



TORNATECH

Project: _____

Customer: _____

Engineer: _____

Pump Manufacturer: _____

Technical Data Submittal Document

Model JP3

Across the Line Start
Jockey Pump Controller



Contents:

Data Sheets

Dimensional Data

Wiring Schematics

Field Connections

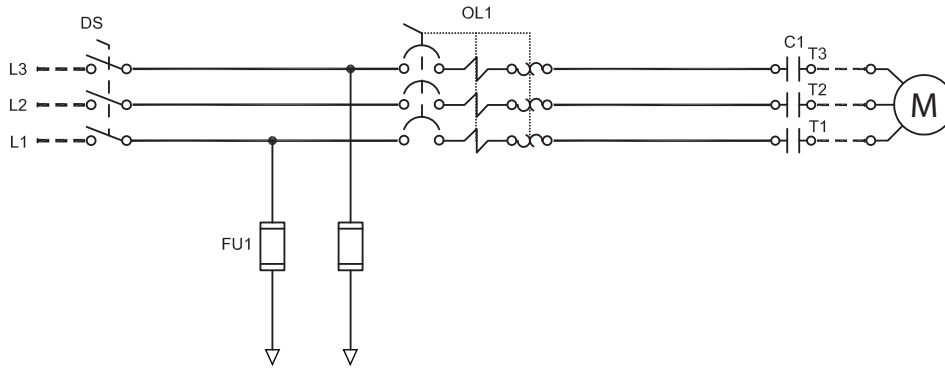
Note: The drawings included in this package are for controllers covered under our standard offering. Actual AS BUILT drawings may differ from what is shown in this package.



N.Y.C.
APPROVED



August 2020



N.Y.C.
APPROVED



| | | |
|------------------|--|--|
| Listing | Underwriters Laboratory (UL) | UL508A - Industrial Pump Controllers |
| | New York City | Accepted for use in the City of New York by the Department of Buildings |
| | Seismic Certification | See page 4 for details |
| | CE Mark | Various EN, IEC & CEE directives and standards |
| Enclosure | Protection Rating <input type="checkbox"/> Standard: NEMA 2 Optional <input type="checkbox"/> NEMA 12 <input type="checkbox"/> NEMA 4X-304 sst painted <input type="checkbox"/> NEMA 3 <input type="checkbox"/> NEMA 4X-304 sst brushed finish <input type="checkbox"/> NEMA 3R <input type="checkbox"/> NEMA 4X-316 sst painted <input type="checkbox"/> NEMA 4 <input type="checkbox"/> NEMA 4X-316 sst brushed finish | |
| | Accessories <ul style="list-style-type: none"> • Wall mounting lugs (x4) | Paint Specifications <ul style="list-style-type: none"> • Red RAL3002 • Powder coating • Glossy textured finish |

