



# 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.

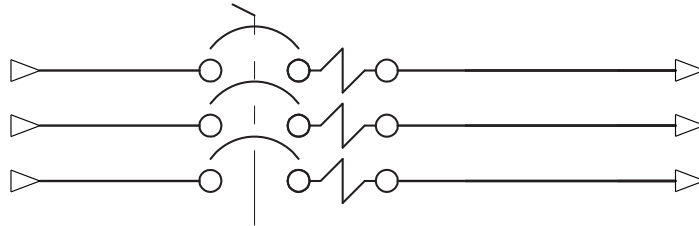


August 2018



From

- Normal Power
- Alternate Power



To Electric Fire Pump Controller

230V / 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



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

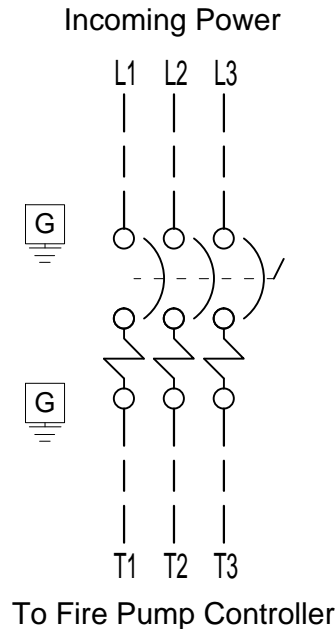
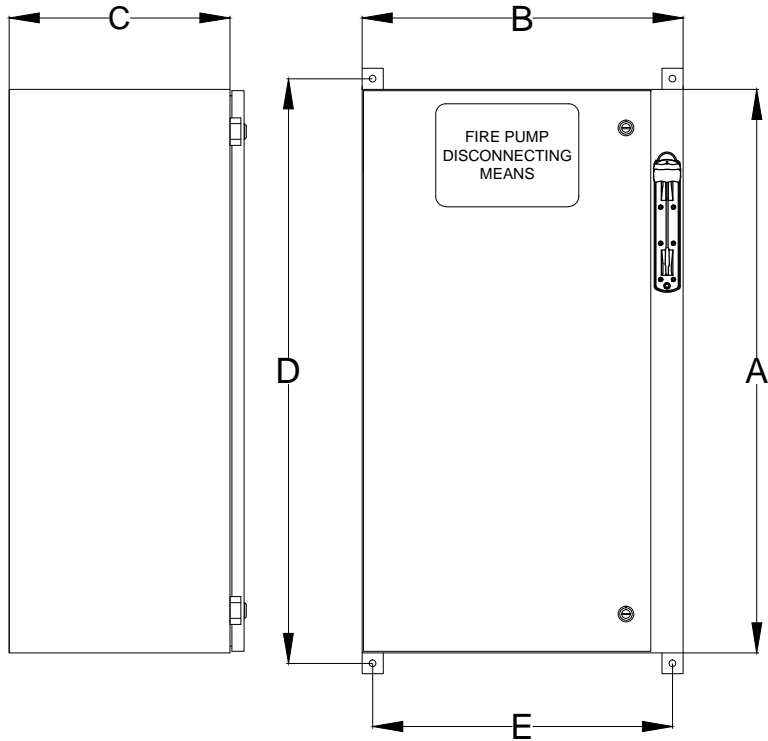
Model:OPD

# 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	OPD-WS500 / E		
3	Modified Dimensions	16/01/17			
4	Revised logo	18/06/18			



### 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.