



ISS

Industrial Start/Stop

1Ø & 3Ø, 115~600VAC, 1-300HP

Start/Stop Pushbuttons or HOA control

Superior Motor Protection

NEMA Sized



Proven Reliability for Demanding Industrial Applications

Everything You Need is Standard

- Factory installed pilot devices on door, wired and ready to use
- Solid-state electronic overload relay (Up to NEMA Size 3)
- Lockable cover prevents tampering (Type 1 enclosure)

Quality Construction

- UL 508A Listed
- NEMA Size rated contactors
- 5-Year warranty

Superior Motor Overload Protection

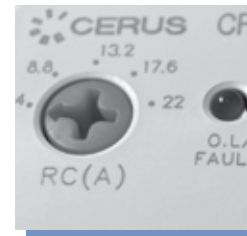
- Phase loss and phase imbalance protection
- Ambient compensated (-5° to 40°C)
- Manual Reset
- Trip-free design

Combination Versions Include Disconnect

- Motor Circuit Protector disconnect provides branch and short circuit protection
- High interrupting ratings for maximum electrical system compatibility
- No fuses or breakers required — save time and money
- Lockable through the door handle for safety

Easy Installation with Fewer Call Backs

- Flexible sizing makes ordering easy
- UL Type 1 enclosure includes top and bottom knock-outs
- Mount more starters in less space with our slim line case
- High reliability...up to 2.5 million contactor electrical cycles at full rated current



Wide range electronic overload eliminates sizing call backs.



Our lockable disconnect provides superior protection without costly fuses.

Specifications

Starter Type

Industrial Starter
Standard or Combination
UL Type 1, 4/12, or 3R

User Interface

Start / Stop Pushbuttons or Hand-Off-Auto Switch

Standard Control Operations

Start/Stop — 3-Wire	Terminal block provision for remote Start/Stop
Hand-Off-Auto — 2-Wire	Terminal block provision for remote run command

Protective Functions (9~95A Models With Electronic Overload)

Overload Type	Electronic; I ² t Thermal Trip Curve
Trip Class	Class 1-30
Reset	Manual
Phase Unbalanced	Trip within 3 seconds @ 70% unbalance
Phase Loss	Trip within 3 seconds
Stall	Trip within 3 seconds @ 170% FLA

Protective Functions (9~400A Models With Thermal Overload)

Overload Type	Thermal bi-metallic
Trip Class	Class 10
Reset	Manual
Phase Loss	Differential overload protection

Mechanical

Enclosure types UL Type 1, 4/12 or 3R

Environmental

Ambient Operating Temp	-5° to 140° F (-20° to 60° C)
Ambient Storage Temp	-5° to 185° F (-20° to 85° C)
Relative Humidity	5% to 95% non-condensing



Simple and clearly indicated Start/Stop operation.



Provided terminal blocks allow for connection to remote Start/Stop station.



Heavy duty HOA switch with run pilot light provides simple and functional basic control

Two Configurations Available



Hand-Off-Auto Switch

- Selectable manual or remote control
- Run light clearly indicates starter status
- Terminal blocks included for quick and easy wiring
- Auxiliary contacts for versatile integration



Start/Stop Pushbuttons

- Simple, local, manual control
- Compact, economical design
- Terminal blocks for remote operator station
- Clearly labeled, rugged pushbuttons

Ordering and Sizing Information

ISS Electronic Overload



- Start/Stop pushbuttons or H-O-A switch
- Enclosure types for all environments
- Provision for remote operator station
- Combination version features motor circuit protector to provide branch and short circuit protection
- Wide range class 1-30 electronic overload prevents ordering confusion and call backs due to mis-sized heaters

Options

Part Number	Description
ISS-ERST	Front Mounted Reset Pushbutton
ISS-TBC	Terminal Control Only
ISS-1PH	Wiring for Single Phase Motor
ISS-HOA	Hand-Off-Auto Switch (no pushbuttons)
*ISS-600V	For use on 575-600 Line Voltage

* For 600V part numbers please our factory at 800.962.3787

For NEMA 4x and explosion proof enclosures please contact our factory at 800.962.3787

Standard Magnetic Starters 9~95A - Electronic Overload

Horsepower						SCIC KAIC @460V	NEMA Size	UL Type 1	Price	UL Type 3R	Price	UL Type 4/12	Price
Single Phase		Three Phase											
115V	230V	200V	230V	460V	575V*								
1/6	1/2	1	1.5	3	3	5	00	ISS1-9/J-5	\$503.00	ISS3R-9/J-5	\$618.00	ISS12-9/J-5	\$618.00
1	3	5	5	10	15	5	0	ISS1-18/J-22	\$529.00	ISS3R-18/J22	\$639.00	ISS12-18/J-22	\$639.00
2	5	7.5	10	20	25	5	1	ISS1-32/J-40	\$560.00	ISS3R-32/J-40	\$658.00	ISS12-32/J-40	\$658.00
3	10	20	20	40	50	5	2	ISS1-50/J-80	\$646.00	ISS3R-50/J-80	\$646.00	ISS12-50/J-80	\$796.00
5	15	30	40	60	60	10	3	-		ISS3R-85/J-80	\$1,014.00	ISS12-85/J-80	\$1,014.00

