

Project:	
Customer:	

Engineer: \_\_\_\_\_

Pump Manufacturer: \_\_\_\_\_

## **Technical Data Submittal Document**

# **Model HFA**

Across the line Electric Fire Pump Controller Built to EN12485

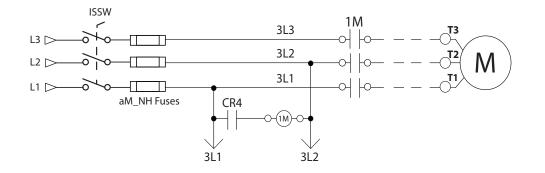


**Contents:** Data Sheets Dimensional Data Wiring Schematics Field Connections

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.



### Technical Data Model HFA Electric Fire Pump Controller



CE

Standard &	Built to EN12845			
Certification	CE Mark: Various EN, IEC & CEE directives and standards			
	Protection Rating IP55			
Enclosure	Accessories       Paint Specifications         • Bottom entry gland plate       • Red RAL3002         • Powder coating       • Glossy textured finish			
Isolationg Means Motor Protection	<ul> <li>Three (3) pole fused disconnect switch complete with rotary door handle</li> <li>Fuse NH_aM (3)</li> <li>Door interlocked in the ON position</li> </ul>			
Electrical Readings	<ul> <li>Voltage phase to phase</li> <li>Amperage at L1 when motor is running</li> </ul>			
Event recorder	<ul> <li>Event recording with date stamp</li> <li>Under regular maintained operation, events can be stored in memory for up to 5 years.</li> <li>Data viewable on operator interface display screen</li> </ul>			
Pressure Sensing	Provision to connect to externally mounted pressure switch (by others)			
Visual Indications & Alarms	• Power available• Low water level• Remote pressure switch• Phase reversal• Phase unbalance• Remote manual start• Motor run• Fail to start• Overcurrent• Pump room alarm• Pump on demand/Automatic start• Undercurrent• Motor trouble• Manual start• Undervoltage• Phase loss• Deluge valve start• Overvoltage			
Remote Alarm Contacts	SPDT-8A-250V.AC  Power available Spare Motor run Common pump room alarm Overvoltage Undervoltage Common motor trouble Overcurrent Undercurrent Fail to start			



ViZiTouch Light Operator Interface	<ul> <li>Embedded microcomputer with software PLC logic</li> <li>4.2" color touch screen (HMI technology)</li> <li>Upgradable software</li> <li>Expandable storage</li> <li>Multi-language</li> </ul>			
Operation	Automatic Start	Start on pressure drop (pressure switches by others)		
	Manual Start	<ul> <li>Start pushbutton</li> <li>Run test pushbutton</li> <li>Deluge valve start</li> <li>Remote start from manual device</li> </ul>		
	Stopping	Manual with Stop pushbutton		
	Timers	Field Adjustable & Visual Countdown	<ul> <li>Minimum run period time (off delay)</li> <li>Sequential start timer (on delay)</li> <li>Manual test timer</li> </ul>	



# TORNATECH Technical Data Model HFA Electric Fire Pump Controller

#### **Options**

D14	Anti-condensation heater & thermostat		
I01	Permanent isolation controller for direct on line start (CPI)		
102	Manu off auto key selector switch		
103	Permanent isolation controller for y-delta start (CPI)		

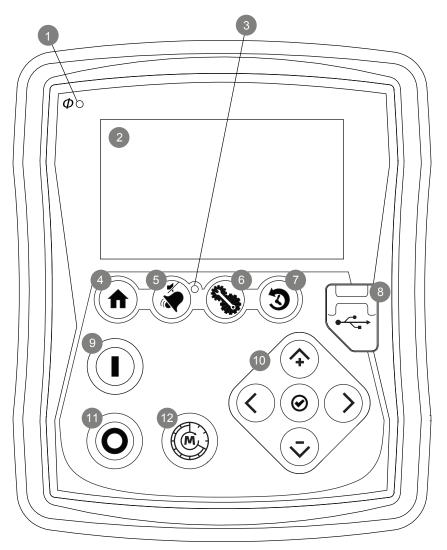
L01	Other language and English (bilingual)
L02	French
L03	Spanish
L04	German
L05	Italian
L06	Polish
L07	Romanian
L08	Hungarian
L09	Slovak
L10	Croatian
L11	Czech
L12	Portuguese
L13	Dutch
L14	Russian
L15	Turkish
L16	Swedish
L17	Bulgarian
L18	Thai
L19	Indonesian
L20	Slovenian
L21	Danish
L22	Greek
L23	Arabic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

