC
220E	220VDCE	220VDCE	~
220DD	~	~	220VDC
250DD	~	~	250VDC

CAT9 AC/DC Coil Codes and Voltage Ranges ❷❸❺

Electronic Coils	V	24-60V	48-130V	100-250V	250-500V
		(Replace "✱" in cat.# with coil code)			
CA9-116...370	AC/DC	**24W**	**48W**	**120W**	**480W**
CA9-116-EI...370-EI	AC/DC with PLC Input	~	~	**120W**	**480W**
CA9-400-EI...750-EI		**24W ❼**	**48W**	**120W**	**480W**
CA9-860-EI...1060-EI		~	~	**120W**	~
CA9-1260-EI		**24W ❼**	**48W**	**120W**	**480W**
CA9-2050-EI...2650-EI		~	~	**120W**	~

❶ Only the most common coils are shown here. Other coil voltages may be available. Refer to Contactor Renewal Parts in Section A of this catalog, or contact your nearest Sprecher + Schuh sales office.
❷ Wide range coil.
❸ "-EI" designates contactor coil with PLC input. Selections CA9-116...370 with "EI" requires use of control logic on terminals 1, 2, 3. CA9-400 contactors and larger include an integral switch to select use of "EI".
❹ "DD" coils are standard for CA7-60D...97D.
❺ Reversing applications require two coils. Add appropriate price adder(s) to list price of enclosed contactors and starters. Remember to add price for each coil required.
❻ CA7-9E...55E electronic coils are not interchangeable with non-electronic DC or AC coils.
❼ This coil range is 24-60V DC only.

CA7 Contactor with CEP7 Overload Relay ❸❹

For use with contactor...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay)
1-Phase & 3-Phase / Manual reset / Class 10 & 20			
CA7-9...CA7-23	0.1...0.5	**1EAB**	CEP7-1EEAB
	0.2...1.0	**1EBB**	CEP7-1EEBB
	1.0...5.0	**1ECB**	CEP7-1EECB
	3.2...16	**1EDB**	CEP7-1EEDB
	5.4...27	**1EEB**	CEP7-1EEEB
CA7-30...CA7-55	1.0...5.0	**FCP**	CEP7-1EFCP ❶
	3.6...16	**FDP**	CEP7-1EFDP ❶
	5.4...27	**1EED**	CEP7-1EEED
	11...55	**1EFD**	CEP7-1EEFD
CA7-60...97	20...100	**1EGE**	CEP7-1EEGE
1-Phase & 3-Phase / Auto or Manual / Adj. Trip Class 10...30			
CA7-9...CA7-23	0.1...0.5	**FAB**	CEP7-1EFAB
	0.2...1.0	**FBB**	CEP7-1EFBB
	1.0...5.0	**FCB**	CEP7-1EFCB
	3.2...16	**FDB**	CEP7-1EFDB
	5.4...27	**FEB**	CEP7-1EFEB
CA7-30...CA7-55	1.0...5.0	**FCP**	CEP7-1EFCP ❶
	3.2...16	**FDP**	CEP7-1EFDP ❶
	5.4...27	**FED**	CEP7-1EFED
	11...55	**FFD**	CEP7-1EFFD
CA7-55	11...55	**FFD**	CEP7-1EFFD
CA7-60...CA7-97	5.4...27	**FEP**	CEP7-1EFEP ❶
	11...55	**FFP**	CEP7-1EFFP ❶
	20...100	**FGE**	CEP7-1EFGE

CA9 Contactor with Overload Relay ❷

Directly Mounts to Contactor... ❷	Adj. Range (A)	Overload Relay Code (◆)	CT Ratio	Catalog Number (of Overload Relay)
Automatic or Manual Reset for 3-Phase Applications Adjustable Trip Class 10, 15, 20 & 30				
CA9-116...146	30...150	**9IP ❻**	~	CEP9-ESM-I-146-200 CEP9-EIO... CEP9-ECM-PCM
		9IGP ❻		CEP9-ESM-IG-146-200 CEP9-EIOGP... CEP9-ECM-PCM
		9VIGP ❻		CEP9-ESM-VIG-146-200 CEP9-EIOGP... CEP9-ECM-PCM
CA9-190...205	40...200	**9IP ❻**	~	CEP9-ESM-I-205-200 CEP9-EIO... CEP9-ECM-PCM
		9IGP ❻		CEP9-ESM-IG-205-200 CEP9-EIOGP... CEP9-ECM-PCM
		9VIGP ❻		CEP9-ESM-VIG-205-200 CEP9-EIOGP... CEP9-ECM-PCM
CA9-265...305		**CT3**	300:5	❺
CA9-370...580		**CT6**	600:5	❺
CA9-750...1060		**~**		**Refer to Factory**

Special Notes:

Wye-Delta Starters - First multiply motor full load current by 58%. Then, using this figure, select appropriate Overload Relay Code from tables above.

Part Winding Starters - First multiply motor full load current by 50%. Then, using this figure, select appropriate Overload Relay Code from tables above.

Variable Frequency Drives - CEP7 solid state overload relays cannot be utilized on VFDs or Softstarters with Braking option.

❶ Engineered solution is a pass-thru model overload. No direct contactor mounting for this selection is available within the CEP7-1EE/1EF series.
❷ This reference is not intended to be a guide for selecting contactors. Size overload relays using the full load current of the motor.
❸ The reset time of a CEP7 set in the automatic mode is approximately 180 seconds.
❹ CEP7 Overload relays do not work with Variable Frequency Drives or any Sprecher + Schuh Softstarter with braking options.
❺ Utilizes UL approved Current Transformers and a CEP7-1EF_Z overload relay. For CE approved Current Transformers – refer to factory.
❻ The letter "P" designates the parameter configuration module and can changed to an "E" to represent the use of Ethernet/IP communication module. Price adder applies.

CA7 Starters with optional CT7N Bimetallic Overload Relay ❶

Directly Mounts to Contactor...	Amp Range	Overload Relay Code (◆)	Catalog Number (of Overload Relay used)
CA7-9...CA7-23 Frame "A"	0.10...0.16	**AA16**	CT7N-23-A16
	0.16...0.25	**AA25**	CT7N-23-A25
	0.25...0.40	**AA40**	CT7N-23-A40
	0.35...0.50	**AA50**	CT7N-23-A50
	0.45...0.63	**AA63**	CT7N-23-A63
	0.55...0.80	**AA80**	CT7N-23-A80
	0.75...1.0	**AB10**	CT7N-23-B10
	0.90...1.3	**AB13**	CT7N-23-B13
	1.1...1.6	**AB16**	CT7N-23-B16
	1.4...2.0	**AB20**	CT7N-23-B20
	1.8...2.5	**AB25**	CT7N-23-B25
	2.3...3.2	**AB32**	CT7N-23-B32
	2.9...4.0	**AB40**	CT7N-23-B40
	3.5...4.8	**AB48**	CT7N-23-B48
	4.5...6.3	**AB63**	CT7N-23-B63
	5.5...7.5	**AB75**	CT7N-23-B75
	7.2...10	**AC10**	CT7N-23-C10
	9.0...12.5	**AC12**	CT7N-23-C12
	11.3...16	**AC16**	CT7N-23-C16
	15...20	**AC20**	CT7N-23-C20
	17.5...21.5	**AC21**	CT7N-23-C21
	21...25	**AC25**	CT7N-23-C25
CA7-30... CA7-37 Frame "B"	15...20	**BC20**	CT7N-37-C20
	17.5...21.5	**BC21**	CT7N-37-C21
	21...25	**BC25**	CT7N-37-C25
	24.5...30	**BC30**	CT7N-37-C30
	29...36	**BC36**	CT7N-37-C36
	33...38	**BC38**	CT7N-37-C38
CA7-43...55 Frame "C"	17...25	**CC25**	CT7N-43-C25
	24.5...36	**CC36**	CT7N-43-C36
	35...47	**CC47**	CT7N-43-C47
	45...60	**CC60**	CT7N-55-C60
CA7-60... CA7-97 Frame "D"	35...47	**DC47**	CT7N-85-C47
	45...60	**DC60**	CT7N-85-C60
	58...75	**DC75**	CT7N-85-C75
	72...90	**DC90**	CT7N-85-C90
	85...97	**DC97**	CT7N-97-C97

Special Notes:

Wye-Delta Starters - First multiply motor full load current by 58%. Then, using this figure, select appropriate Overload Relay Code from tables above.

Part Winding Starters - First multiply motor full load current by 50%. Then, using this figure, select appropriate Overload Relay Code from tables above.

❶ Separately mounted overload is available. See Section B.

Modifications or Special Feature ❷		Change Last Digit (0) in Catalog Number To:
Pilot Devices In Cover or Flange		
"Start-Stop" Pushbutton		3
"On-Off" Pushbutton		4
"Emergency Stop" Pushbutton - Twist to Release ❸		9
"Hand-Auto" Selector Switch		5
"Off-On" Selector Switch		6
"Hand-Off-Auto" Selector Switch		7
Pilot Light Only ❶		1
Pilot Lights Only (2) ❶		2
Pilot light w/ "Start-Stop" Pushbutton ❶		13
Pilot Light w/ "On-Off" Pushbutton ❶		14
Pilot Light w/ "Hand-Auto" Selector Switch ❶		15
Pilot Light w/ "Off-On" Selector Switch ❶		16
Pilot Light w/ "Hand-Off-Auto" Selector Switch ❶		17
Reversing	"For-Stop-Rev"- Pushbutton	3
	"Up-Stop-Down" Pushbutton	4
	"Open-Stop-Close" Pushbutton	5
Multi-Speed	"High-Stop-Low" Pushbutton	3
	"Fast-Stop-Slow" Pushbutton	4
Reversing	"For-Off-Rev" Selector Switch	6
	"Up-Off-Down" Selector Switch	7
	"Open-Off-Close" Selector Switch	8
Multi-Speed	"High-Off-Low" Selector Switch	5
	"Fast-Off-Slow" Selector Switch	6
Reversing	Pilot Lights (2) w/ "For-Stop-Rev" Pushbutton ❶	23
	Pilot Lights (2) w/ "Up-Stop-Down" Pushbutton ❶	24
	Pilot Lights (2) w/ "Open-Stop-Close Pushbutton ❶	25
Multi-Speed	Pilot Lights (2) w/ "High-Stop-Low" Pushbutton ❶	23
	Pilot Lights (2) w/ "Fast-Stop-Slow" Pushbutton ❶	24
Reversing	Pilot Lights (2) w/ "For-Off-Rev" Selector Switch ❶	26
	Pilot Lights (2) w/ "Up-Off-Down" Selector Switch ❶	27
	Pilot Lights (2) w/ "Open-Off-Close Selector Switch ❶	28
Multi-Speed	Pilot Lights (2) w/ "High-Off-Low" Selector Switch ❶	25
	Pilot Lights (2) w/ "Fast-Off-Slow" Selector Switch ❶	26

Ordering Instructions

Change base **Catalog Number** according to instructions at top of column 2. Example: To Add a "Start-Stop" Pushbutton: change **CAT7-30-✱-◆-GO** to **CAT7-30-✱-◆-G3**

❶ Pilot Lights may be applied with 24VAC/DC, 120VAC or 240VAC control circuit. Pilot Lights with 380 VAC...575VAC require a control circuit transformer.

❷ Modifications may change dimension of starter enclosure.

❸ Emergency Stop pushbutton includes inscription ring D7-15YSE112. For other selections from page H68 refer to factory.