Combination Magnetic Starters 9~95A - Electronic Overload

Horsepower						SCIC KAIC @460V	NEMA Size	UL Type 1	Price	UL Type 3R	Price	UL Type 4/12	Price
Single Phase		Three Phase											
115V	230V	200V	230V	460V	575V*								
-	1/10	-	-	3/4	3/4	65	00	ISS1-9/J-G1.6-5	\$742.00	ISS3R-9/J-G1.6-5	\$976.00	ISS12-9/J-G1.6-5	\$976.00
-	1/6	1/2	1/2	1	1.5	65	00	ISS1-9/J-G2.5-5	\$742.00	ISS3R-9/J-G2.5-5	\$976.00	ISS12-9/J-G2.5-5	\$976.00
1/8	1/3	3/4	3/4	2	3	65	00	ISS1-9/J-G4-5	\$742.00	ISS3R-9/J-G4-5	\$976.00	ISS12-9/J-G4-5	\$976.00
1/6	1/2	1	1.5	3	3	65	00	ISS1-9/J-G6-5	\$742.00	ISS3R-9/J-G6-5	\$976.00	ISS12-9/J-G6-5	\$976.00
1/3	1	2	2	5	5	65	0	ISS1-18/J-G8-22	\$778.00	ISS3R-18/J-G8-22	\$1,006.00	ISS12-18/J-G8-22	\$1,006.00
1/2	1.5	2	3	5	7.5	65	0	ISS1-18/J-G10-22	\$778.00	ISS3R-18/J-G9-22	\$1,006.00	ISS12-18/J-G10-22	\$1,006.00
1/2	2	3	3	7.5	10	65	0	ISS1-18/J-G13-22	\$778.00	ISS3R-18/J-G13-22	\$1,006.00	ISS12-18/J-G13-22	\$1,006.00
1	3	3	5	10	15	30	0	ISS1-18/J-G17-22	\$778.00	ISS3R-18/J-G18-22	\$1,006.00	ISS12-18/J-G17-22	\$1,006.00
1.5	3	5	7.5	15	20	30	1	ISS1-32/J-G22-40	\$807.00	ISS3R-32/J-G22-40	\$1,043.00	ISS12-32/J-G22-40	\$1,043.00
2	3	7.5	7.5	15	20	30	1	ISS1-32/J-G26-40	\$807.00	ISS3R-32/J-G25-40	\$1,043.00	ISS12-32/J-G26-40	\$1,043.00
2	5	7.5	10	20	25	30	1	ISS1-32/J-G32-40	\$807.00	ISS3R-32/J-G32-40	\$1,043.00	ISS12-32/J-G32-40	\$1,043.00
3	7.5	10	10	30	30	50	2	-		ISS3R-50/J-G40-40	\$1,428.00	ISS12-50/J-G40-40	\$1,428.00
3	10	15	15	40	40	50	2	-		ISS3R-50/J-G50-80	\$1,428.00	ISS12-50/J-G50-80	\$1,428.00
5	10	20	20	50	50	50	3	-		ISS3R-85/J-G65-80	\$1,787.00	ISS12-85/J-G65-80	\$1,787.00
5	15	20	25	60	60	50	3	-		ISS3R-85/J-G75-80	\$1,787.00	ISS12-85/J-G75-80	\$1,787.00
5	15	25	30	60	60	50	3	-		ISS3R-85/J-G90-80	\$1,787.00	ISS12-85/J-G90-80	\$1,787.00

ISS Thermal Overload



- Start/Stop pushbuttons or H-O-A switch
- Enclosure types for all environments
- Provision for remote operator station
- Combination version features motor circuit protector to provide branch and short circuit protection
- Thermal overload offers differential phase failure protection, ambient compensation & manual/automatic reset

Options

Part Number	Description
ISS-RST	Front Mounted Reset Pushbutton
ISS-TBC	Terminal Control Only
ISS-1PH	Wiring for Single Phase Motor
ISS-HOA	Hand-Off-Auto Switch (no pushbuttons)
*ISS-600V	For use on 575-600 Line Voltage

* For 600V part numbers please our factory at 800.962.3787

For NEMA 4x and explosion proof enclosures please contact our factory at 800.962.3787