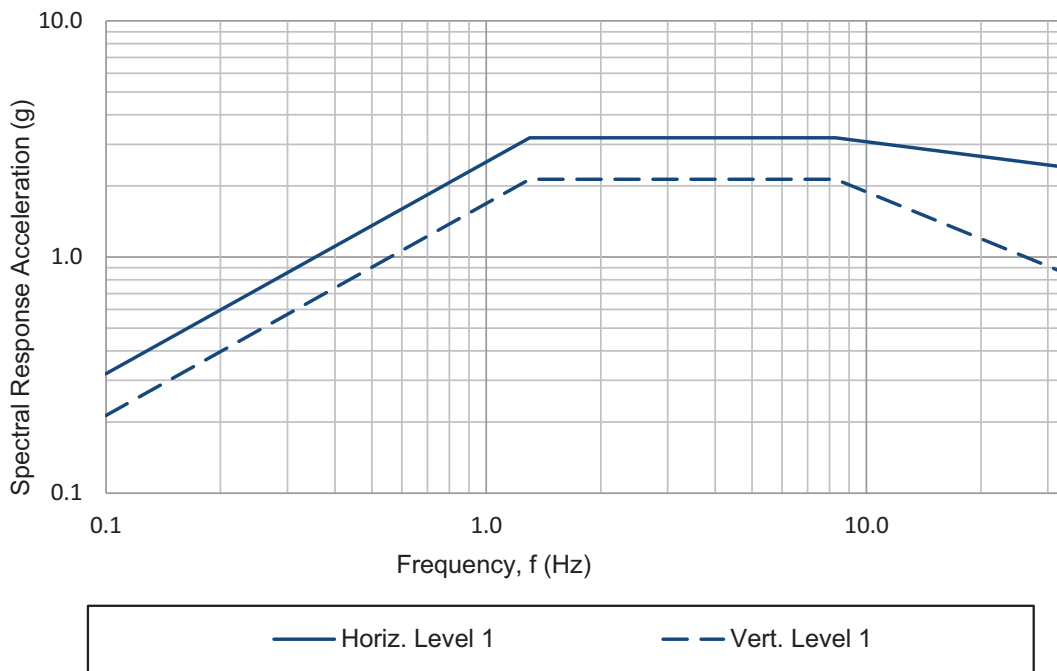


| | | | |
|--------------------------------|--|-------------------------------------|---|
| Fuseless Motor Starter | <ul style="list-style-type: none"> • Main disconnect – padlockable – rotary type handle – door interlocked • Thermo-magnetic motor protector • Contactor | | |
| Control Circuit | <ul style="list-style-type: none"> • 24V.AC | | |
| iPD+ Operator Interface | <ul style="list-style-type: none"> • Solid state controls • All adjustments on door front • Navigation pushbuttons | | |
| Pressure Sensing | <ul style="list-style-type: none"> • Pressure transducer for fresh water application 316 stainless steel construction • Rated for 0-600psi working pressure • Pressure sensing line connection 1/2" brass Male NPT | | |
| Visual Indications | <ul style="list-style-type: none"> • Manual motor start/run LED • Automatic motor start/run LED • Motor overload • Pressure reading <ul style="list-style-type: none"> • Start pressure • Stop pressure • System pressure • System pressure diagnostic LED's <ul style="list-style-type: none"> • Green: system pressure at or above stop pressure • Yellow: system pressure between start and stop pressure • Red: system pressure at or below start pressure • AUTO mode • OFF mode | | |
| Timers | <ul style="list-style-type: none"> • Minimum run timer (off delay) • Delay start timer (on delay) • Visual countdown | | |
| Counters | <ul style="list-style-type: none"> • Pump start counter • Elapsed timer meter (hours / non-resettable) | | |
| Operators | <ul style="list-style-type: none"> • OFF-AUTO pushbutton • Start and Stop pushbutton | | |
| Operation | Automatic Start | Start on pressure drop | |
| | Manual Start | Start pushbutton | |
| | Stopping | Stop pushbutton | |
| | Timers | Field adjustable & visual countdown | <ul style="list-style-type: none"> • Minimum run timer (off delay) • Delay start timer (on delay) |



| | | | | | | | | | | | |
|------------------------------|-------------------------------|---|----------------------|--------------------|-----------------------|------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Seismic Certification | Seismic Certification Company | TRU Compliance, LLC A Tobalski Watkins Affiliate | | | | | TWEI Project No.: 15014 | | | | |
| | Mounting details | Rigid wall mounting | | | | | | | | | |
| | Seismic Information | Building Code | Test Criteria | Seismic Parameters | S_{Ds} | z/h | I_p | A_{FLX-H} | A_{RIG-H} | A_{FLX-V} | A_{RIG-V} |
| | IBC 2015, CBC 2016 | ICC-ES AC156 | ASCE 7-10 Chapter 13 | 2.0 | 1.0 | 1.5 | 3.20 | 2.40 | 1.33 | 0.53 | |
| | | | | 3.2 | 0.0 | 1.5 | 3.20 | 1.28 | 2.13 | 0.85 | |

RRS for Nonstructural Components Testing



Notes:

- Components are tested in accordance with ICC-ES AC156, IBC 2015 & CBC 2016.
- OSHPD Special Seismic Certification Preapproval (OSP)