Modifications or Special Feature ❺			ADD Suffix to Catalog Number	Enclosure Type
Additional Auxiliary Contacts ❻				
1 N.O. 1 N.C.			**L10** **L01**	All
1 N.O. & 1 N.C. 2 N.O. 2 N.C.			**L11** **L20** **L02**	All
1 NO + 2 NC Auxiliary 2 NO + 1 NC Auxiliary 3 NO Auxiliaries 3 NC Auxiliaries			**L12** **L21** **L30** **L03**	All
2 N.O. & 2 N.C. 1 NO + 3 NC Auxiliary 3 NO + 1 NC Auxiliary 4 NO Auxiliaries 4 NC Auxiliaries			**L22** **L13** **L31** **L40** **L04**	All
Alternate Auxiliary Contact Arrangements 1 N.C. in lieu of standard 1 N.O. (on CAT7) 2 N.C. in lieu of standard 2 N.O. (on CAUT7)			 **LX1** **LX2**	All
Control Circuit Transformer (with fused primary & secondary)				
	Primary Volts	Secondary Volts	Replace (✱) in catalog # with following codes ❷❹	
Standard Capacity ❸	208	120	**XA**	Type 1, 12, 3R, 4,4X Open
	240	120	**XB**	
	480	120	**XC**	
	600	120	**XD**	
	380	110	**XG**	
	240	24	**XE**	
	480	24	**XF**	
	600	24	**XJ**	Type 7/9
	380	24	**XK**	
	208	24	**XO**	
	120	24	**XP**	
	277	120	**XY**	
50 Watt Extra Capacity	208	120	**XA05**	Type 1, 12, 3R, 4,4X Open
	240	120	**XB05**	
	480	120	**XC05**	
	600	120	**XD05**	Type 7/9
	240	24	**XE05**	
	480	24	**XF05**	
100 Watt Extra Capacity	208	120	**XA1**	Type 1, 12, 3R, 4,4X Open
	240	120	**XB1**	
	480	120	**XC1**	
	600	120	**XD1**	Type 7/9
	240	24	**XE1**	
	480	24	**XF1**	
	600	24	**XJ1**	
Special Voltage Transformer - Add suffix F/A to end of catalog # ❶ For applications requiring more than 100 Watt extra capacity				All, Open

Ordering Instructions

Change base **Catalog Number** according to instructions in column 2.
Example: To Add a Control Circuit Transformer (480/120) and additional NO/NC auxiliaries: change **CAT7-30-✱-◆-GO_** to **CAT7-30-XC-◆-G0-L11.**

Note: Separate multiple modification suffixes with a hyphen (-).

❶ Factory assigned.
❷ Coil will be factory selected based on transformer secondary.
❸ See page C8:11 for detail specifications for Control Circuit Transformer.
❹ Refer to factory for pricing on larger oversized control circuit transformer selections.
❺ Modifications may change dimension of starter enclosure.
❻ Auxiliary addition is per contactor. Quantity is double for reversing applications. Double price adder accordingly.

Modifications or Special Feature ❶❷	Power Supply					Replace (✱) in catalog # with following codes	Enclosure Type
	Rating (W)	Input V AC	Output V DC	Output Amps @ 40ºC	Output Amps @ 60ºC		
AC to DC Output Power Supplies							
1-Phase Standard Capacity (CA7-9E...55E)							Open All
Power Supply (with no CPT)	72	115	24	2	1.5	**PS1P**	
Power Supply (with no CPT)	72	230	24	2	1.5	**PS1E**	
Power Supply w/CPT @ 208 VAC Primary	72	115	24	2	1.5	**PS1XA**	
Power Supply w/CPT @ 230 VAC Primary						**PS1XB**	
Power Supply w/CPT @ 460 VAC Primary						**PS1XC**	
Power Supply w/CPT @ 575 VAC Primary						**PS1XD**	
1-Phase Standard Capacity (CA7-60D...97D)							Open All
Power Supply (with no CPT)	336	115	24	14	10	**PS4P**	
Power Supply (with no CPT)	336	230	24	14	10	**PS4E**	
Power Supply w/CPT @ 208 VAC Primary	336	115	24	14	10	**PS4XA**	
Power Supply w/CPT @ 230 VAC Primary						**PS4XB**	
Power Supply w/CPT @ 460 VAC Primary						**PS4XC**	
Power Supply w/CPT @ 575 VAC Primary						**PS4XD**	
1-Phase 90W Extra Capacity (CA7-9E...55E)							Open All
Power Supply (with no CPT)	120	115	24	5	4	**PS2P**	
Power Supply (with no CPT)	120	230	24	5	4	**PS2E**	
Power Supply w/CPT @ 208 VAC Primary	120	115	24	5	4	**PS2XA**	
Power Supply w/CPT @ 230 VAC Primary						**PS2XB**	
Power Supply w/CPT @ 460 VAC Primary						**PS2XC**	
Power Supply w/CPT @ 575 VAC Primary						**PS2XD**	
2-Phase Standard Capacity (CA7-9E...55E)							Open All
Power Supply @ 230 VAC Primary	120	230	24	5	4	**PS6B**	
Power Supply @ 460 VAC Primary	120	460	24	5	4	**PS6C**	
2-Phase Standard Capacity (CA7-60D...97D)							Open All
Power Supply @ 230 VAC Primary	336	230	24	7.5	5	**PS7B**	
Power Supply @ 460 VAC Primary	336	460	24	7.5	5	**PS7C**	
For applications requiring extra capacity on either device, please refer to factory							
CRI7E-✱ Electronic Interface Module for use with CA7-9...CA7-97: Interface between the DC control signal from a PLC and the AC operating mechanism of the contactor. • Eliminates the need for a power supply-current draw is 10 to 15 mA across a voltage range of 12-48V DC • Requires no additional surge suppression for the coils • Must have output voltage 110...240V AC • Add Suffix to end of catalog number: for example change **CAT7-30-✱-◆-GO** to **CAT7-30-✱-◆-GO-JE**						**add Suffix to end of Catalog Number** -JE	Open All

Ordering Instructions

Replace ✱ in base **Catalog Number** with Power Supply code.
Example: To Add a Standard Capacity Power Supply with Control Circuit Transformer (480/120):
change **CAT7-30E-✱-◆-GO** to **CAT7-30E-PS1XC-◆-G0.**

❶ Not applicable for Series CA9 Starters. CAT9 Starter applications should strongly consider the use of the "EI" functionality included in the CA9-116...1060-EI Contactors. The optional electronic interface selection allows the CA9 contactor to be switched from a PLC or other low-level signal source (15...33V DC) without the need of an interposing relay. The current burden of the interface is 15 mA maximum.

❷ Modifications may change dimension of starter enclosure.

Modifications or Special Feature ❼	ADD Suffix to Catalog Number	Enclosure Type	
Other modifications			
Fused Control Circuit for separate or common control ❻			
- 1 Fuse	**F1**	All, Open	
- 2 Fuses	**F2**	All, Open	
Surge Suppressor - RC Link	**RC**	All, Open	
Surge Suppressor - Varistor	**RV**	All, Open	
Surge Suppressor - Diode	**RD**	All, Open	
Unwired Terminal Blocks Specify quantity (▼).	**-▼TB**	All	
Control Relay Limited to one per controller-8 pole maximum, Specify pole arrangement and voltage ❺	F/A ❶	All, Open	
Timing Relay Limited to one per controller-specify "On" or "Off" delay. Voltage will be same as coil voltage	F/A ❶	All, Open	
Compelling Relay ❷ ❺	F/A ❶	All, Open	
Progressive or Decelerating Relay ❷ ❺	F/A ❶	All, Open	
Omit Automatic Alternator ❸	F/A ❶	All, Open	
Back Spin Timer ❹	F/A ❶	All, Open	
Program Timer (24 hour) ❹	F/A ❶	All, Open	
Fireman Damper Control Option			
HVAC Enclosed Starter Fireman Damper Option - 24 VAC/DC - 120 VAC/DC	FD24 FD120	Type 1	Non-Combination
			Fusible
			Non-Fusible
			Thermal Magnetic
		Type 3R	Non-Combination
			Fusible
			Non-Fusible
			Thermal Magnetic

Ordering Instructions

Change base catalog number according to instructions at top of column 2 or 3.
Example: To Add a "Start-Stop" Pushbutton, Control Circuit Transformer (480/120) and RC Link: change **CAT7-30-✱-◆-GO** to **CAT7-30-XC-◆-G3-RC**.
Note: Separate multiple modification suffixes with a hyphen (-).

❶ Factory assigned.
❷ For Multi-speed controllers.
❸ For Duplex Pump controllers.
❹ For Pump Panel controllers.
❺ If controller has a Control Circuit Transformer, select transformer with additional capacity for relay required.
❻ CPT and power supply modification includes fused control circuit protection.
❼ Modifications may change dimension of starter enclosure.

Modifications or Special Feature ❸	ADD Suffix to Catalog Number	Enclosure Type
Meters		
Ammeter - Single Phase	**AM1**	All, Open
Ammeter - Three Phase (includes switch)	**AM3**	
Voltmeter - Single Phase	**VM1**	
Voltmeter - Three Phase (includes switch)	**VM3**	
Wattmeter	**WM**	
Elapsed Time Meter	**ETM**	
Enclosures		
Space Heater (with N.C. interlock)	**HTR**	Type 1, 12, 3R, 4, 4X
Breather and Drain	**BD**	Type 7/9
Service Identification Nameplate	F/A ❶	All
Miscellaneous		
Lightning Arrester ❷	**LA**	All, Open
Surge Capacitor ❷	**SC**	
Phase Monitor Relay	F/A ❶	
UL508A Panel Label	**UL**	Type 1, 12, 3R, 4, 4X
UL1203 Panel Label (includes 508A)	**ULX**	Type 7/9

Panel Shop Certifications

Sprecher + Schuh is an ISO9001 company. Our panel shops are UL and ATEX Certified.
Please refer to factory for specifications and label options for the following panel certifications.

UL508A or SUSE label: Most starter assemblies can be supplied with a UL508A 'Industrial Control Panel' label. Combination starters can be supplied with Suitable for Service Entrance (SUSE) label. The need for a UL508A or SUSE label must be identified at the time of quotation as well as on the purchase order. The need for a UL508A label may not change the components we would normally use but we must consider all possible requirements at the time we are developing the bill-of-material to be referenced at the time of order entry. Failure to identify the need for a UL508A label or SUSE label at the time of quotation may result in change notice price adders.

ATEX Certification: A requirement for ATEX certification MUST be identified at the time of quotation as well as on the purchase order. ATEX certification of a Type 7/9 explosion proof enclosure definitely requires all conduit and cover openings to be drilled by the enclosure manufacturer. Further, all pilot devices and equipment to be installed must be identified as it controls the heat dissipation which is an ATEX certification requirement. Absolutely no field modification of an ATEX certified starter assembly is allowed. Failure to identify the need for an ATEX certification at the time of quotation and order entry may result in 100% cancelation or re-stocking charge since a new enclosure will be required.

UL1203 Certification: The UL1203 label for explosion proof starters and panels encompasses the UL508A certification. This means all components in a UL1203 labeled panel must first comply with UL508A, and all components in the panel must have a UL label in some form, including the wiring. A special name plate and UL508A label are applied to the panel or starter. A panel is not UL1203 certified unless both label and name plate are present. Contact customquotes@sprecherschuh.com for more information on UL1203 certified panels.

Ordering Instructions

Change base catalog number according to instructions at top of column 2.
Example: To add an Elapsed Time Meter and Breather Drain to an explosion-proof starter, change **CAT7-30-✱-◆-E0** to **CAT7-30-✱-◆-E0-ETM-BD.**
Note: Separate multiple modification suffixes with a hyphen (-).

❶ Factory assigned.
❷ For Pump Panel controllers.
❸ Modifications may change dimension of starter enclosure.