Standard Magnetic Starters 9~95A - Thermal Overload

Horsepower						SCIC KAIC @460V	NEMA Size	UL Type 1	Price	UL Type 3R	Price	UL Type 4/12	Price
Single Phase		Three Phase											
115V	230V	200V	230V	460V	575V*								
-	1/10	-	-	3/4	3/4	65	00	ISS1-9/K-1.6	\$529.00	ISS3R-9/K-1.6	\$608.00	ISS12-9/K-1.6	\$608.00
-	1/6	1/2	1/2	1	1.5	65	00	ISS1-9/K-2.5	\$529.00	ISS3R-9/K-2.5	\$608.00	ISS12-9/K-2.5	\$608.00
1/8	1/3	3/4	3/4	2	3	65	00	ISS1-9/K-4	\$529.00	ISS3R-9/K-4	\$608.00	ISS12-9/K-4	\$608.00
1/6	1/2	1	1.5	3	3	65	00	ISS1-9/K-6	\$529.00	ISS3R-9/K-6	\$608.00	ISS12-9/K-6	\$608.00
1/3	1	2	2	5	5	65	0	ISS1-9/K-8	\$529.00	ISS3R-18/K-8	\$639.00	ISS12-18/K-8	\$639.00
1/2	1.5	2	3	5	7.5	65	0	ISS1-9/K-9	\$529.00	ISS3R-18/K-9	\$639.00	ISS12-18/K-9	\$639.00
1/2	2	3	3	7.5	10	65	0	ISS1-18/K-13	\$544.00	ISS3R-18/K-13	\$639.00	ISS12-18/K-13	\$639.00
1	3	3	5	10	15	30	0	ISS1-18/K-18	\$544.00	ISS3R-18/K-18	\$639.00	ISS12-18/K-18	\$639.00
1.5	3	5	7.5	15	20	30	1	ISS1-32/K-22	\$579.00	ISS3R-32/K-22	\$658.00	ISS12-32/K-22	\$658.00
2	3	7.5	7.5	15	20	30	1	ISS1-32/K-25	\$579.00	ISS3R-32/K-25	\$658.00	ISS12-32/K-25	\$658.00
2	5	7.5	10	20	25	30	1	ISS1-32/K-32	\$579.00	ISS3R-32/K-32	\$658.00	ISS12-32/K-32	\$658.00
3	7.5	10	10	30	30	50	2	ISS1-50/K-40	\$569.00	ISS3R-50/K-40	\$857.00	ISS12-50/K-40	\$857.00
3	10	15	15	40	40	50	2	ISS1-50/K-50	\$569.00	ISS3R-50/K-50	\$857.00	ISS12-50/K-50	\$857.00
5	10	20	20	50	50	50	3	-	-	ISS3R-85/K-65	\$1,108.00	ISS12-85/K-65	\$1,108.00
5	15	20	25	60	60	50	3	-	-	ISS3R-85/K-75	\$1,108.00	ISS12-85/K-75	\$1,108.00
5	15	25	30	60	60	50	3	-	-	ISS3R-85/K-85	\$1,108.00	ISS12-85/K-85	\$1,108.00

Combination Magnetic Starters 9~95A - Thermal Overload

Horsepower						*SCIC KAIC @460V	NEMA Size	UL Type 1	Price	UL Type 3R	Price	UL Type 4/12	Price
Single Phase		Three Phase											
115V	230V	200V	230V	460V	575V*								
-	1/10	-	-	3/4	3/4	65	00	ISS1-9/K-G-1.6	\$676.00	ISS3R-9/K-G-1.6	\$936.00	ISS12-9/K-G-1.6	\$936.00
-	1/6	1/2	1/2	1	1.5	65	00	ISS1-9/K-G-2.5	\$676.00	ISS3R-9/K-G-2.5	\$936.00	ISS12-9/K-G-2.5	\$936.00
1/8	1/3	3/4	3/4	2	3	65	00	ISS1-9/K-G-4	\$676.00	ISS3R-9/K-G-4	\$936.00	ISS12-9/K-G-4	\$936.00
1/6	1/2	1	1.5	3	3	65	00	ISS1-9/K-G-6	\$676.00	ISS3R-9/K-G-6	\$936.00	ISS12-9/K-G-6	\$936.00
1/3	1	2	2	5	5	65	0	ISS1-9/K-G-8	\$676.00	ISS3R-18/K-G-8	\$972.00	ISS12-18/K-G-8	\$972.00
1/2	1.5	2	3	5	7.5	65	0	ISS1-9/K-G-9	\$676.00	ISS3R-18/K-G-9	\$972.00	ISS12-18/K-G-10	\$972.00
1/2	2	3	3	7.5	10	65	0	ISS1-18/K-G-13	\$710.00	ISS3R-18/K-G-13	\$972.00	ISS12-18/K-G-13	\$972.00
1	3	3	5	10	15	30	0	ISS1-18/K-G-18	\$710.00	ISS3R-18/K-G-18	\$972.00	ISS12-18/K-G-17	\$972.00
1.5	3	5	7.5	15	20	30	1	ISS1-32/K-G-22	\$748.00	ISS3R-32/K-G-22	\$1,043.00	ISS12-32/K-G-22	\$1,043.00
2	3	7.5	7.5	15	20	30	1	ISS1-32/K-G-25	\$748.00	ISS3R-32/K-G-25	\$1,043.00	ISS12-32/K-G-26	\$1,043.00
2	5	7.5	10	20	25	30	1	ISS1-32/K-G-32	\$748.00	ISS3R-32/K-G-32	\$1,043.00	ISS12-32/K-G-32	\$1,043.00
3	7.5	10	10	30	30	50	2	ISS1-50/K-G-40	\$989.00	ISS3R-50/K-G-40	\$1,428.00	ISS12-50/K-G-40	\$1,428.00
3	10	15	15	30	40	50	2	ISS1-50/K-G-50	\$989.00	ISS3R-50/K-G-50	\$1,428.00	ISS12-50/K-G-50	\$1,428.00
5	10	20	20	40	50	50	3	-	-	ISS3R-85/K-G-65	\$1,779.00	ISS12-85/K-G-65	\$1,779.00
5	15	20	25	50	60	50	3	-	-	ISS3R-85/K-G-75	\$1,779.00	ISS12-85/K-G-75	\$1,779.00
5	15	25	30	60	60	50	3	-	-	ISS3R-85/K-G-90	\$1,779.00	ISS12-85/K-G-90	\$1,779.00