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



#### ViZiTouch Light Operator Interface



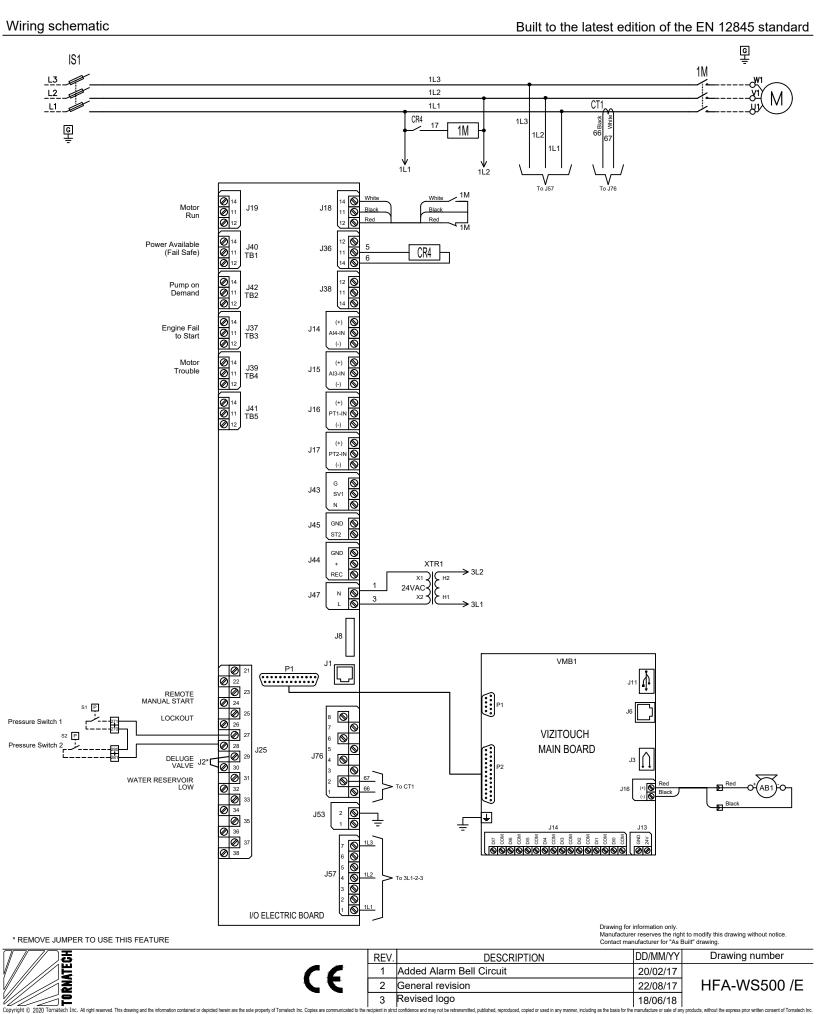


- 1 Power on LED
- 2 Color touch screen
- 3 Alarm LED
- 4 HOME page button
- 5 ALARM page button
- 6 CONFIGURATION page button
- 7 HISTORY page button

- 8 USB port
- 9 START button
- 10 Contextual navigation pad
- 11 STOP button
- 12 RUN TEST button