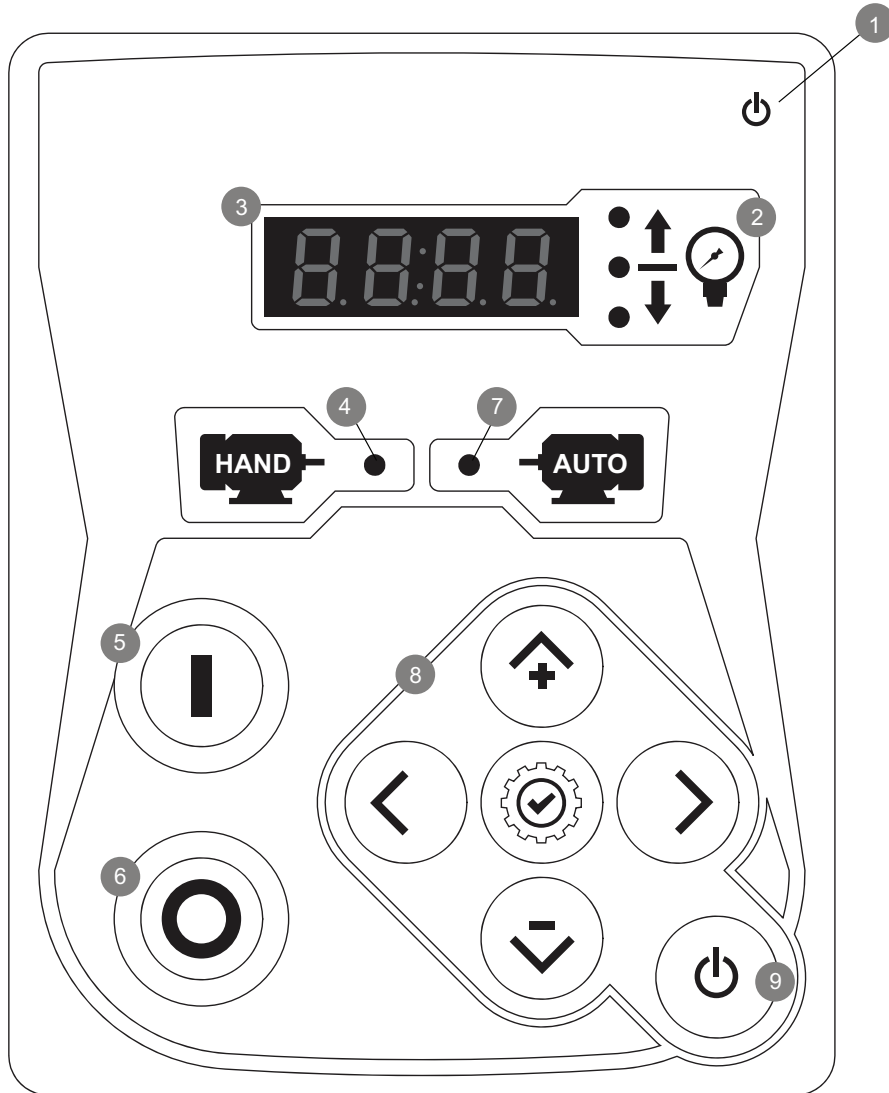


| | |
|-------------------------------|---|
| <input type="checkbox"/> A5 | Motor run alarm contact |
| <input type="checkbox"/> A6 | Loss of power alarm contact |
| <input type="checkbox"/> A7 | Overload or short circuit alarm contact |
| <input type="checkbox"/> D11D | Pressure transducer 0-600psi with 1/2" MNPT 316 stainless steel bushing |
| <input type="checkbox"/> D15 | Less pressure transducer - provision to connect pressure switch (pressure switch by others) |
| <input type="checkbox"/> D19 | Anti-condensation heater and thermostat |
| <input type="checkbox"/> D20 | Anti-condensation heater and humidistat |
| <input type="checkbox"/> D21 | Tropicalization |
| <input type="checkbox"/> D22 | Phase reversal / failure pilot light and alarm contact |
| <input type="checkbox"/> D28 | Selector switch in auto alarm contacts |
| <input type="checkbox"/> D29 | Selector switch in off alarm contacts |

| | |
|------------------------------|--|
| <input type="checkbox"/> L01 | Other language and English (bilingual) |
| <input type="checkbox"/> L02 | French |
| <input type="checkbox"/> L03 | Spanish |
| <input type="checkbox"/> L04 | German |
| <input type="checkbox"/> L05 | Italian |
| <input type="checkbox"/> L06 | Polish |
| <input type="checkbox"/> L07 | Romanian |
| <input type="checkbox"/> L08 | Hungarian |
| <input type="checkbox"/> L09 | Slovak |
| <input type="checkbox"/> L10 | Croatian |
| <input type="checkbox"/> L11 | Czech |
| <input type="checkbox"/> L12 | Portuguese |
| <input type="checkbox"/> L13 | Dutch |
| <input type="checkbox"/> L14 | Russian |
| <input type="checkbox"/> L15 | Turkish |
| <input type="checkbox"/> L16 | Swedish |
| <input type="checkbox"/> L17 | Bulgarian |
| <input type="checkbox"/> L18 | Thai |
| <input type="checkbox"/> L19 | Indonesian |
| <input type="checkbox"/> L20 | Slovenian |
| <input type="checkbox"/> L21 | Danish |
| <input type="checkbox"/> L22 | Greek |
| <input type="checkbox"/> L23 | Arabic |
| <input type="checkbox"/> L24 | Hebrew |
| <input type="checkbox"/> L25 | Chinese |