Standard Magnetic Starters 100~400A - Thermal Overload

Horsepower				SCIC KAIC @460V	NEMA Size	UL Type 4/12	Price
Three Phase							
200V	230V	460V	575V*				
40	40	75	75	10	-	ISS12-125/K-125	\$1,756.00
40	50	100	100	10	4	ISS12-150/K-150	\$2,247.00
60	75	150	150	10	-	ISS12-220/K-220	\$3,336.00
100	100	200	200	18	5	ISS12-300/K-300	\$3,653.00
125	150	300	300	18	-	ISS12-400/K-400	\$4,130.00



Combination version features molded case circuit breaker to provide branch and short circuit protection

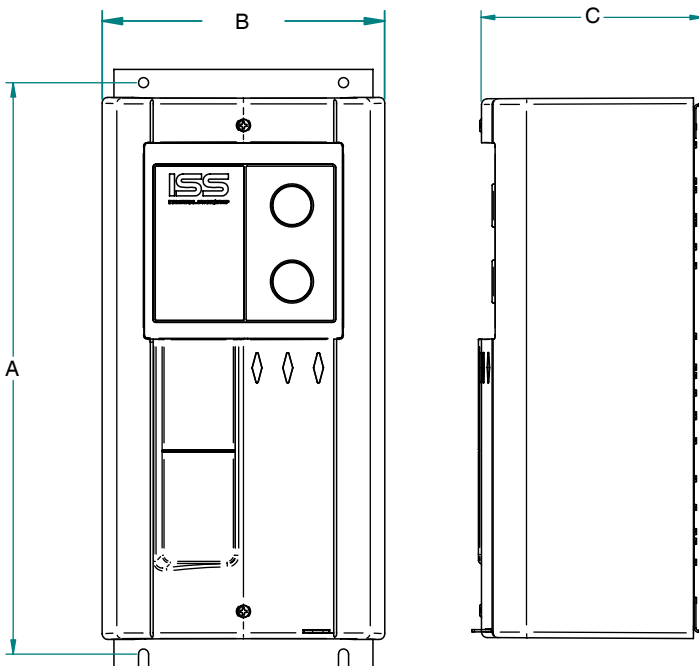
Combination Magnetic Starters 100~400A - Thermal Overload

Horsepower				SCIC KAIC @460V	NEMA Size	UL Type 4/12	Price
Three Phase							
200V	230V	460V	575V*				
40	40	75	75	10	-	ISS12-125/K-G-125	\$3,028.00
40	50	100	100	10	4	ISS12-150/K-G-150	\$4,734.00
60	75	150	150	10	-	ISS12-220/K-G-220	\$6,039.00
100	100	200	200	18	5	ISS12-300/K-G-300	\$7,476.00
125	150	300	300	18	-	ISS12-400/K-G-400	\$9,419.00

*For 600V part numbers please consult factory.

