

XT Series Jockey Pump Controllers

March 2012



Product Description

ACROSS THE LINE JOCKEY PUMP CONTROLLERS

The XTJP jockey pump controllers operate across-the-line. Full voltage is applied to the motor for starting by the use of a single motor starter. Starting inrush current is approximately 600% of rated full load amperes.

WYE-DELTA (Star-Delta) JOCKEY PUMP CONTROLLERS

When six or twelve-lead delta connected jockey pump motors are started wye (star) connected, approximately 58% of line voltage is applied to each winding. The motor develops 33% of full-voltage starting torque and draws 33% of normal locked-rotor current from the line. After an adjustable time delay (during which the motor accelerates), it is reconnected for normal operation.

Product Features

Combination Motor Controllers

All jockey pump controllers are supplied with EATON combination motor controllers, which combine the circuit breaker and overload in one device.



Sealed Rotary Handle Mechanism

The rotary handle mechanism can be padlocked in the OFF position.

XT Power Controls

The XT Series of Jockey Pump Controllers incorporate Eaton's XT Power Controls which are designed for the global marketplace. The XT controls carry global ratings, are small in size and are available in a wide variety of operating voltages. They are easy to install and maintain, due to their modular, plug-in design.

120V Control Power Transformer

All jockey pump controllers are wired with a 120V control power transformer as standard.

Digital Display

Eaton's XTJP and XTJY series of jockey pump controllers are supplied standard with an 1/8 DIN, NEMA 4X digital panel meter that displays current pressure and hi and low setpoints on a 4-digit, superbright LED display. Pressure input is provided by a 4-20mA pressure sensor.

NEMA 2 Enclosures

Enclosures have an oven baked powder paint finish and are supplied with NEMA 2 rating, unless otherwise ordered. Available options include: NEMA 3R, 4, 4X, 12.

Technical Data

ACROSS-THE-LINE (Direct On Line) JOCKEY PUMP CONTROLLERS Line Voltage 200 - 208V 380 - 415V 440 - 480V 550 - 600V 240V 1 ph 220 - 240V 120V 1 ph Motor Horsepower 1/3 - 15Hp 1/3 - 40Hp 1/3 - 50Hp 1/3 - 50Hp 1/3 - 50Hp 1/3 - 5Hp 1/3 - 10Hp

WYE-DELTA (Star-Delta) JOCKEY PUMP CONTROLLERS

Line Voltage						
200 - 208V	220 - 240V	380 - 415V	440 - 480V	550 - 600V		
Motor Horsepower						
1/3 - 15Hp	1/3 - 40Hp	1/3 - 50Hp	1/3 - 50Hp	1/3 - 50Hp		
(0.74 - 11.03KW)	(0.74 - 29.42KW)	(0.74 - 36.78KW)	(0.74 - 36.78KW)	(0.74 - 36.78KW)		

Standards & Certification

The XT Series of Jockey Pump Controllers meet or exceed the requirements of Underwriters Laboratories, Underwriters Laboratories Canada, the Canadian Standards Association and the New York City Building Code.