Note: Options chosen from this page are not electrically represented on the wiring schematics in this submittal package.

iPD+ Operator Interface



- | | |
|-----------------------|-------------------------|
| 1 - Power on LED | 6 - STOP pushbutton |
| 2 - System status LED | 7 - Auto start LED |
| 3 - Digital display | 8 - Navigation keypad |
| 4 - Hand start LED | 9 - ON - OFF pushbutton |
| 5 - START pushbutton | |

Jockey Pump Controller

Across the Line / 3 Phase

Model:JP3

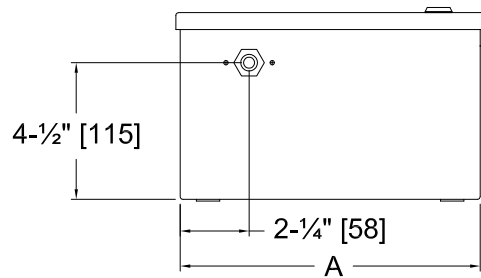
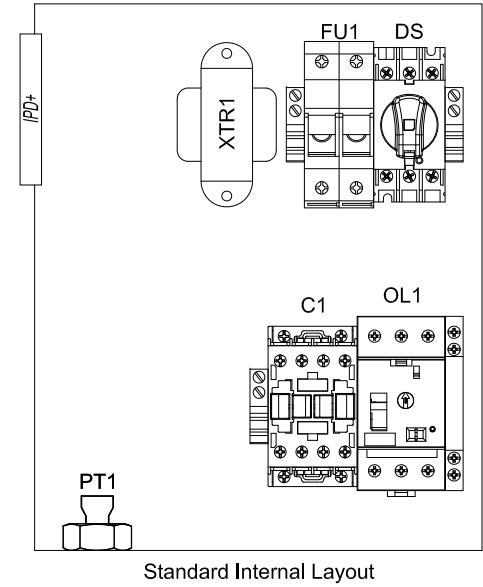
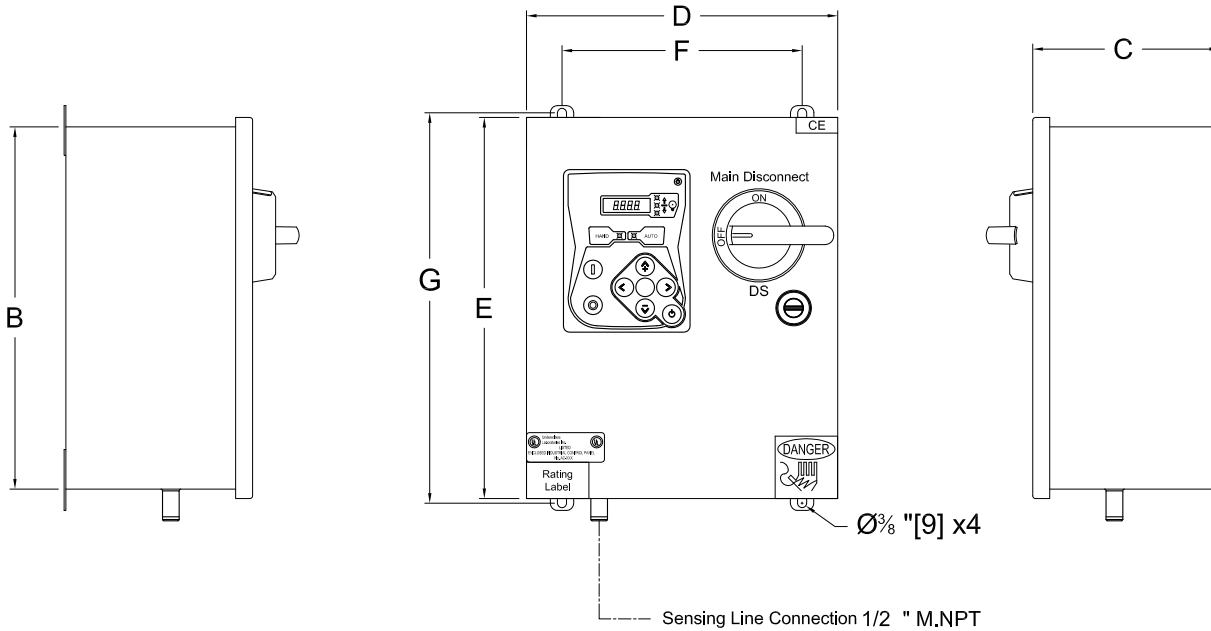
PER QUOTE DRAWING No.



