



TORNATECH

Project: _____

Customer: _____

Engineer: _____

Pump Manufacturer: _____

Technical Data Submittal Document

Model OPD

UL Listed Disconnecting Means for UL Listed and FM Approved
Electric Fire Pump Applications



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.

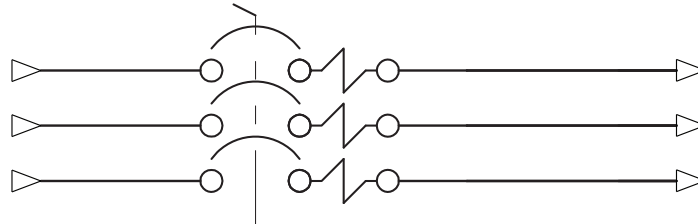


August 2018



From

- Normal Power
- Alternate Power



To Electric Fire Pump Controller

| 240V / 3Ph / 60Hz | | | | |
|--------------------------|-----|------|-------|-------------------|
| | HP | FLA* | 6xFLA | Ampere Rating (A) |
| <input type="checkbox"/> | 5 | 15 | 90 | 100 |
| <input type="checkbox"/> | 7.5 | 22 | 132 | 150 |
| <input type="checkbox"/> | 10 | 28 | 168 | 150 |
| <input type="checkbox"/> | 15 | 42 | 252 | 125 |
| <input type="checkbox"/> | 20 | 54 | 324 | 250 |
| <input type="checkbox"/> | 25 | 68 | 408 | 250 |
| <input type="checkbox"/> | 30 | 80 | 480 | 250 |
| <input type="checkbox"/> | 40 | 104 | 624 | 400 |
| <input type="checkbox"/> | 50 | 130 | 780 | 400 |
| <input type="checkbox"/> | 60 | 154 | 924 | 600 |
| <input type="checkbox"/> | 75 | 192 | 1152 | 600 |
| <input type="checkbox"/> | 100 | 248 | 1488 | 800 |
| <input type="checkbox"/> | 125 | 312 | 1872 | 1200 |
| <input type="checkbox"/> | 150 | 360 | 2160 | 1200 |
| <input type="checkbox"/> | 200 | 480 | 2880 | 1600 |
| <input type="checkbox"/> | 250 | 604 | 3624 | 2000 |

* Table 2 from CSA C22.2 NO. 263-09 and UL218



| | |
|--------------------------------------|--|
| Standards and Listing | Built to standards (latest editions): <ul style="list-style-type: none"> • NFPA70 (NEC): 695.4(B)(2)(a)(2) and NFPA70 (NEC): 695.3(F)(2) • NFPA20 9.2.3.4.1 |
| | Listing: <ul style="list-style-type: none"> • Underwriters Laboratory (UL) |
| Overcurrent Protection Device | <ul style="list-style-type: none"> - Selective short circuit protection - Magnetic only - non-thermal - Instantaneous trip setting (Factory set non field adjustable) - No time delay element - Selection based on: <ul style="list-style-type: none"> ▪ The overcurrent protective device shall not open within 2 minutes at 600 percent of the full-load current of the fire pump motor(s). ▪ The overcurrent protective device shall not open with a re-start transient of 24 times the full-load current of the fire pump motor(s). ▪ The overcurrent protective device shall not open within 10 minutes at 300 percent of the full-load current of the fire pump motor(s) ▪ The trip point for circuit breakers shall not be field adjustable |
| Enclosure | Protection Rating NEMA 2 |
| | Paint Specifications <ul style="list-style-type: none"> • Red RAL 3002 • Powder coating • Glossy textured finish |
| External Operator | Flange mounted disconnect handle lockable in the ON (closed) position as per NFPA70 (NEC) 695.4(B)(3)(a)(2) |
| Service Entrance Rating | Suitable as service entrance equipment |
| Markings | Disconnect markings as per NFPA70 (NEC) 695.4(B)(3)(c) |