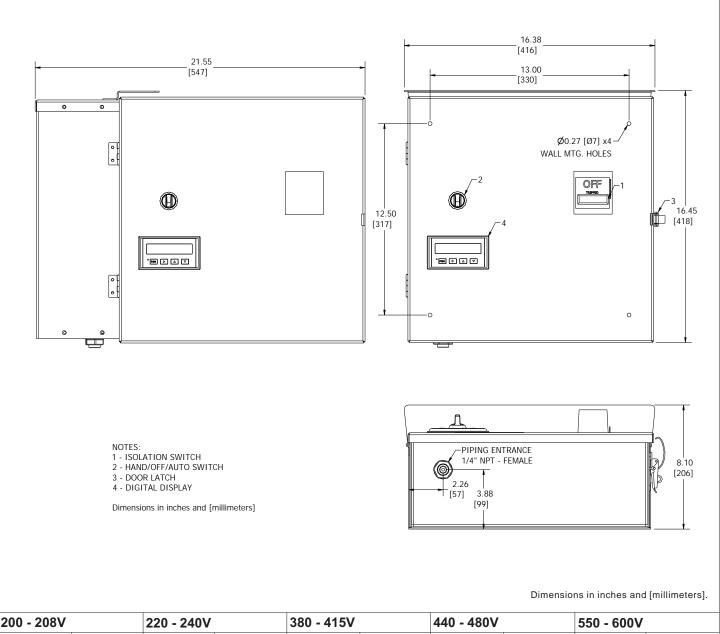
Jockey Pump Controllers Dimensions

XTJP Jockey Pump Controllers

March 2012

Dimensions

Standard Enclosure - Type NEMA 2 - Large HP - Jockey Pump Controller



200 - 208V		220 - 240V		380 - 415V		440 - 480V		550 - 600V	
Motor Hp	Withstand Rating (kA)								
15	100	15 - 40	100	15 - 50	100	25 - 50	100	15 - 50	25

120V 1ø		240V 1ø		Approx. Weight
Motor Hp	Withstand Rating (kA)	Motor Hp	Withstand Rating (kA)	Lbs (Kg)
3 - 5	100	7.5 - 10	100	55 (25)



NOTES:

1. All enclosures finished in Red.

Cable Entrance either top or bottom.
Standard Enclosure type NEMA 2.

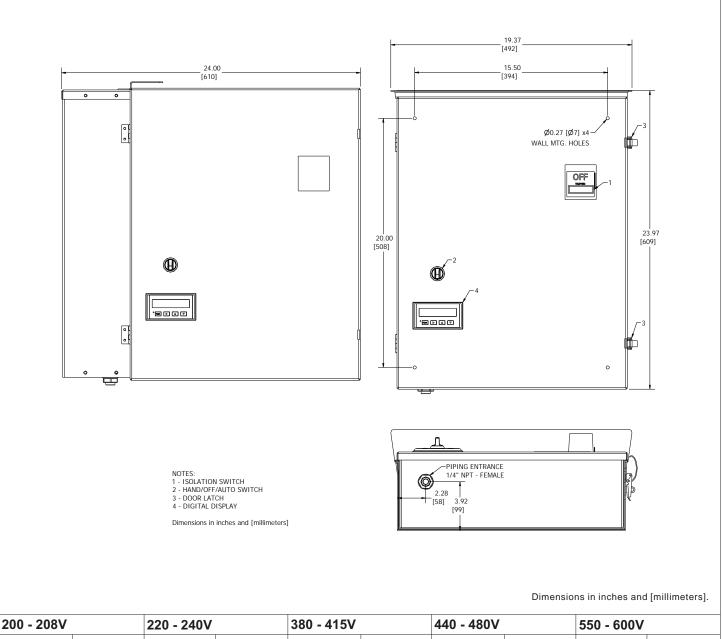


Jockey Pump Controllers Dimensions

XTJP Jockey Pump Controllers

Dimensions

Standard Enclosure - Type NEMA 2 - Large HP - Jockey Pump Controller with Options



200 - 208V		220 - 240V		380 - 415V		440 - 480V		550 - 600V	
Motor Hp	Withstand Rating (kA)								
15	100	15 - 40	100	15 - 50	100	25 - 50	100	15 - 50	25

120V 1ø		240V 1Ø		Approx. Weight
Motor Hp	Withstand Rating (kA)	Motor Hp	Withstand Rating (kA)	Lbs (Kg)
3 - 5	100	7.5 - 10	100	55 (25)



NOTES:

1. All enclosures finished in Red.

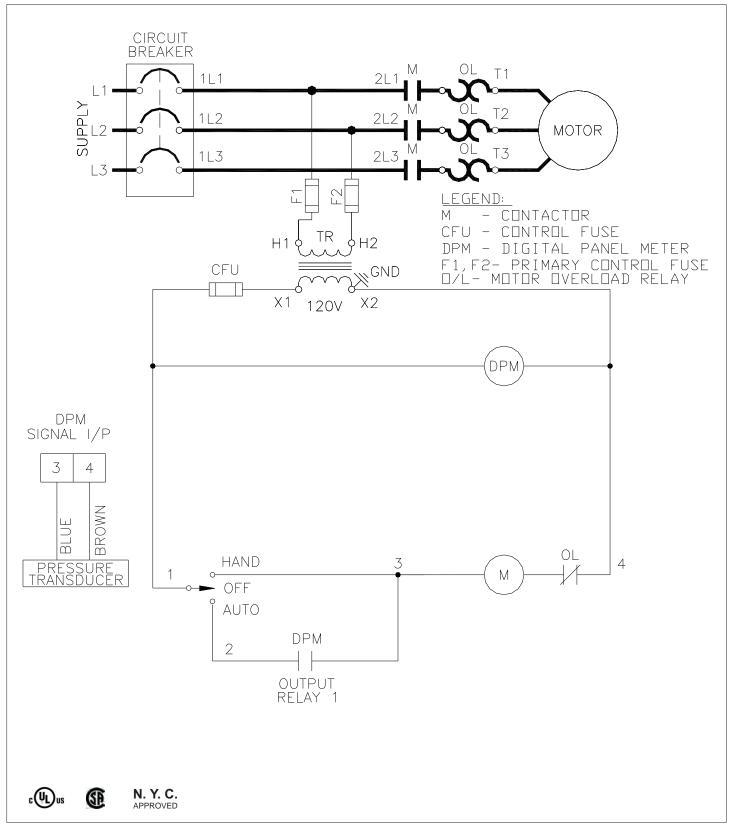
Cable Entrance either top or bottom.
Standard Enclosure type NEMA 2.



Jockey Pump Controllers Electrical Wiring Schematic

XTJP Jockey Pump Controllers

Electrical Wiring Schematic - 3 Phase - Large HP





Jockey Pump Controllers Electrical Wiring Schematic

XTJP Jockey Pump Controllers

March 2012

Electrical Wiring - Options

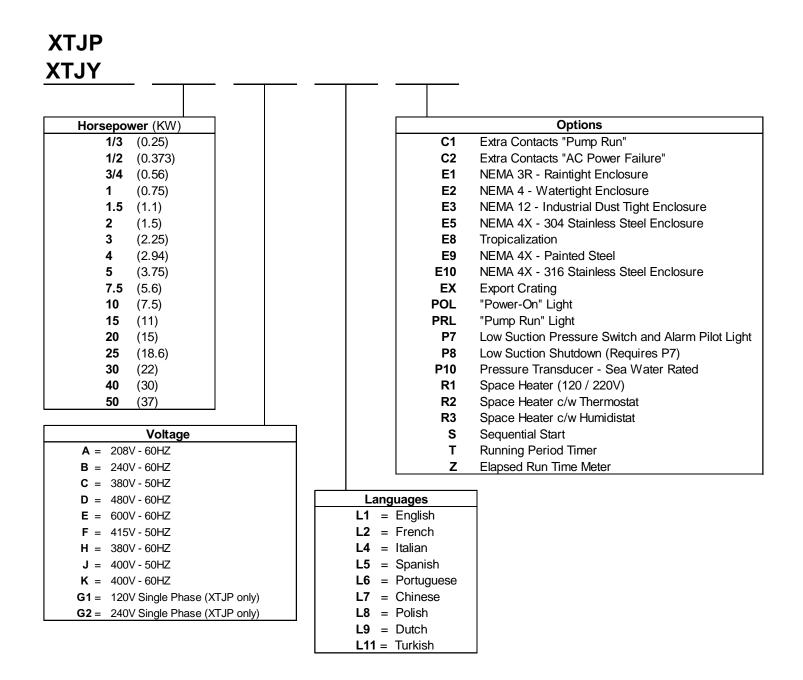
ELAPSED TIME METER (Z)	$\Box (C1)^{\text{EXTRA CONTACTS}}_{\text{PUMP RUN}} \downarrow $
	PUMP DERATING CENTACT 85 CENTACT 85 CENTACT 6
RUN PERIOD TIMER PPT (T) (T) (T) (T) (T) (T) (T) (T) (T) (T	C2) AC POWER FAILURE RELAY POWER FAILURE RELAY 73 74 75 AC POWER FAILURE POWER FAILURE POWER FAILURE AC POWER FAILURE AC AC AC AC AC AC AC AC AC AC
CUUS S N.Y.C. APPROVED	



XTJP / XTJY Jockey Pump Controllers

March 2014

Part Number / Options Selection Guide XTJP / XTJY Jockey Pump Controllers







XTJP / XTJY Jockey Pump Controllers

Typical Jockey Pump Controller Specifications

Approvals

The Jockey Pump Controller shall meet the requirements of UL 508 [Underwriters Laboratories (UL)] and approved by [Canadian Standards Association (CSA)] [New York Department of Buildings (NYSB).