Contactor (Relay) Coil Data ❸

Device	Coil Consumption DC Watts Inrush	Coil Consumption DC Watts Sealed	Coil Consumption AC ❶ Inrush (pick-up) VA	Coil Consumption AC ❶ Inrush (pick-up) Watts	Coil Consumption AC ❶ Sealed (holding) VA	Coil Consumption AC ❶ Sealed (holding) Watts	Minimum Recommended Transformer ❸ VA ❷
CA8-9, CA8-12	-	-	35	32	5	1.8	50
CA8-09C,CA8-12C	3.0 cold / 2.6 warm	3.0 cold / 2.6 warm	-	-	-	-	-
CA7-9, CA7-12, CA7-16	-	-	75	50-60	9.5	2.7	50
CA7-9E, CA7-12E, CA7-16E, CA7-23E	10 avg. / 17 peak	1.7	-	-	-	-	-
CA7-23	-	-	105	60-70	12.3	3.1	50
CA7-30, CA7-37	-	-	105	70	12.3	3.1	50
CA7-30E, CA7-37E	10 avg. / 17 peak	1.7	-	-	-	-	-
CAL7-30, CA7-40	-	-	135	90-100	13.3	3.3	75
CA7-43, CA7-55	-	-	135	90-100	13.3	3.3	75
CA7-40E, CA7-43E, CA7-55E	16 avg. / 25 peak	2.5	-	-	-	-	-
CA7-60, CA7-72, CA7-85	-	-	235	110	19	6.5	100
CAL7-60, CA7-90, CA7-97	-	-	400	240	24	9	200
CA7-60D, CA7-72D, CA7-85D, CA7-97D	200	4.5	-	-	-	-	-
CA7-90D	325	5.5	-	-	-	-	-
CA9-116, CA9-146							100
CA9-190, CA9-205							100
CA9-265, CA9-305, CA9-370							100
CA9-400, CA9-460							200
CA9-580, CA9-750							200
CA9-860, CA9-1060							300
CA9-1260							200
CA9-2050, CA9-2650							300

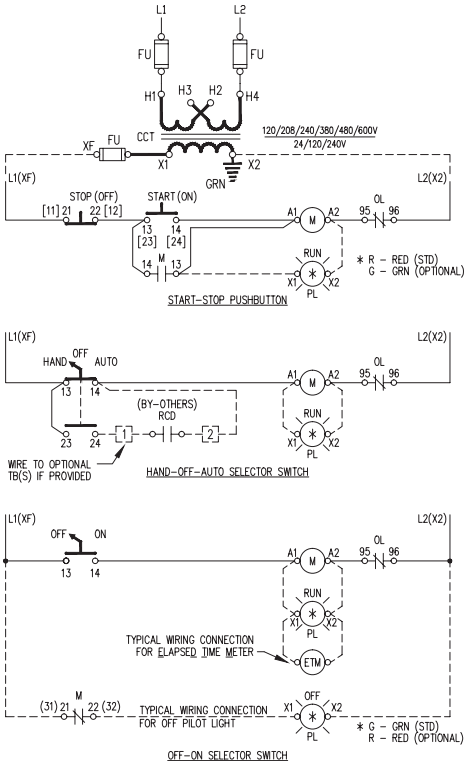
See section A

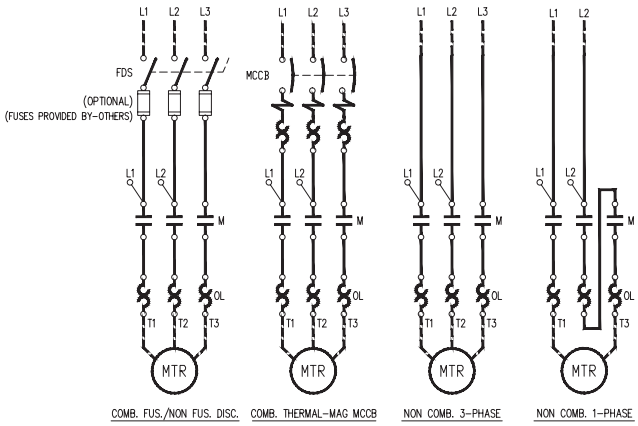
Control Circuit Transformer Voltage Specifications

Factory Modification Code ❹	Factory Wired Connection Primary	Factory Wired Connection Secondary	Voltage Taps Available Primary	Voltage Taps Available Secondary
XA	208	120	208/230/460	115
XB	240	120	240/480	120
XC	480	120	240/480	120
XD	600	120	575/600	115/120
XE	240	24	240/480	24
XF	480	24	240/480	24
XG	380	110	380/400/415	110/220
XH	Must specify tap	115	208/230/460	115
XJ	600	24	600	12/24
XK	380	24	480/380/277/240/208	24
XL	415	24	480/415/400	24/120
XM	Must specify tap	24/115	208/230/460	24/115
XN	400	24	480/415/400	24/120
XO	208	24	208/230/460	24/115
XP	120	24	120/240	24

❶ 50Hz, 60Hz or 50/60Hz except CA7 which is 60Hz.
❷ For AC coils.
❸ The "VA" values shown are the minimum requirement to energize one contactor. For multiple contactors and/or additional control circuit devices (burden) refer to control circuit transformer manufacturer's selection criteria.
❹ Modification codes in Gray are Special Order. Contact a Sprecher + Schuh representative.

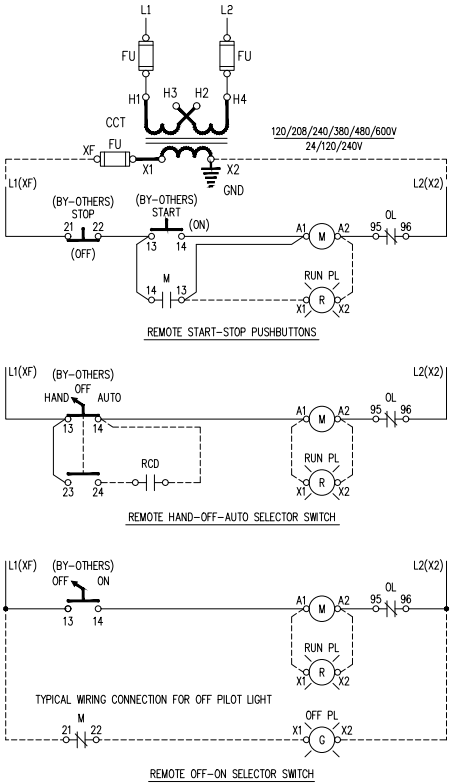
Motor Starters - Non-Reversing

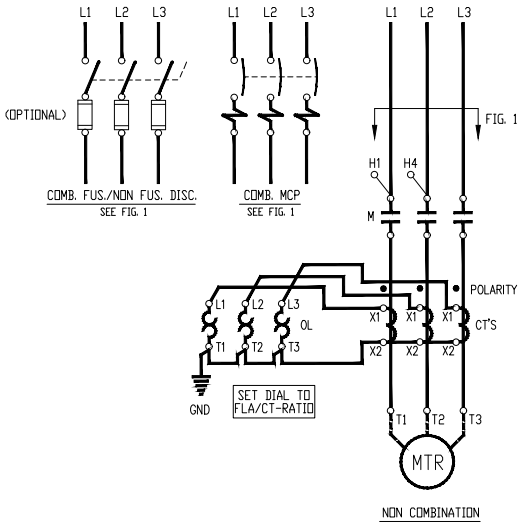




NOTES:
1) X2 TERMINAL GROUNDED AS STANDARD, REMOVE GROUND IF NOT REQUIRED.
2) RCD: STANDS FOR REMOTE CONTROL DEVICE BY CUSTOMER.
3) [ ] : FOR MULTIFUNCTION TERMINAL NUMBERS.
4) ( ) : FOR ALT. AUX. CONTACT TERMINAL NUMBERS.

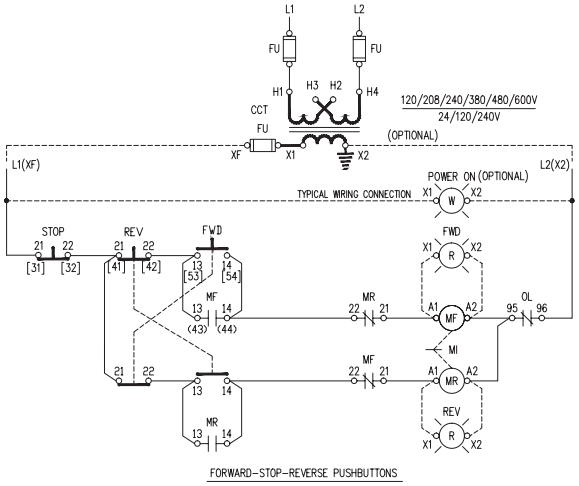
Motor Starters - Non-Reversing (with Current Transformers)

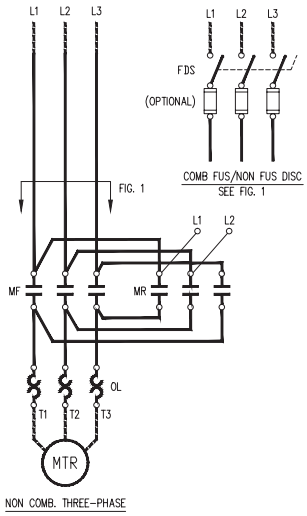


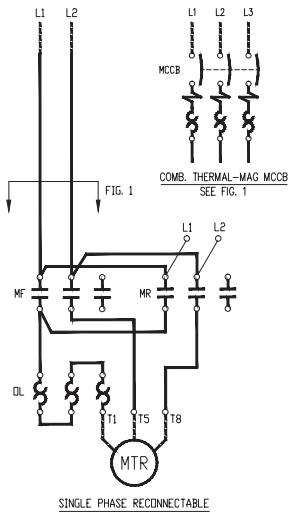


NOTES:
1) RCD: STANDS FOR REMOTE CONTROL DEVICE BY CUSTOMER.
2) X2 TERMINAL GROUNDED AS STANDARD, REMOVE GROUND IF NOT REQUIRED.
3) REFER TO PAGE B13 FOR CURRENT SETTING GUIDANCE

Motor Starters - Reversing (three phase & single phase reconnectable)

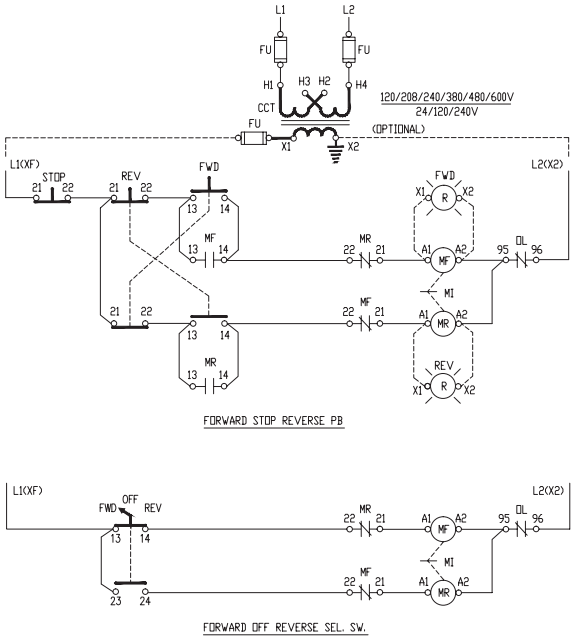


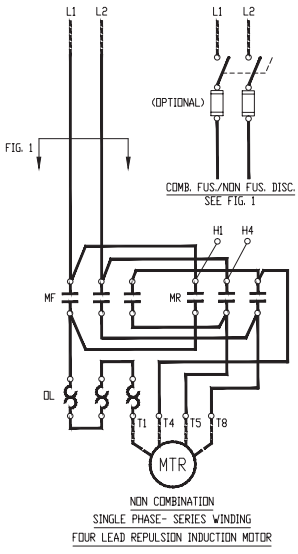


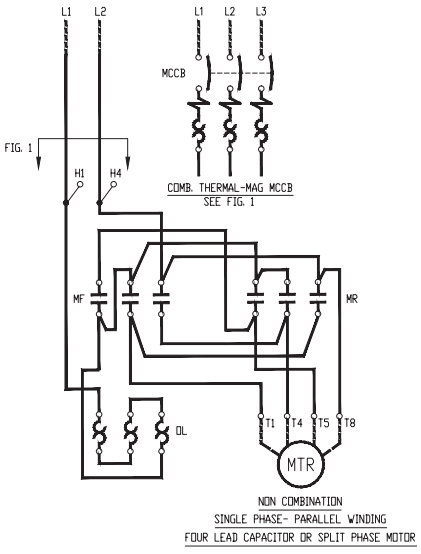


NOTES:
1) X2 TERMINAL GROUNDED AS STANDARD. REMOVE IF NOT REQUIRED.
2) MI: STANDS FOR MECHANICAL INTERLOCK
3) TERMINAL NUMBERS IN ( ) APPLIES ONLY ON CA7-30...97