UL Type 1 Dimensions

All dimensions are in inches



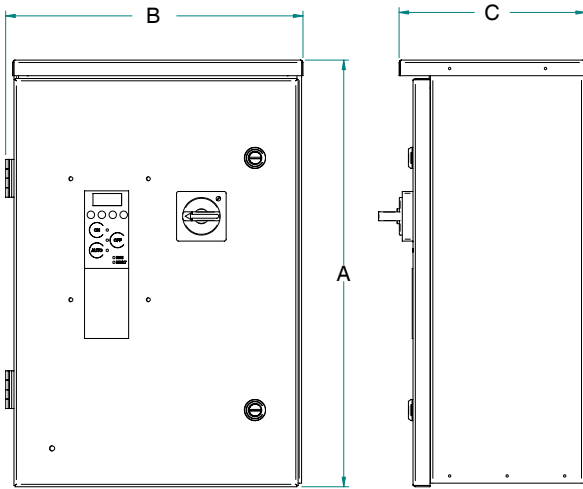
Enclosure Frame Size 1	A	B	C	Weight*
ISS1-9 ~ ISS1-50 STANDARD	15	7.5	6.1	14 lbs.
ISS1-9 ~ ISS1-50/K COMBINATION				

* All weights are approximate

All dimensions are in inches

UL Type 3R Dimensions

All dimensions are in inches



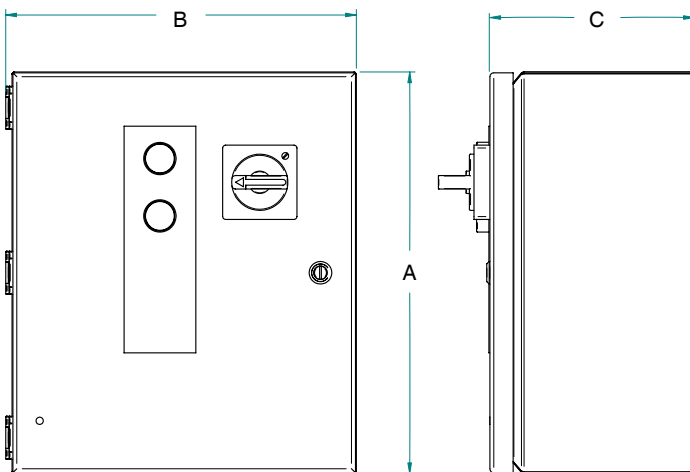
Enclosure Frame Size 1	A	B	C	Weight*
ISS3R-9/K ~ ISS3R-85/K STANDARD	16.3	12.5	7.7	25-45 lbs.
ISS3R-9/K ~ ISS3R-32/K COMBINATION				
ISS3R-9/J ~ ISS3R-32/J STANDARD				
ISS3R-9/J ~ ISS3R-32/J COMBINATION				
ISS3R-50/J ~ ISS3R-85/J STANDARD				
Enclosure Frame Size 2	A	B	C	Weight
ISS3R-50/K COMBINATION	22.3	15.5	9.7	25-45 lbs.
ISS3R-50/J COMBINATION				
Enclosure Frame Size 3	A	B	C	Weight
ISS3R-85/J COMBINATION	32.3	15.5	9.7	50+ lbs.
ISS3R-85/K COMBINATION				