| REV. | DESCRIPTION | DD/MM/YY |
|------|----------------------------------|----------|
| 8 | Revised dimensions | 14/02/19 |
| 9 | Sensing line connection changed | 25/03/25 |
| 8 | UL logo updated CSA logo removed | 14/07/20 |

Drawing No:
JP3-DI501/E

Dimensions



| Dimensions* | | | | | Enclosure Dimensions A X B X C | Door Dimensions D X E | Anchor Dimensions F X G |
|--------------------------|----------|----------|----------|----------|-----------------------------------|--------------------------|----------------------------|
| Maximum Motor Horsepower | | | | | | | |
| 200-208V | 220-240V | 380-416V | 440-480V | 575-600V | 12"X12"X6-1/2" | 12-3/4"X12-3/4" | 10"X12-3/4" |
| 10HP | 10HP | 15HP | 20HP | 25HP | 16"X16"X7-1/2" | 16-1/2"X16-1/2" | 14"X16-3/4" |
| 20HP | 30HP | 40HP | 60HP | 60HP | | | |

Notes:

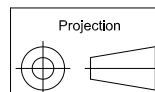
- Standard NEMA: NEMA 2
- Standard Paint: Textured Red RAL 3002.
- All Dimensions are in Inches [Millimeters]
- Use Watertight Conduit and Connector Only.
- Protect Equipment Against Drilling Chips.
- Door Swing Equal to Door Width

Drawing for information only.

Manufacturer reserves the right to modify this drawing without notice.

Contact manufacturer for "As Built" drawing.

*Dimensions may change depending on option required. Consult Factory for exact dimensions.



Jockey Pump Controller

Across the Line / 3 Phase

Model:JP3

Wiring schematic

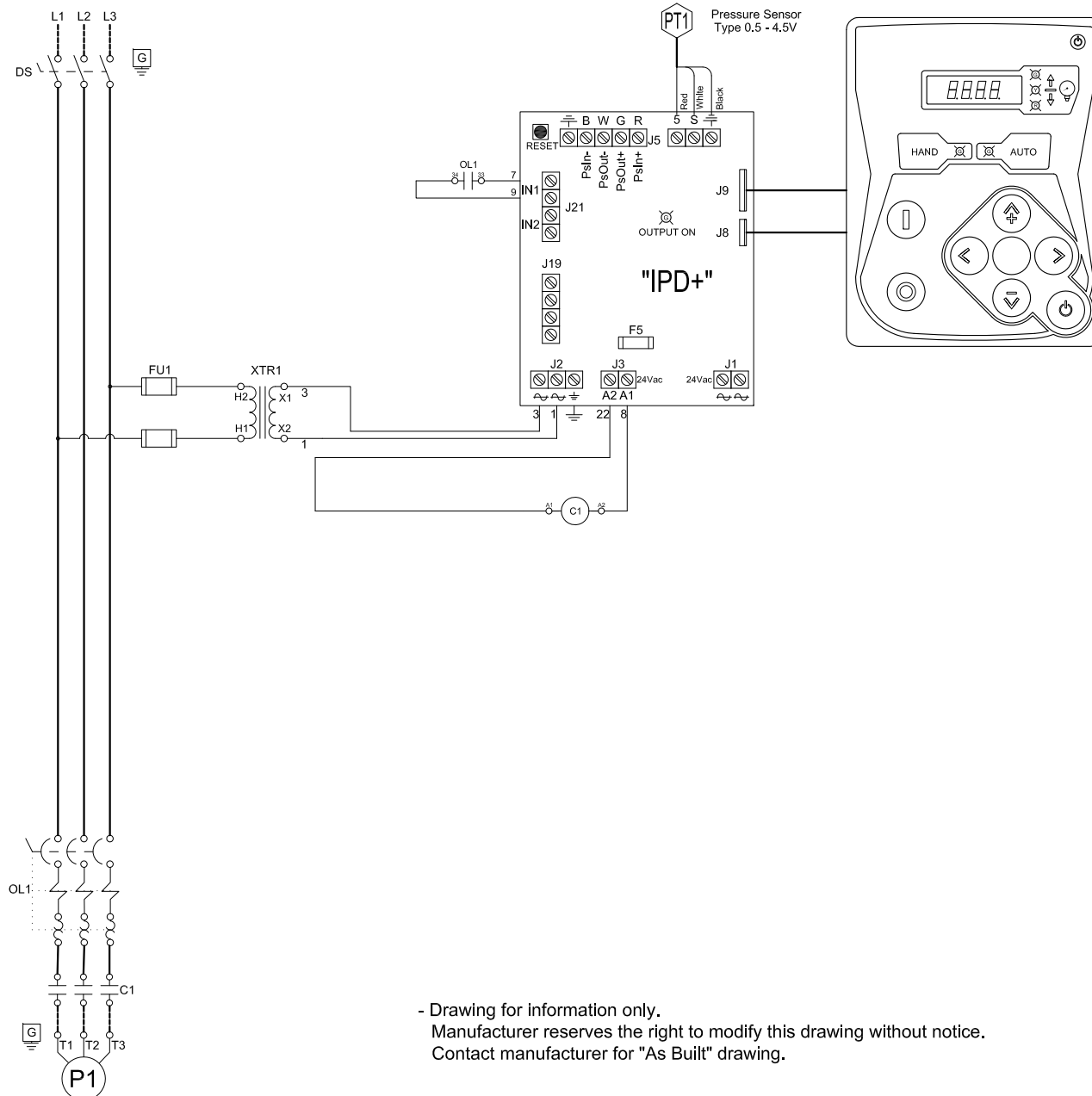
PER QUOTE DRAWING No.