Motor Starters - Reversing (single phase series & parallel winding)

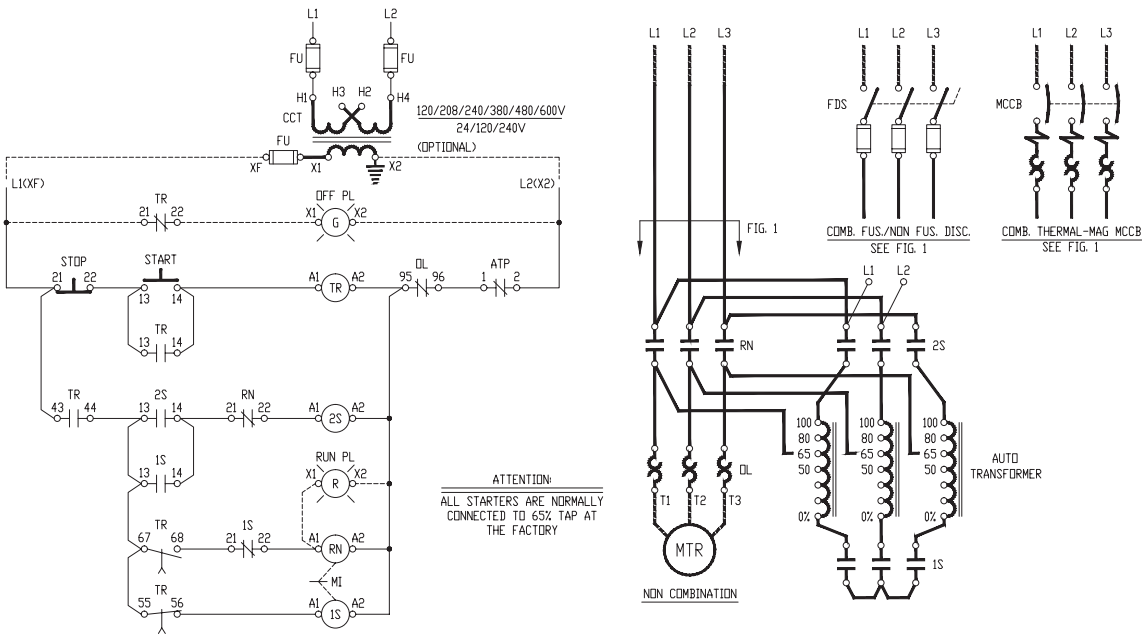






NOTES:
1). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
2). MI STANDS FOR MECHANICAL INTERLOCK.

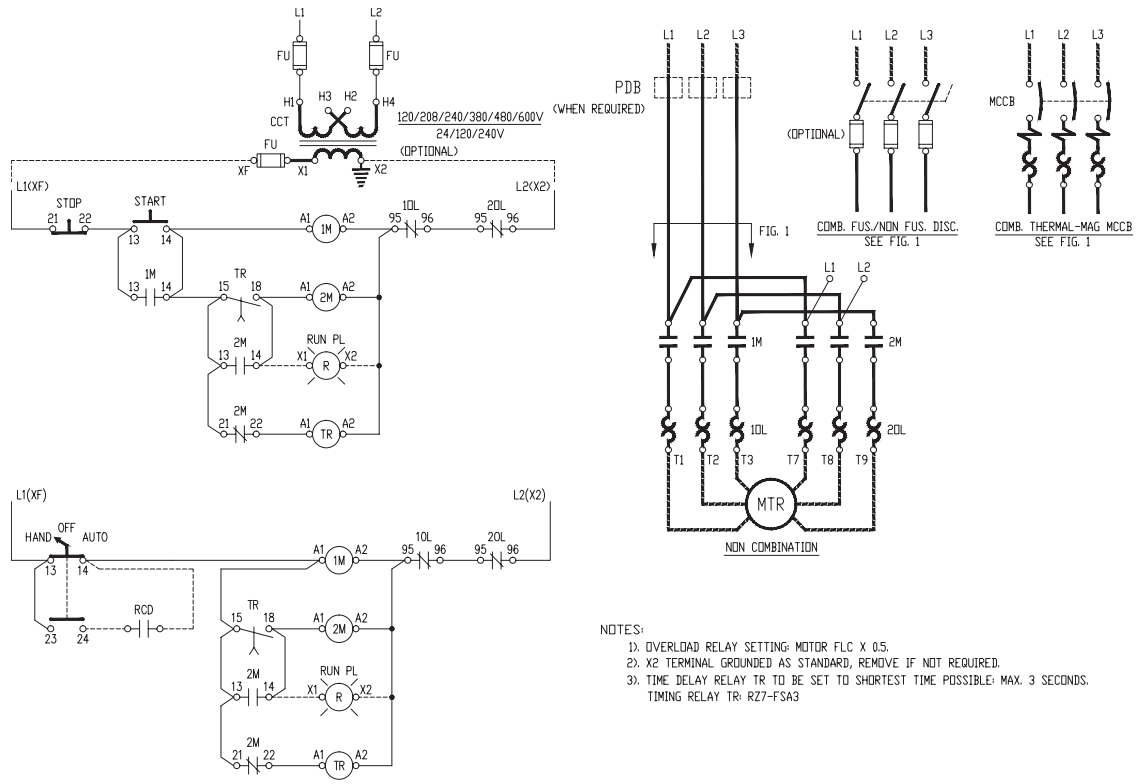
Reduced Voltage Starters - Autotransformer



NOTES:

1). ATP: STANDS FOR AUTO TRANSFORMER THERMAL PROTECTION.
2). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
3). MI STANDS FOR MECHANICAL INTERLOCK.
4). TIMING RELAY TR: CS7-22E+CZE7-30S.

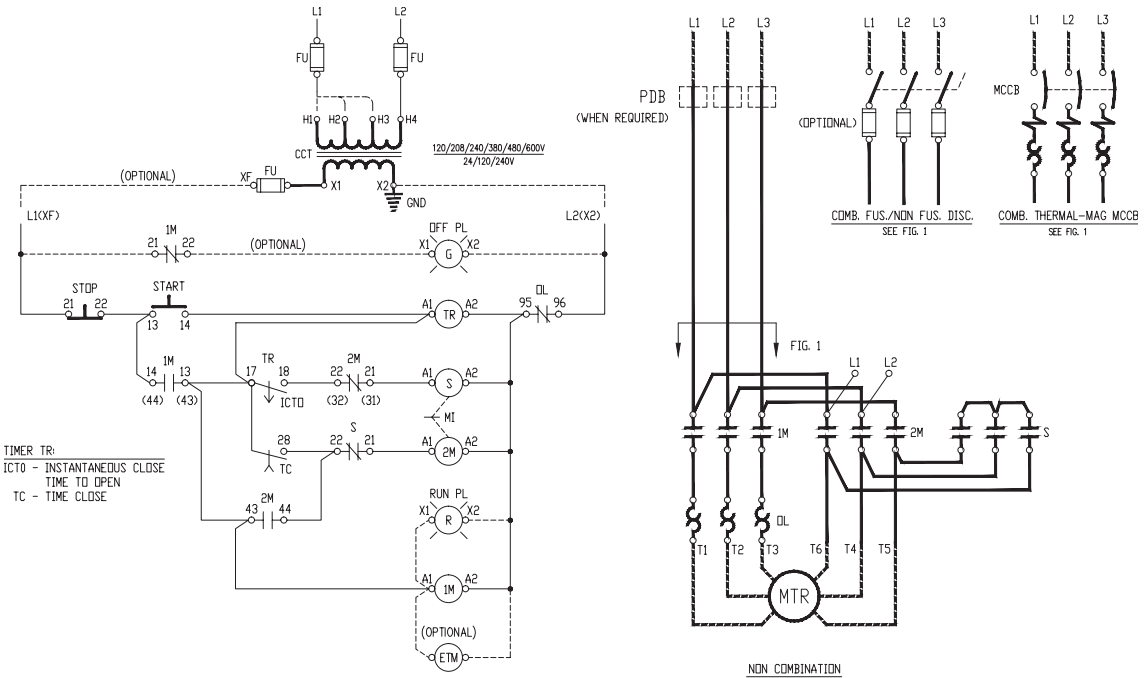
Reduced Voltage Starters - Part Winding



NOTES:

1). OVERLOAD RELAY SETTING: MOTOR FLC X 0.5.
2). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
3). TIME DELAY RELAY TR TO BE SET TO SHORTEST TIME POSSIBLE: MAX. 3 SECONDS.
TIMING RELAY TR: RZ7-FSA3

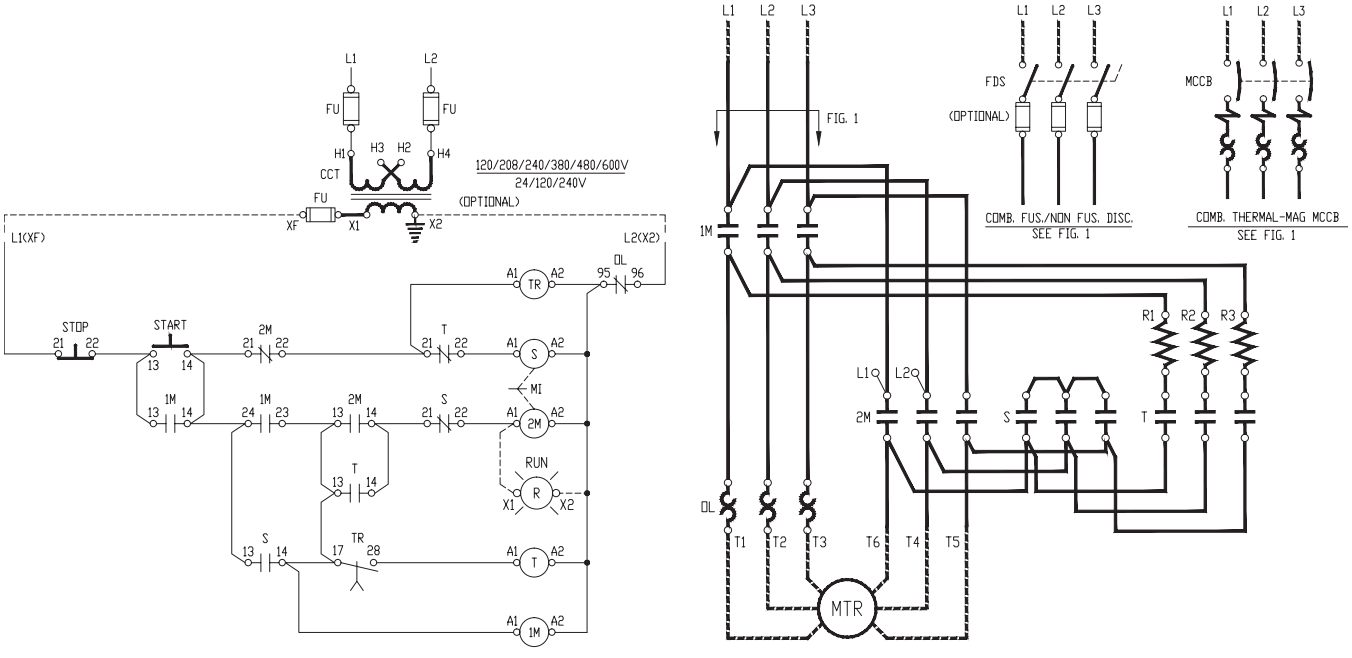
Reduced Voltage Starters - Wye Delta (Open Transition)



NOTES:

1). OVERLOAD RELAY SETTING: MOTOR FLC X 0.58.
2). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
3). MI STANDS FOR MECHANICAL INTERLOCK.
4). TIMING RELAY TR: RZ7-FSY2 WYE DELTA TIMER.