* All weights are approximate

All dimensions are in inches

UL Type 4/12 Dimensions

All dimensions are in inches

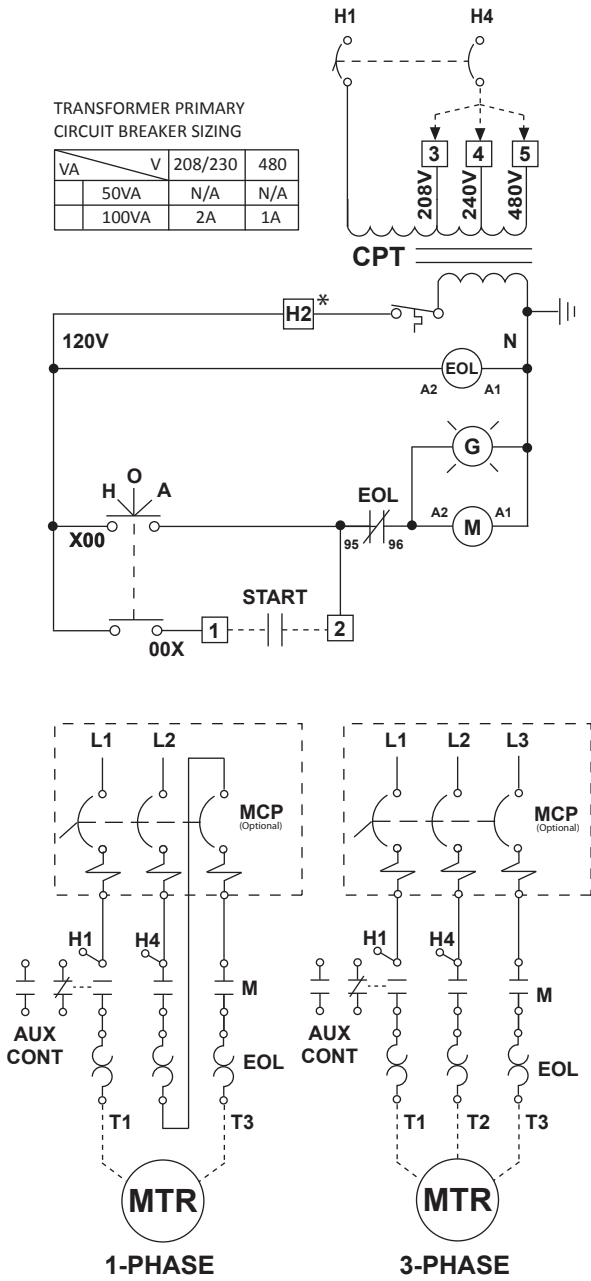


Enclosure Frame Size 1	A	B	C	Weight
ISS12-9/J ~ ISS12-32/J STANDARD	10	8	6	20 lbs.
ISS12-9/K ~ ISS12-32/K STANDARD				
Enclosure Frame Size 2	A	B	C	Weight
ISS12-50/J STANDARD	12	10	6	35 lbs.
ISS12-50/K STANDARD				
Enclosure Frame Size 3	A	B	C	Weight
ISS12-85/J STANDARDS	14	12	6	35 lbs.
ISS12-85/K STANDARD				
ISS12-9/J ~ ISS12-32/J COMBINATION				
ISS12-9/K ~ ISS12-32/K COMBINATION				
Enclosure Frame Size 4	A	B	C	Weight
ISS12-50/K COMBINATION	16	14	8	25-45 lbs.
Enclosure Frame Size 4	A	B	C	Weight
ISS12-50/J ~ ISS12-85/J COMBINATION	20	16	10	50+ lbs.
ISS12-85/K COMBINATION				

* All weights are approximate

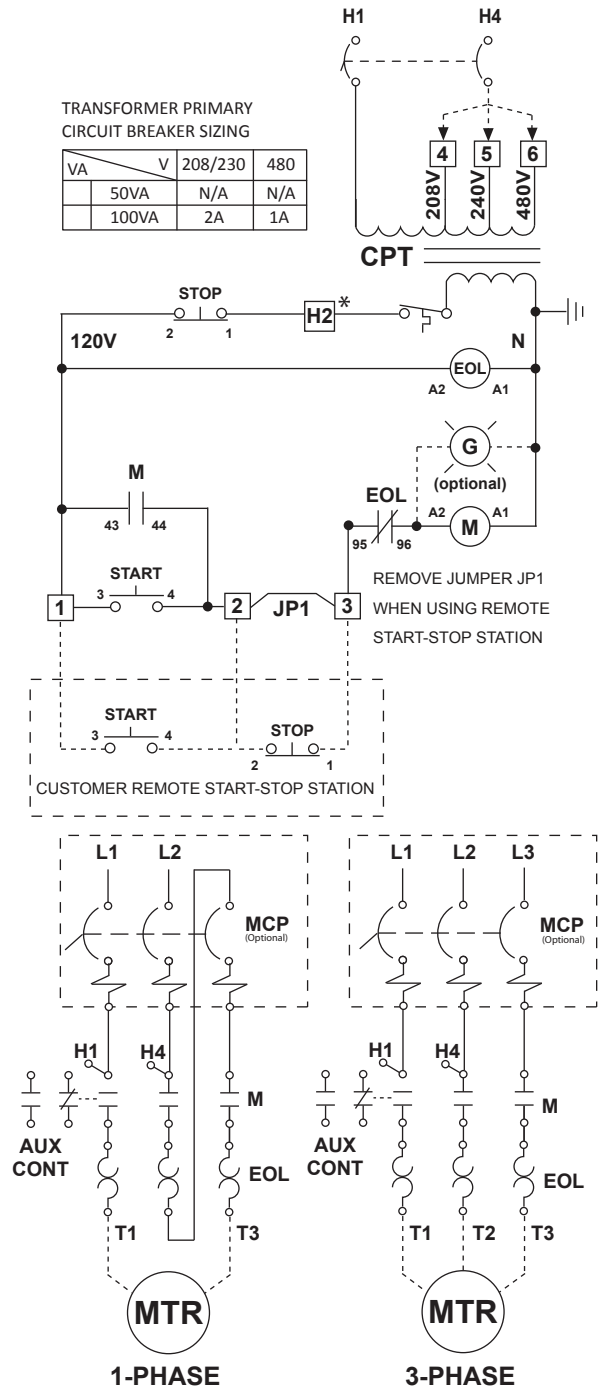
All dimensions are in inches

Hand Off Auto - Electronic Overload



*H2 Terminal does not apply for Type 1 enclosed configurations

Start/Stop pushbuttons - Electronic Overload



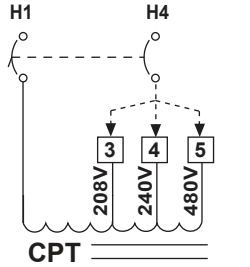
*H2 Terminal does not apply for Type 1 enclosed configurations

Hand Off Auto Thermal Overload Combination

Hand Off Auto Thermal Overload Standard (non-combo)