Starting Type

The controller shall be Across-the-Line or Wye-Delta (Star Delta) type designed for full voltage starting.

Ratings

The Controller shall have a minimum withstand rating of 18,000 symmetrical amperes @ [208V] [240V] [380V] [415V] [480V] [600V] [120V Single Phase] [240V Single Phase].

The horsepower rating of the controller shall not exceed 50Hp for three (3) phase units or 10Hp on single phase units.

Construction

The controller shall include a combination Circuit Breaker / Overload Motor Protector.

The circuit breaker shall be mechanically interlocked such that the enclosure door cannot be opened when the handle is in the on position except by a tool operated defeater mechanism.

The controller manufacturer shall manufacture the contactor, circuit breaker, pushbuttons, and enclosures. Brand-labeled components will not be accepted.

Supply Voltage

The jockey pump controller shall be available with the following supply voltages:

- A 200-208V 60 Hz
- B 220-240V 60 Hz
- C 380V 50 / 60 Hz
- D 440-480V 60 Hz
- E 550-600V 60 Hz
- F 415V 50 / 60 Hz
- G1 120V Single Phase
- G2 240V Single Phase

Enclosure

The controller shall be housed in a NEMA Type 2 (IEC IP11) drip-proof, powder baked finish, freestanding enclosure.

Optional Enclosures

- 1. NEMA 3R (IEC IP14) rain-tight enclosure.
- 2. NEMA 4 (IEC IP66) watertight enclosure.
- 3. NEMA 4X (IEC IP66) watertight 304 stainless steel enclosure.
- 4. NEMA 4X (IEC IP66) watertight 316 stainless steel enclosure.
- 5. NEMA 4X (IEC IP66) watertight corrosion resistant enclosure.
- 6. NEMA 12 (IEC IP52) dust-tight enclosure.

Run Period Timer

An optional Run Period Timer shall be available.

Languages

The controller shall be available in a variety of languages including, but not limited to: English, French, Spanish, Turkish.

Digital Indication

The controller shall be supplied with a digital display that shall indicate the following: System Pressure, Start Pressure, Stop Pressure.

The digital display shall be supplied with a solid-state 4-20mA pressure sensor. The pressure Start and Stop points shall be adjustable in increments of one (1) PSI.

The digital display shall be a door-mount type that permits exterior programming with the controller door secured.

Options

The jockey pump controller shall have provision to be supplied with the following options:

- C1 Extra Contacts " Pump Run"
- C2 Extra Contacts "AC Power Failure"
- E1 NEMA 3R Raintight Enclosure
- E2 NEMA 4 Watertight Enclosure
- E3 NEMA 12 Industrial Dust Tight Enclosure
- E5 NEMA 4X Stainless Steel Enclosure
- E8 Tropicalization
- E9 NEMA 4X Painted Steel
- E10 NEMA 4X 316 Stainless Steel Enclosure
- EX Export Crating
- POL "Power On" Light
- PRL "Pump Run" Light
- P7 Low Suction Pressure Switch and Alarm Pilot Light
- P8 Low Suction Shutdown (Requires P7)
- P10 Pressure Switch (0-500psi) Sea Water
- R1 Space Heater (120 / 220V)
- R2 Space Heater c/w Thermostat
- R3 Space Heater c/w Humidistat
- S Sequential Start
- T Run Period Timer
- Z Elapsed Run Time Meter

Manufacturer

The controller shall be of the XTJP Across-the-Line or XTJY Wye Delta (Star-Delta) type as manufactured by EATON Corporation.