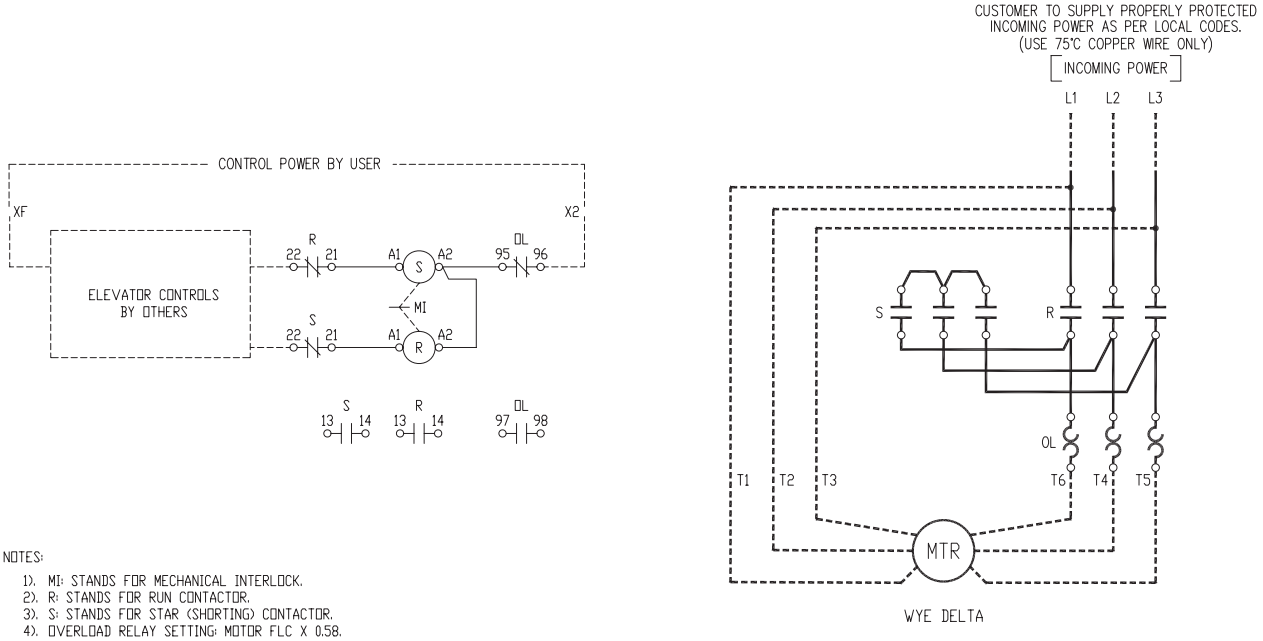
Reduced Voltage Starters - Wye Delta (Closed Transition)



NOTES:

1). OVERLOAD RELAY SETTING: MOTOR FLC X 0.58.
2). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
3). MI STANDS FOR MECHANICAL INTERLOCK.
4). TIMING RELAY TR: RZ7-FSY2D

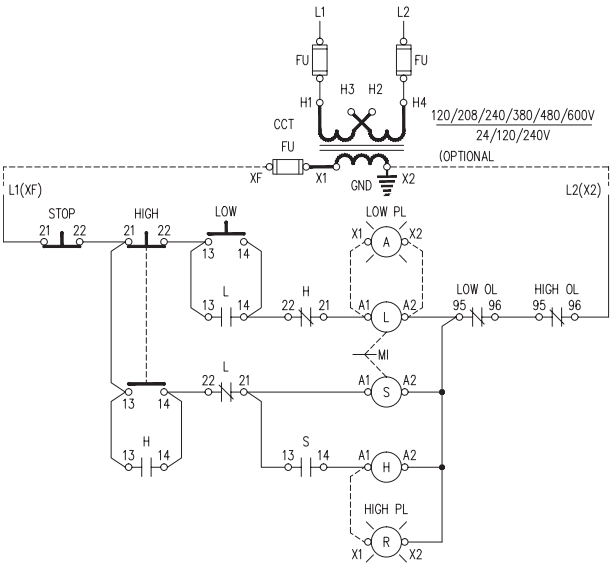
Typical Hydraulic Elevator Two-Contactor Wye-Delta Starter



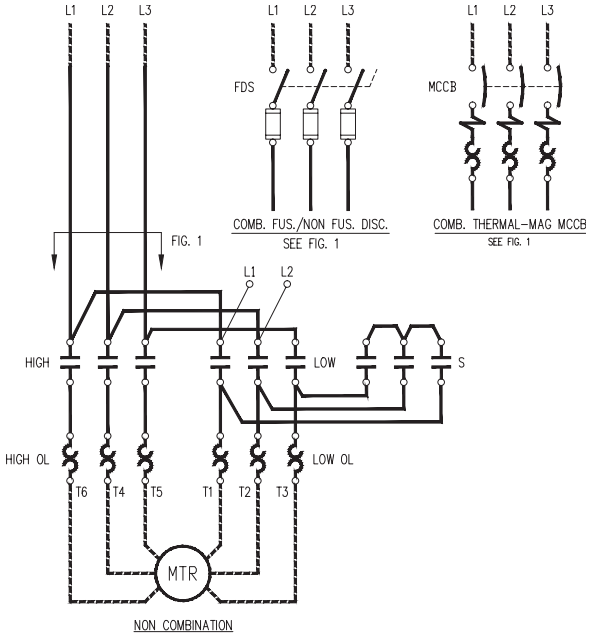
NOTES:

1). MI: STANDS FOR MECHANICAL INTERLOCK.
2). R: STANDS FOR RUN CONTACTOR.
3). S: STANDS FOR STAR (SHORTING) CONTACTOR.
4). OVERLOAD RELAY SETTING: MOTOR FLC X 0.58.

Multi Speed - One Reconnectable Winding (Selective Control)



STOP – LOW – HIGH PUSHBUTTON

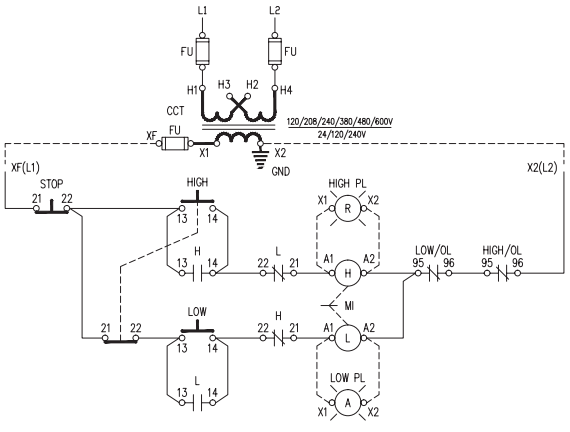


NON COMBINATION

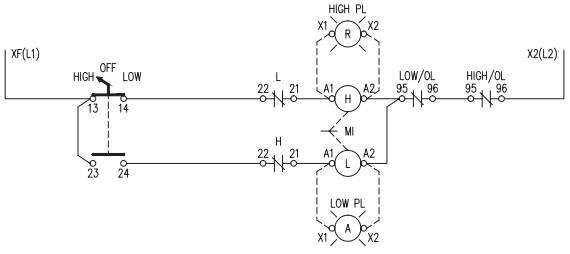
NOTES:

1). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
2). MI STANDS FOR MECHANICAL INTERLOCK.

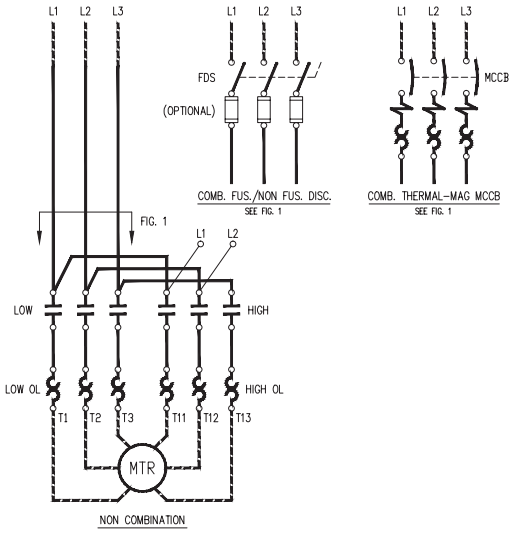
Multi Speed - Two Separate Windings (Selective Control)



STOP–LOW–HIGH PUSHBUTTON



HIGH–OFF–LOW SELECTOR SWITCH

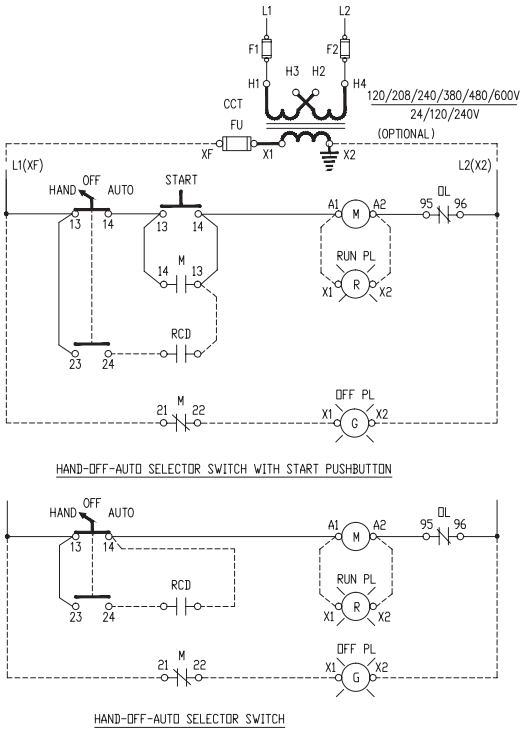


NON COMBINATION

NOTES:

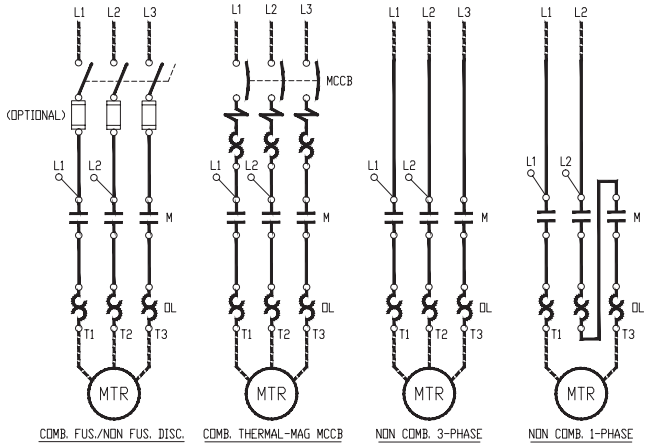
1). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.
2). MI STANDS FOR MECHANICAL INTERLOCK.