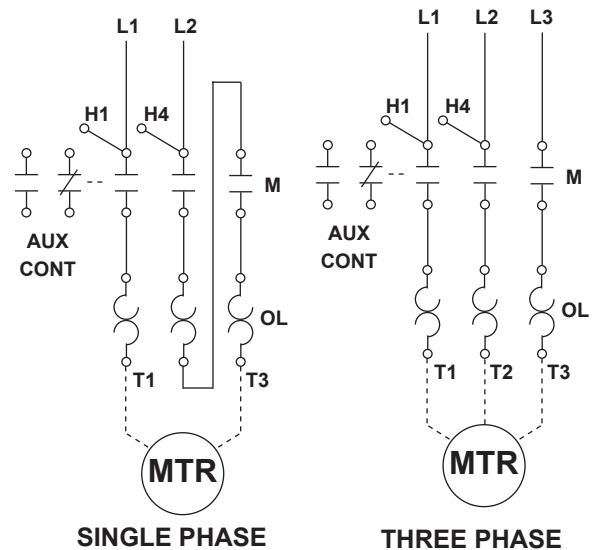
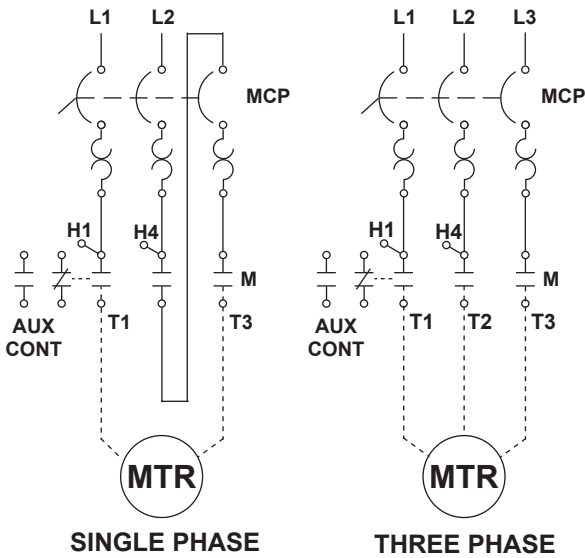
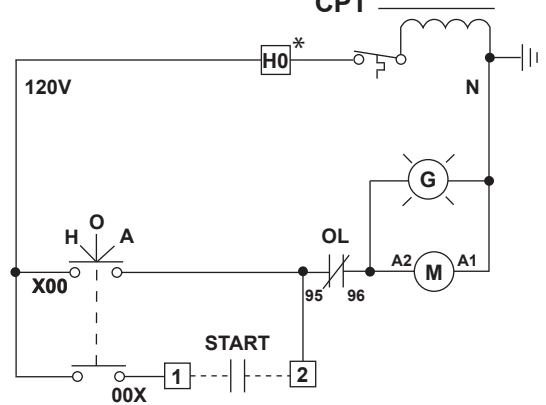
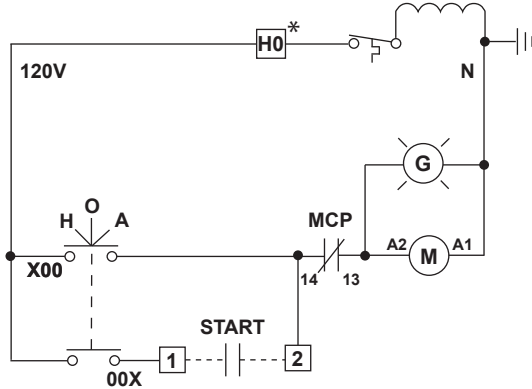
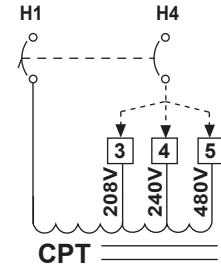
TRANSFORMER PRIMARY
CIRCUIT BREAKER SIZING