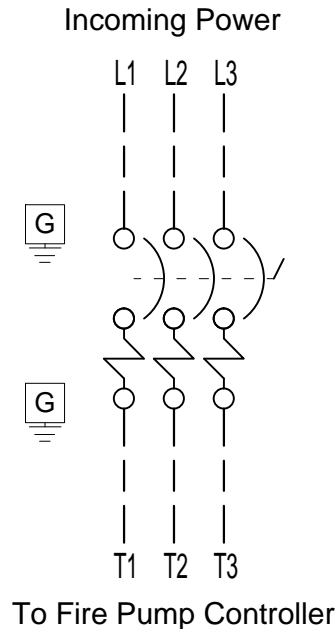
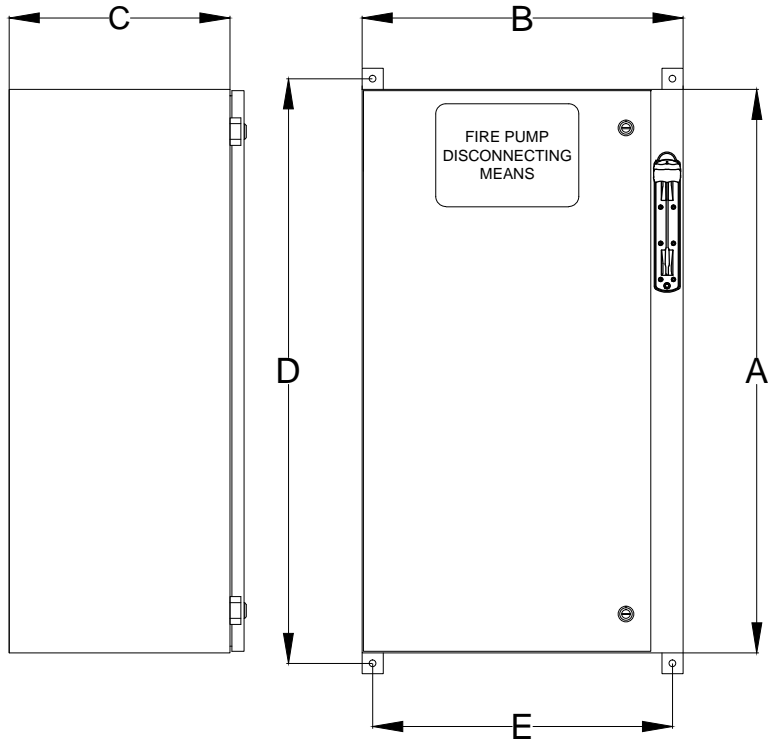
Model:OPD

UL Listed Disconnecting Means for Electric Fire Pump Applications

Terminal Size and Dimensions

Built to the latest edition of the NFPA20 & NFPA70

| | | | | | |
|------|---------------------|----------|--|---------------|--|
| | | | | | |
| REV. | DESCRIPTION | DD/MM/YY | | Drawing No. | |
| 2 | Modified Title | 28/07/16 | | 16/01/17 | |
| 3 | Modified Dimensions | | | 18/06/18 | |
| 4 | Revised logo | | | OPD-WS500 / E | |



Notes:

- NEMA 2 Assembly
- Paint : Textured Red RAL 3002.
- All Dimensions are in Inches.
- Use Watertight Conduit and Connector Only.
- Protect Equipment Against Drilling Chips.

| Terminals (L1,L2,L3,T1,T2,T3) | | | | | | | | | Wire (Lug) Size (Copper Only) | Torque | Ground (Lug) Size (Copper Only) | Dimensions A x B x C x D x E | Bending Space |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|---------------------|----------------------------------|---------------------|------------------------------------|---------------------------------|---------------|
| Maximum Motor Horsepower | | | | | | | | | | | | | |
| 200V | 208V | 220V | 230V | 240V | 380-416V | 440-480V | 575-600V | | | | | | |
| 5-10HP | 5-10HP | 5-15HP | 5-15HP | 5-15HP | 5-25HP | 5-30HP | 5-40HP | 8-1/0 AWG | 4-8 Nm | 6 AWG | 22 x 12 x 11 x 23½ x 10½ | 5" | |
| 15-25HP | 15-25HP | 20-30HP | 20-30HP | 20-30HP | 30-50HP | 40-60HP | 50-75HP | 4-1/0 AWG | 30 Nm | 4 AWG | 26 x 14 x 11 x 27½ x 12½ | 5" | |
| 30-40HP | 30-40HP | 40-50HP | 40-50HP | 40-50HP | 60-75HP | 75-100HP | 100-125HP | 1/0 AWG-250 MCM | 34 Nm | 4 AWG | 28 x 16 x 11 x 29½ x 14½ | 8" | |
| 50-60HP | 50-60HP | 60-75HP | 60-75HP | 60-75HP | 100-125HP | 125-150HP | 150-200HP | 3/0 AWG-250 MCM | 34 Nm | 4 AWG | 28 x 16 x 11 x 29½ x 14½ | 8" | |
| 75HP | 75HP | 100HP | 100HP | 100HP | 150HP | 200HP | 250HP | 300-500 MCM | 43 Nm | 4 AWG | 40 x 18 x 11 x 41½ x 16½ | 12" | |
| 100-150HP | 125-150HP | 125-150HP | 125-150HP | 125-150HP | 200-250HP | 250-350HP | 300-450HP | 2x(4/0 AWG-500 MCM) | 42 Nm | 3/0 AWG | 40 x 18 x 11 x 41½ x 16½ | 12" | |
| - | 200HP | 200HP | 200HP | 200HP | 300-350HP | 400-450HP | 500HP | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | |
| - | - | 250HP | 250HP | 250HP | 400-450HP | 500HP | - | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | TBD Consult Factory | |

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