Classic Pump Control Panels



HAND-OFF-AUTO SELECTOR SWITCH WITH START PUSHBUTTON

HAND-OFF-AUTO SELECTOR SWITCH

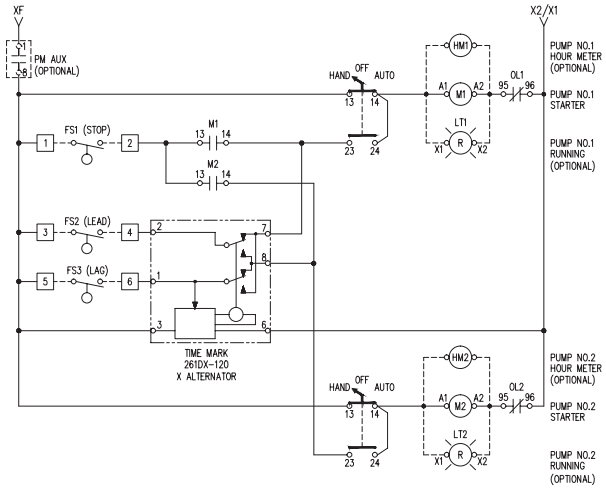


COMB. FUS./NON FUS. DISC. | COMB. THERMAL-MAG MCCB | NON COMB. 3-PHASE | NON COMB. 1-PHASE

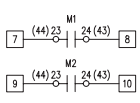
NOTES:
1). RCD: STANDS FOR REMOTE CONTROL DEVICE BY CUSTOMER.
2). X2 TERMINAL GROUNDED AS STANDARD, REMOVE GROUND IF NOT REQUIRED
3). DO NOT WIRE CONTROL CIRCUIT TO LINE SIDE OF CONTACTOR WHEN COIL VOLTAGE IS 120V OR LESS

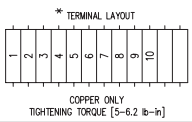
Combination Fusible Switch 3-PH FVNR Duplex Alternating Panel

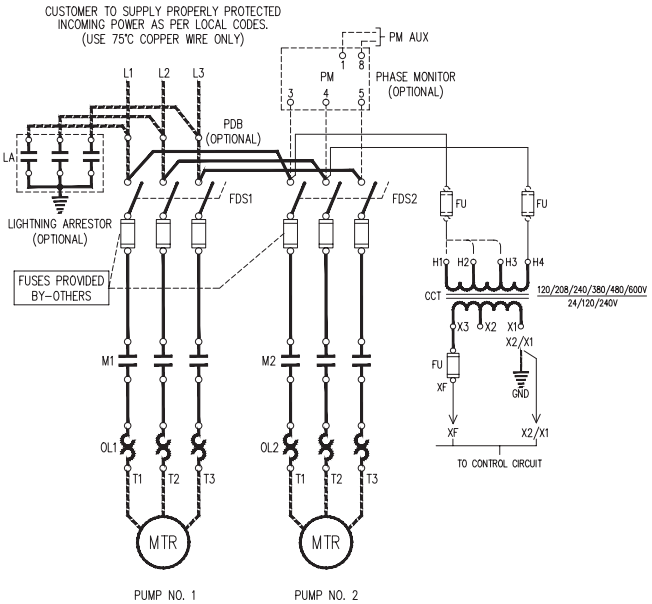
AC Control w/ D7 Series Pilot Devices



FS1 – "STOP" FLOAT SWITCH
FS2 – "LEAD" FLOAT SWITCH
FS3 – "LAG" FLOAT SWITCH



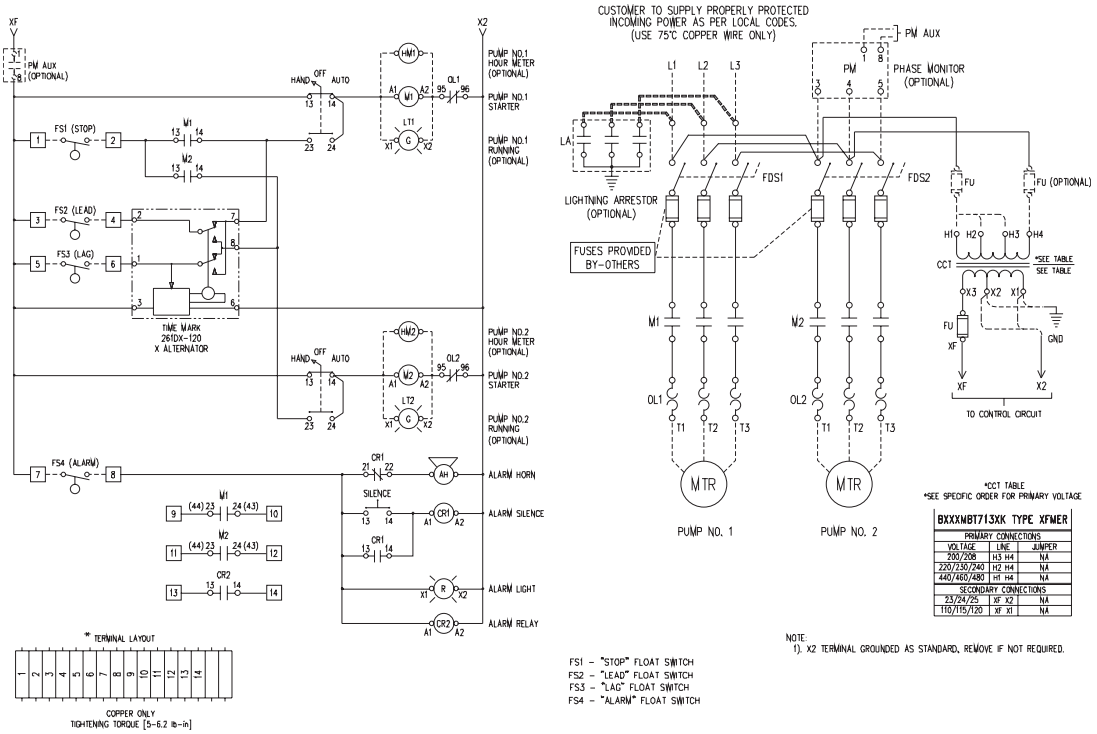




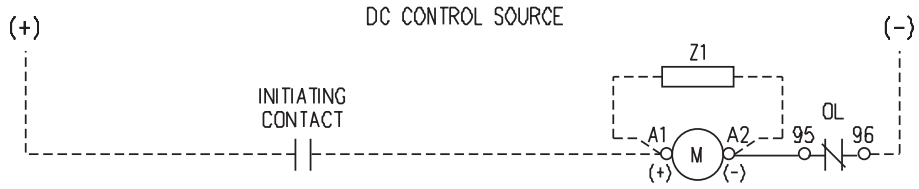
NOTE:
1). X2 TERMINAL GROUNDED AS STANDARD, REMOVE IF NOT REQUIRED.

Combination Fusible Switch 3-PH FVNR Duplex Alternating Panel

W/ H-O-A, alarm CKT, Lead, Lag, Stop, 1-Pole Float Switches, Alarm Circuit.



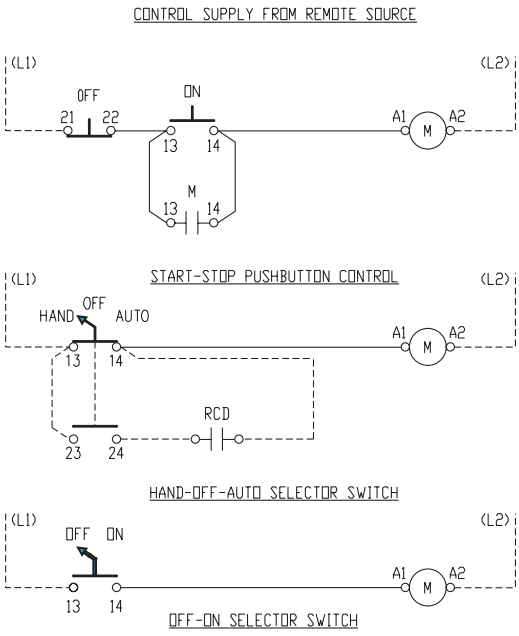
DC Control Configuration for CAT7

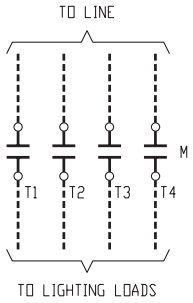


Z1 - VOLTAGE LIMITING ELEMENT
BUILT-IN ON CA7-9E THRU CA7-55E
BUILT-IN ON CA7-60D THRU CA7-97D

TYPICAL 2-WIRE CONTROL CIRCUIT FOR CA7-9E THRU CA7-97D WITH DC COIL

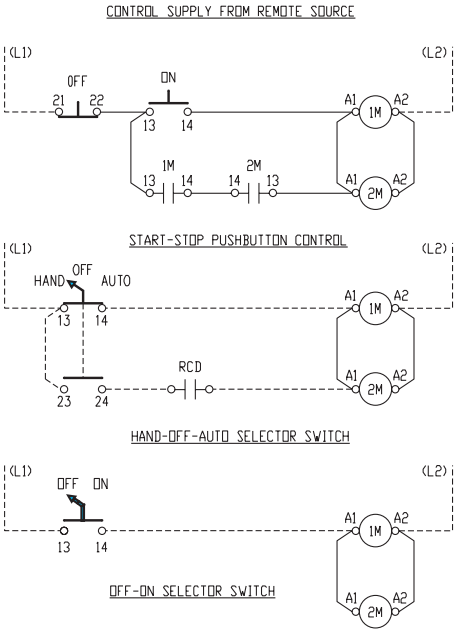
CAL7 Lighting Contactor - 4 Pole

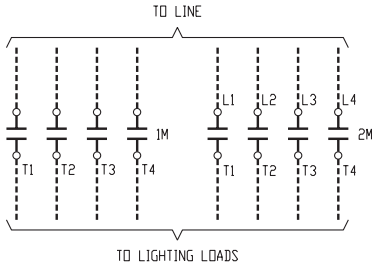




NOTES:
1.) RCD: STANDS FOR REMOTE CONTROL DEVICE BY CUSTOMER.

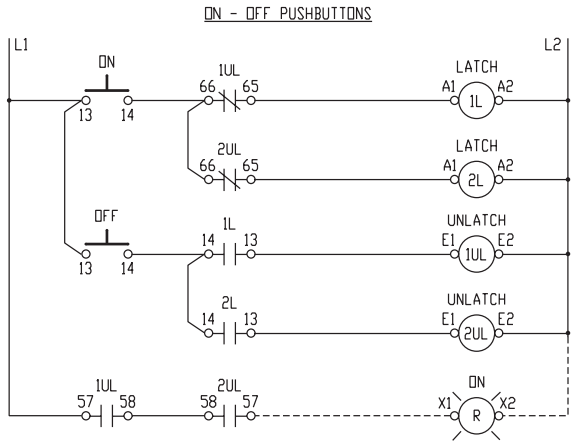
CAL7 Lighting Contactor - 8 Pole

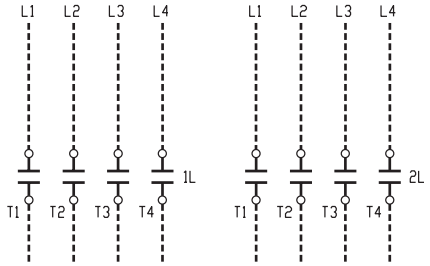




NOTES:
1). M1: STANDS FOR MECHANICAL INTERLOCK.
2). RCD: STANDS FOR REMOTE CONTROL DEVICE BY CUSTOMER.