VA	V	208/230	480
50VA		N/A	N/A
100VA		2A	1A



TRANSFORMER PRIMARY
CIRCUIT BREAKER SIZING

VA	V	208/230	480
50VA		N/A	N/A
100VA		2A	1A



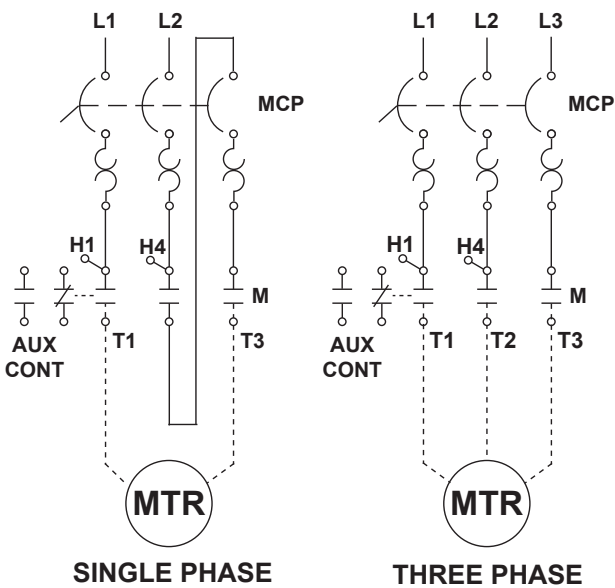
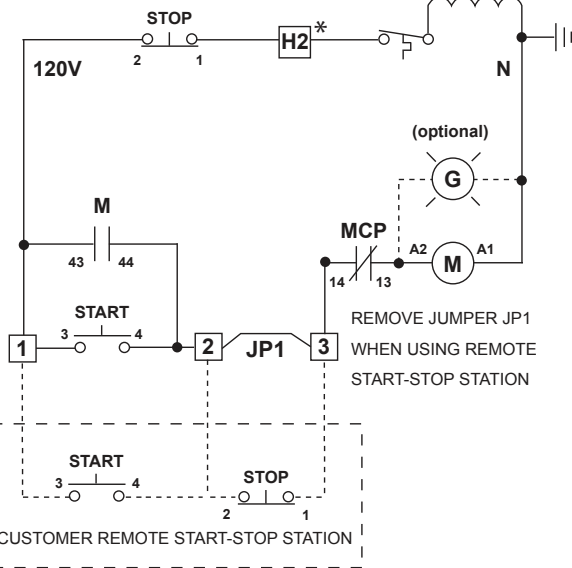
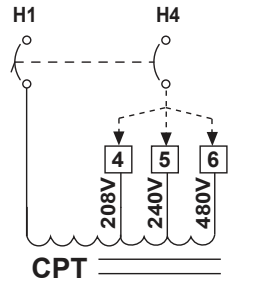
*H0 Terminal does not apply for Type 1 enclosed configurations

*H0 Terminal does not apply for Type 1 enclosed configurations

Start/Stop pushbuttons - Thermal Overload Combination

TRANSFORMER PRIMARY
CIRCUIT BREAKER SIZING

VA	V	208/230	480
50VA		N/A	N/A
100VA		2A	1A

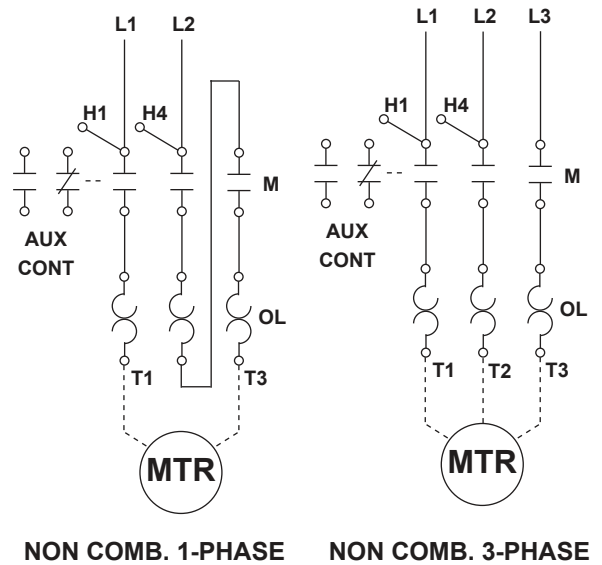
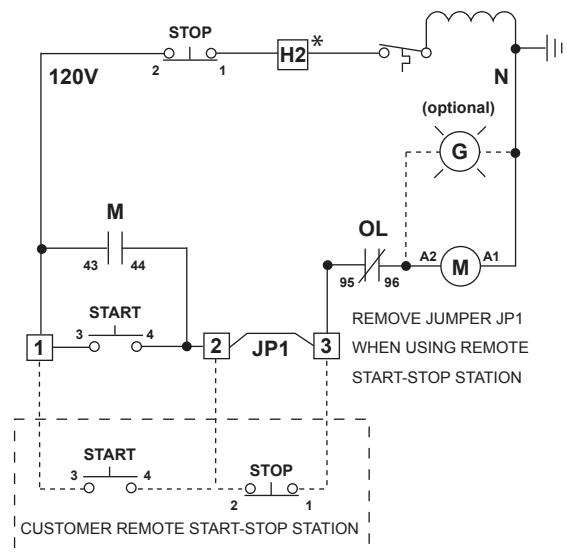
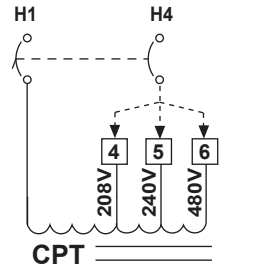


*H2 Terminal does not apply for Type 1 enclosed configurations

Start/Stop pushbuttons - Thermal Overload Standard (non-combo)

TRANSFORMER PRIMARY
CIRCUIT BREAKER SIZING

VA	V	208/230	480
50VA		N/A	N/A
100VA		2A	1A



*H2 Terminal does not apply for Type 1 enclosed configurations