#### Electric Fire Pump Controller Full Voltage / Across the Line

### Model: HFA

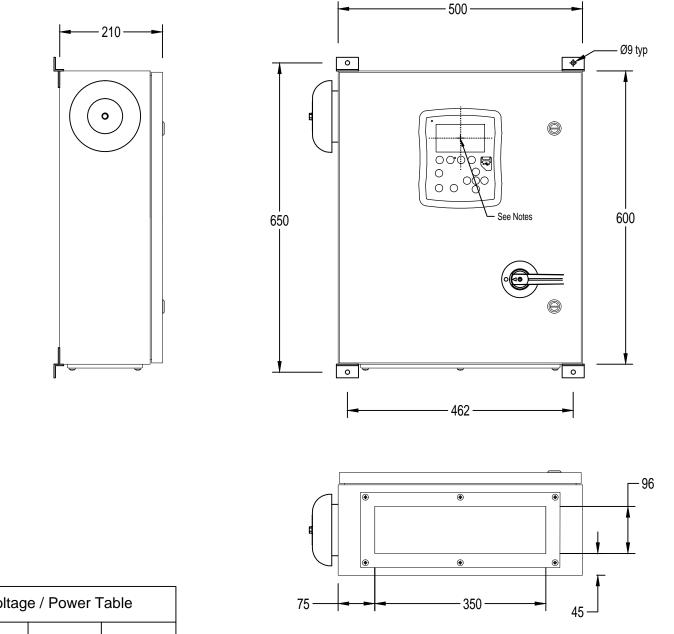


### **Electric Fire Pump Controller**

### Model:HFA/HFY

#### Dimensions

### Built to the latest edition of the EN 12845 standard



Voltage / Power Table				
Voltage	Min	Max		
380 - 400 - 415	5 kW	37 kW		

#### Notes:

- Standard: IP55
- Standard Paint : Textured Red RAL 3002.
- All Dimensions are in Millimeters.
- Center of ViZiTouch Screen: 462mm from Bottom.
- Bottom Conduit Entrance Through Removable Gland Plate Recommended.
- 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.



	REV.	DESCRIPTION	DD/MM/YY	Drawing number
	1	Modified the Enclosure	04/08/16	
7	2	General revision	23/08/17	HFX-DI500 /E
-	3	Revised logo	18/06/18	

Projection

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### **Electric Fire Pump Controller**

### Model: HFX

Built to the latest edition of the EN 12845 standard

#### Terminals Diagram and Sizing

#### Remote Alarm Terminals (I/O Electric Board) Control Terminals (I/O Electric Board) Terminals Wire Size: 0.5 - 4 mm2 0.5 Nm Terminals Wire Size: 0.5 - 2.5 mm2 0.5 Nm Remote Manual Start Remote 23 J25 Normally open RUN Ø J19 - 14 Manual Close to start pump Motor Closes to alarm ē **10TOR I** J19 - 11 Normally closed Start 24 Run Opens to alarm J19 · Lockout Ø <sup>25</sup> J25 Normally closed J40 - 14 Close to block start Lockout Power Opens to alarm Ø 26 Normally open J40 - 11 Ē Signal Available Closes to alarm J40 -(Fail Safe) Ρ S1 Normally open Ø J42 - 14 270 コ Closes to alarm Pump on B2 Open to start pump Normally closed Ø J42 - 11 Pressure Switch 1 Demand Opens to alarm J42 - 12 S2 P 271 280 Pressure Switch 2 Open to start pump 281 Normally open Ø .137 - 14 Closes to alarm ß Normally closed Ø J37 - 11 Engine Fail Deluge Valve Opens to alarm J37 to Start Deluge Ø 29 30 J25 Open to start pump Valve \*J2 6 If used, remove jumper J1 Signal Normally open 00 J39 - 14 Motor Closes to alarm Normally closed J39 - 11 ₩ Trouble Opens to alarm **Filed Connections for External Devices** 🖉 J39 - 12 (I/O board) Terminals Wire Size 12 - 24 AWG 0.5 Nm Normally open Ø J41 - 14 (Field Closes to alarm Water Reservoir Low B Water Reservoir Normally closed Programmable) **Ø** 31 Close to signal alarm Low Opens to alarm Ø J41 - 12 J25 Ø 32 Signal

Network Connection (VMB1) Shielded Female Connector RJ45

Modbus TCP/IP ----



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#### \* Remove jumper to use this feature

CE	REV.	DESCRIPTION	DD/MM/YY	Drawing number
	1	Modified Terminal Descriptions	20/02/17	
	2	General revision	22/08/17	HFX-TD500 /E
	3	Revised logo	18/06/18	

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