CAL7 Lighting Contactor with CAV Mechanical Latch B

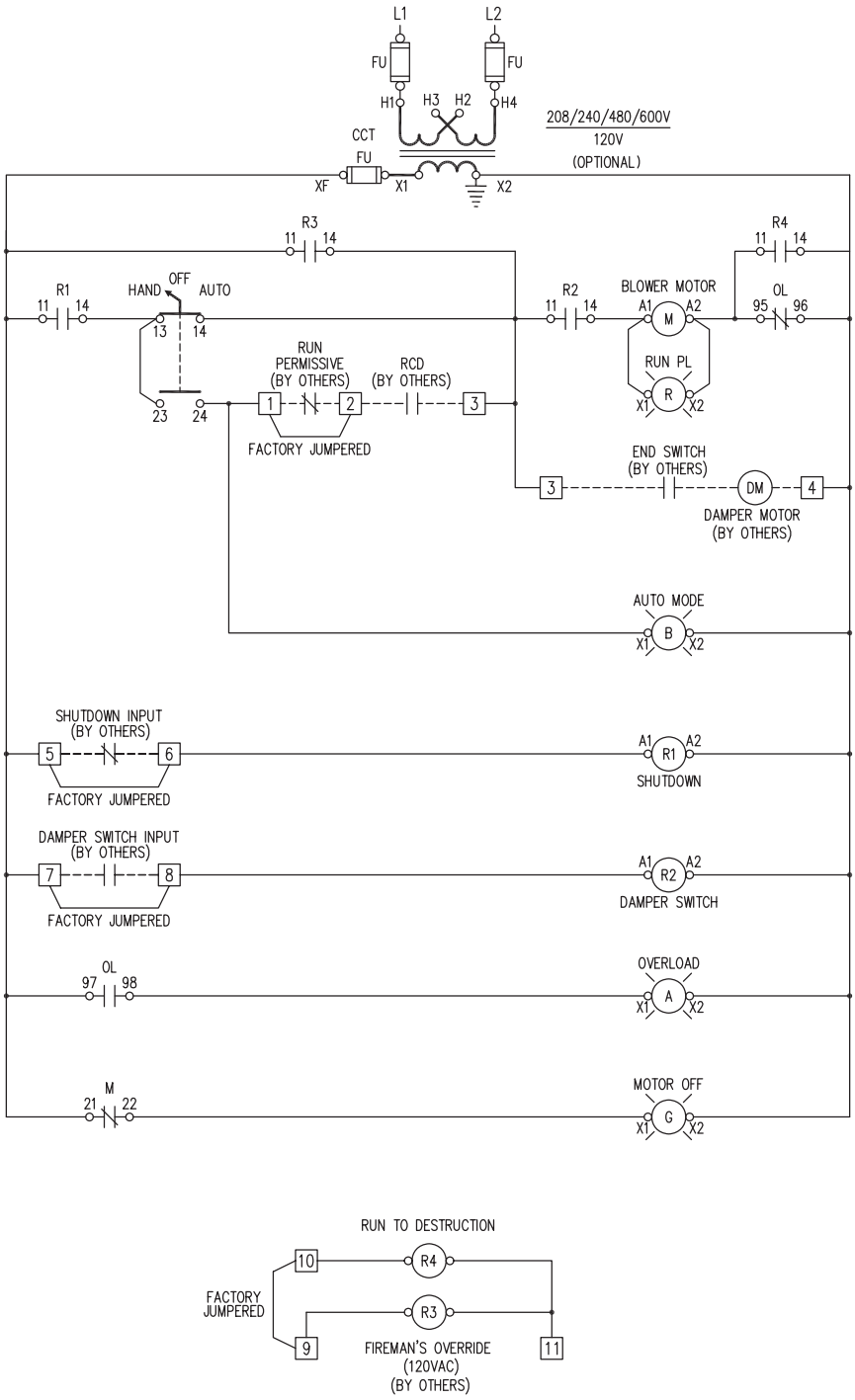




CAV OPERATION:
CAV CONSISTS OF CA7 CONTACTOR "L" WITH CV7-11 MECHANICAL LATCH "UL".
AFTER "L" COIL IS ENERGIZED AND THE CONTACTOR CLOSES, THE MECHANICAL LATCH MECHANICALLY LOCKS THE CONTACTOR IN THE CLOSED POSITION. THE "L" COIL IS THEN DE-ENERGIZED BY THE COIL CLEARING CONTACT "UL" TO REMOVE VOLTAGE.
AFTER THE "UL" COIL IS ENERGIZED, THE MECHANICAL LATCH RELEASES THE CONTACTOR. THE "UL" COIL IS IMMEDIATELY DE-ENERGIZED BY THE COIL CLEARING CONTACT "L" TO REMOVE VOLTAGE. THE CONTACTOR IS NOW OPEN.

NOTES:
1) "L": CA7 CONTACTOR.
2) "UL": CV7-11 MECHANICAL LATCH. (THE CV7 COIL IS MOMENTARY RATED ONLY)
3) CONNECT CONTROL CIRCUIT DIRECTLY TO LINE (L1) & (L2) OF CONTACTOR IF COIL VOLTAGE IS 208V OR ABOVE.
4) DO NOT CONNECT CONTROL CIRCUIT DIRECTLY TO LINE (L1) & (L2) OF CONTACTOR IF COIL VOLTAGE IS 120V OR LESS. (FACTORY WIRING STANDARD)
5) X1 & X2 INDICATES CONNECTION TO REMOTE CONTROL SOURCE.

Fireman (-FD12) Damper Override at 120V



Enclosure Dimensions Figure 1-8

- See enclosure drawings by Figure No. on the next page
- Dimensions are in decimal inches
- Dimensions not intended for manufacturing purposes
- For other dimensions, please refer to factory

TYPE 1 - GENERAL PURPOSE ENCLOSURE

Encl. ID Dim.	Figure No.	Enclosure Size A	B	C	Mtg Depth D	Mtg Centers E	F	Panel Size Sub-Pan		H
A	2	10	8	6	5.5	7	7	8.25	6.25	N/A
B	2	12	10	6	5.5	9	9	10.25	8.25	N/A
C	2	16	12	6.62	6	7	13.88	13	10.5	N/A
C2	2	16	12	8.62	8	7	13.88	13	10.5	N/A
D	2	20	16	6.62	6	11	17.88	17	14.5	N/A
D3	2	20	16	8.62	8	11	17.88	17	14.5	N/A
E	2	24	20	8.62	8	15	21.88	21	18.5	N/A
E2	2	24	20	10.62	10	15	21.88	21	18.5	N/A
F	2	30	24	8.62	8	16.75	27.5	26	22.5	N/A
G	2	30	24	12.62	12	16.75	27.5	26	22.5	N/A
H	2	36	30	12.62	12	22.75	33.5	32	28.5	N/A
I	2	42	30	13.25	12.09	22.76	39.88	39	27	N/A
J	2	48	36	13.25	12.09	28.76	45.88	45	33	N/A
J2	(Type 12 Enclosure, See Table Below)									
K2	(Type 12 Enclosure, See Table Below)									
K3	(Type 12 Enclosure, See Table Below)									
M	2	10	8	6	5.5	7	7	8.25	6.25	N/A
O	2	14	12	6	5.47	10.98	11.02	12.25	10.25	N/A
S	2	36	24	8.62	8	16.75	33.5	32	22.5	N/A

TYPE 12 - INDUSTRIAL DUST TIGHT ENCLOSURE

Encl. ID Dim.	Figure No.	Enclosure Size A	B	C	Mtg Depth D	Mtg Centers E	F	Panel Size Sub-Pan		H
C2	4	16	14	8	7.53	12	16.75	14.75	12.88	17.5
C3	4	16	14	10	9.53	12	16.75	14.75	12.88	17.5
H	5	36	30	12	12	24	37.25	33	27	38.5
I	5	42	30	12	12	24	43.25	39	27	44.5
J	5	48	36	12	12	30	49.25	45	33	50.5
J2	5	48	36	16	16	30	49.25	45	33	50.5
K2	5	60	36	16	16	30	61.25	57	33	62.5
K3	5	60	36	12	12	30	61.25	57	33	62.5
L	4	8	6	6	5.53	4	8.75	6.75	4.88	9.5
M	4	10	8	6	5.53	6	10.75	8.75	6.88	11.5
O	4	14	12	6	5.53	10	14.75	12.75	10.88	15.50
Q	5	20	16	8	8	10	21.25	17	13	22.5
Q2	5	20	16	10	10	10	21.25	17	13	22.5
R	5	24	20	8	8	14	25.25	21	17	26.5
R2	5	24	20	10	10	14	25.25	21	17	26.5
T	5	30	24	10	10	18	31.25	27	21	32.5
W	5	42	36	12	12	30	43.25	39	33	44.5

TYPE 3R - RAIN TIGHT ENCLOSURE

Encl. ID Dim.	Figure No.	Enclosure Size A	B	C	Mtg Depth D	Mtg Centers E	F	Panel Size Sub-Pan		H
L	7	10	8	6	5.46	3	11	8.25	6.25	12
M	7	12	10	6	5.46	3	13	10.25	8.25	14
O	8	18	18	10	8.1	13	19	15	15	20
Q	8	20	20	8	6.98	13	21	17	17	22
R	8	24	20	8	6.98	13	25	21	17	26
R2	8	24	24	10	8.81	13	25	21	21	26
T	5	30	24	10	8.81	13	31	27	21	32.5
H	8	36	30	12	10.97	27	37	33	27	38
I	8	42	30	12	10.97	27	43	39	27	44
W	8	42	36	12	10.97	27	43	39	33	44
J	8	48	36	12	10.97	27	49	45	33	50

Enclosure Dimensions Figure 1-8

See dimension tables on previous page.