| REV. | DESCRIPTION | DD/MM/YY |
|------|----------------------------------|----------|
| 6 | Modified J19 Outputs ID | 10/06/16 |
| 7 | Revised logo | 18/06/18 |
| 8 | UL logo updated CSA logo removed | 14/07/20 |

Drawing No:

JP3-WS500/E



- Drawing for information only.
 Manufacturer reserves the right to modify this drawing without notice.
 Contact manufacturer for "As Built" drawing.

Jockey Pump Controller

Across the Line / 3 Phase

Model:JP3

Line and Motor Terminal Size

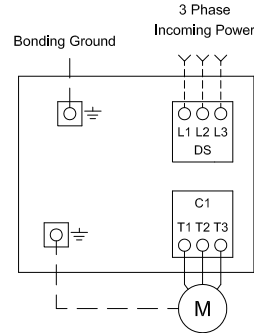
PER QUOTE DRAWING No.



| REV. | DESCRIPTION | DD/MM/YY |
|------|----------------------------------|----------|
| 6 | Modified J19 Outputs ID | 10/06/16 |
| 7 | Revised logo | 18/06/18 |
| 8 | UL logo updated CSA logo removed | 14/07/20 |

Drawing No:
JP3-TD500/E

Power Connections and Motor Connections



Line Terminals (L1,L2,L3,GND)

| Maximum Motor Horsepower | | | | | Wire Size Copper Only | Torque | Wire Size Ground Copper Only |
|--------------------------|----------|----------|----------|----------|-----------------------|--------|------------------------------|
| 200-208V | 220-240V | 380-416V | 440-480V | 575-600V | | | |
| 10HP | 10HP | 20HP | 20HP | 25HP | #14 AWG - #6 AWG | 2 Nm | #14 AWG - #2 AWG |
| 20HP | 30HP | 40HP | 60HP | 60HP | #12 AWG - #1 AWG | 6 Nm | #6 AWG - #2 AWG |

Motor Terminals (T1,T2,T3,GND)

| Maximum Motor Horsepower | | | | | Wire Size Copper Only | Torque | Wire Size Ground Copper Only |
|--------------------------|----------|----------|----------|----------|-----------------------|---------|------------------------------|
| 200-208V | 220-240V | 380-416V | 440-480V | 575-600V | | | |
| 5HP | 7.5HP | 10HP | 15HP | 20HP | #14 AWG - #10 AWG | 1.8 Nm | #14 AWG - #2 AWG |
| 10HP | 10HP | 15HP | 20HP | 25HP | #14 AWG - #6 AWG | 2.5 Nm | #12 AWG - #2 AWG |
| 15HP | 20HP | 30HP | 50HP | 50HP | #10 AWG - #3 AWG | 5 Nm | #12 AWG - #2 AWG |
| 20HP | 30HP | 40HP | 60HP | 60HP | #10 AWG - #2 AWG | 11.3 Nm | #12 AWG - #2 AWG |