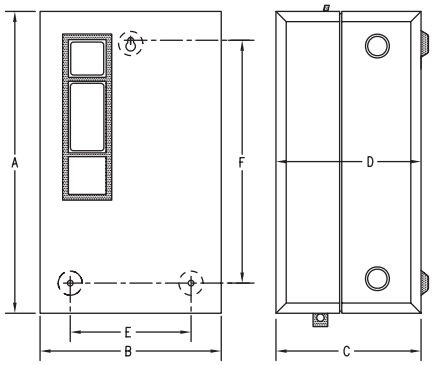


FIGURE NO. 1

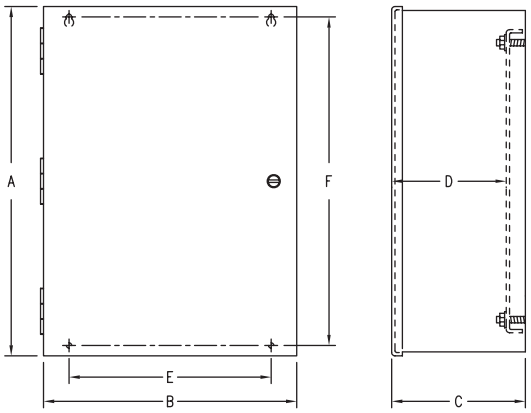


FIGURE NO. 2

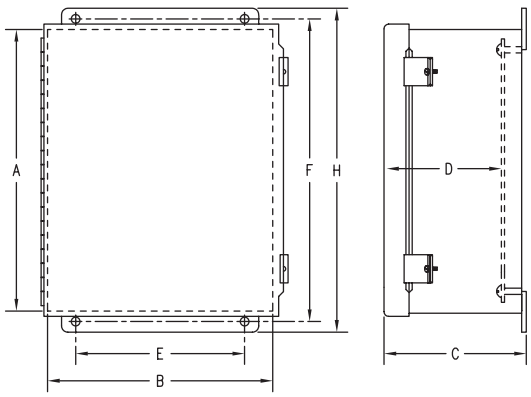


FIGURE NO. 4

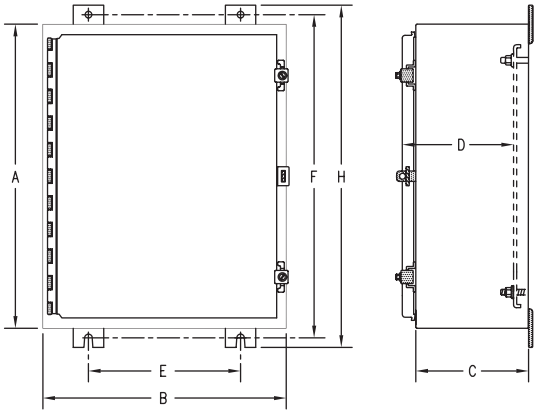


FIGURE NO. 5

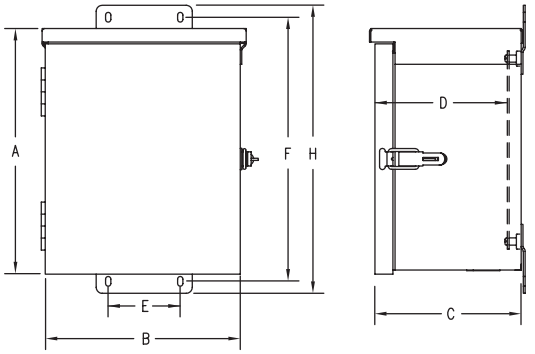


FIGURE NO. 7

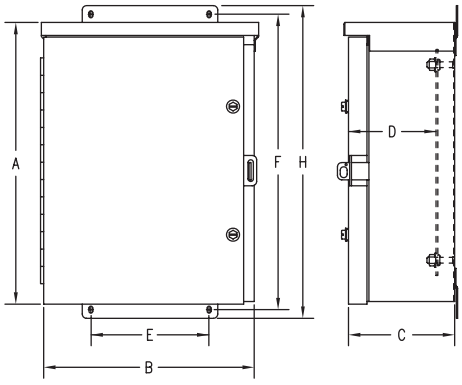


FIGURE NO. 8

Enclosure Dimensions Figure 9-14

- See enclosure drawings by Figure No. on the opposite page
- Dimensions are in decimal inches
- Dimensions not intended for manufacturing purposes
- For other dimensions, please refer to factory

TYPE 4 - WATER TIGHT ENCLOSURE

Encl. ID Dim.	Figure No.	Enclosure Size A	B	C	Mtg Depth D	Mtg Centers E	F	Panel Size Sub-Pan		H
C	10	16	12	6	6	9.5	17.24	13	9	18.5
C2	10	16	12	8	8	9.5	17.24	13	9	18.5
H	10	36	30	12	12	24	37.24	33	27	38.5
J	10	48	36	12	12	30	49.24	45	33	50.5
M	9	10	8	6	5.53	6	10.75	8.75	6.88	11.5
N	9	12	10	5	4.53	8	12.75	10.75	8.88	13.5
O	9	14	12	6	5.53	10	14.75	12.75	10.88	15.5
Q	10	20	16	8	8	10	21.24	17	13	22.5
Q2	10	20	16	10	10	10	21.24	17	13	22.5
R	10	24	20	8	8	14	25.24	21	17	26.5
R2	10	24	20	10	10	14	25.24	21	17	26.5
T	10	30	24	10	10	18	31.24	27	21	32.5

TYPE 4X - WATER TIGHT, CORROSION RESISTANT, NON-METALLIC ENCLOSURE

Encl. ID Dim.	Figure No.	Enclosure Size A	B	C	Mtg Depth D	Mtg Centers E	F	Panel Size Sub-Pan		H
S1	13	7.32	5.94	5.50	4.52	5.16	6.54	4.13	5.5	N/A
U1	13	11.89	7.32	6.93	5.85	6.54	11.10	5.47	8.98	N/A
V1	13	14.65	11.89	6.93	5.85	11.10	13.86	10	11.73	N/A
V2	13	14.65	11.89	9.69	8.23	11.10	13.86	10	11.73	N/A
W1	13	23.74	14.65	6.93	5.85	13.78	22.91	12.76	20.78	N/A
W2	13	23.74	14.65	9.69	8.23	13.78	22.91	12.76	20.78	N/A
X1	14	30.25	24.63	11.80	10.25	18	31.95	27	21	33.13
A2	14	36.25	30.63	13.8	12.25	24	37.58	33	27	39.13
Y1	14	48.25	36.63	13.8	12.25	30	49.58	45	33	50.82
Z1	14	60.25	36.63	13.8	12.25	30	61.58	57	33	62.82

Enclosure Dimensions Figure 9-14

See dimension tables on previous page.

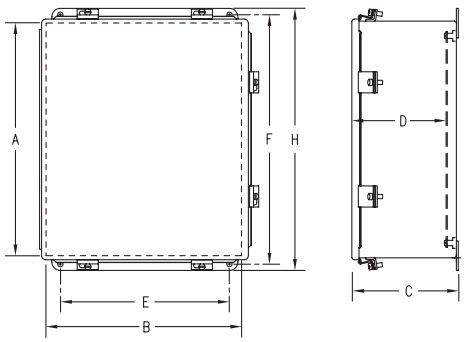


FIGURE NO. 9

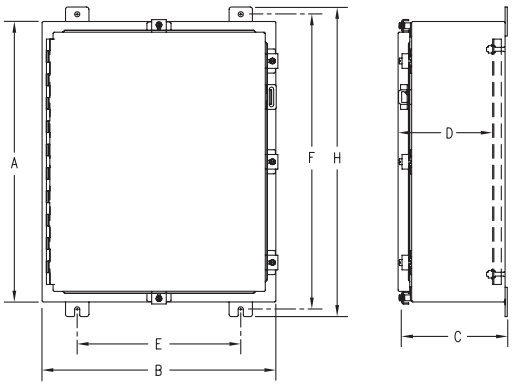


FIGURE NO. 10

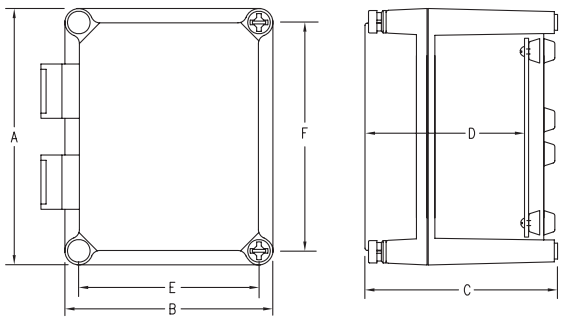


FIGURE NO. 13

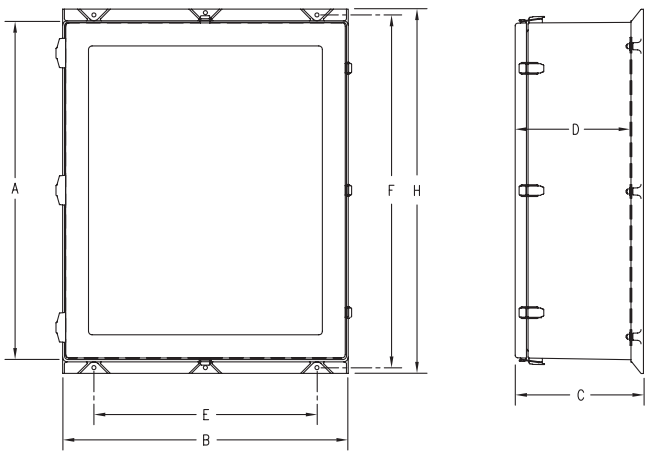
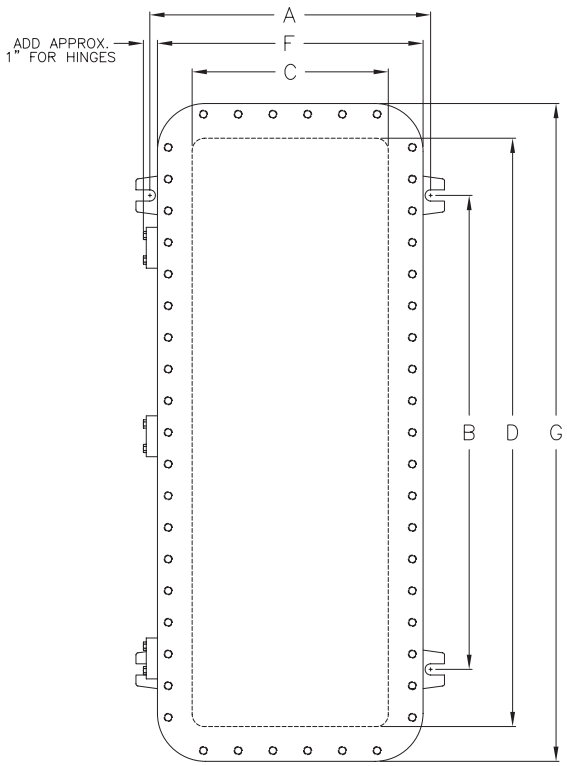
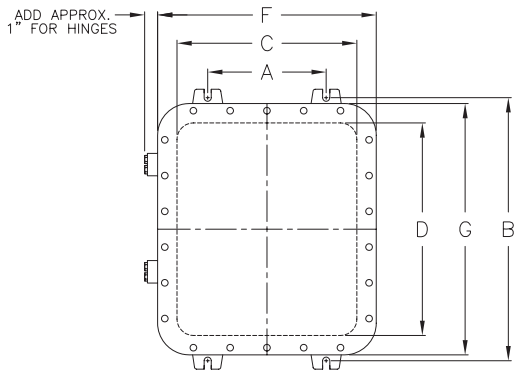


FIGURE NO. 14

Type 7/9 - Explosion Proof Enclosure Dimensions

Dimensions are in decimal inches. Dimensions not intended for manufacturing purposes.





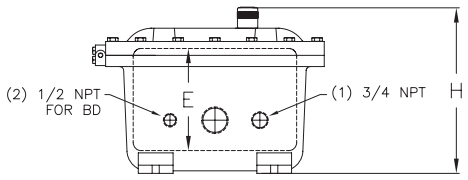


FIGURE NO. 2

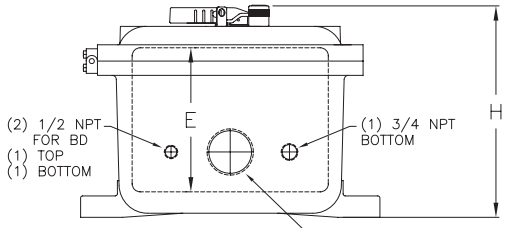


FIGURE NO. 1

(1) TOP
(1) BOTTOM

Encl. ID Dim.	Figure No.	Mounting Dims A	Mounting Dims B	Inside Dims C	Inside Dims D	Inside Dims E	Overall Dims F	Overall Dims G	Overall Dims H	Panel Size Sub-Pan		Conduit Entry Top & Bot
A7	2	7.25	14.50	10.0	12.0	7.25	13.38	15.38	10.13	10.88	8.88	1.25
B7	2	8.50	27.13	12.0	24.0	8.94	16.25	28.25	12.5	11.0	23.0	2.0
C7	1	15.75	29.0	12.0	36.0	8.94	16.25	40.25	12.94	10.75	34.75	2.5
D7	1	19.75	39.0	16.0	46.0	11.81	20.88	50.88	15.81	14.50	44.50	4.0
E7	2	7.25	16.19	10.0	14.0	6.75	13.38	17.38	9.69	8.88	12.88	1.0
F7	2	8.50	27.13	12.0	24.0	6.94	16.25	28.25	10.50	11.0	23.0	1.5
G7	1	15.75	29.0	12.0	36.0	8.94	16.25	40.25	12.94	10.75	34.75	2.0
H7	1	19.75	39.0	16.0	46.0	11.81	20.88	50.88	15.81	14.50	44.5	4.0

Notes