



TORNATECH

Project: _____

Customer: _____

Engineer: _____

Pump Manufacturer: _____

Technical Data Submittal Document

Model HFY

Wye-delta Open

Electric Fire Pump Controller

Built to EN12485



Contents:

Data Sheets

Dimensional Data

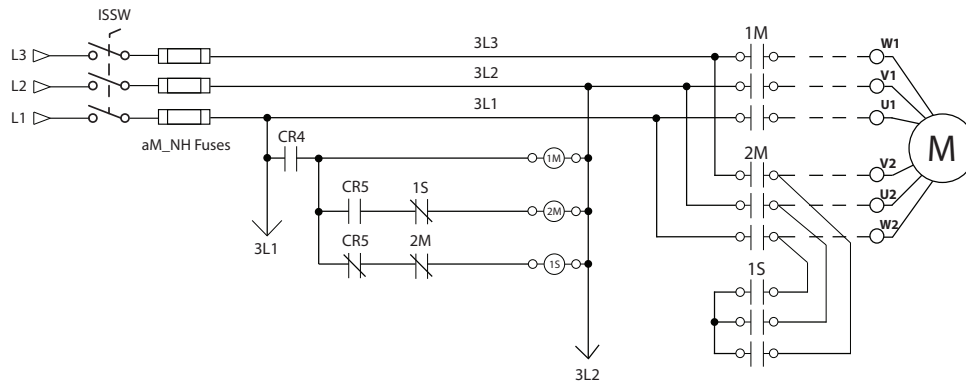
Wiring Schematics

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.



April 2020



Standard & Certification	Built to EN12845		
	CE Mark: Various EN, IEC & CEE directives and standards		
Enclosure	Protection Rating IP55		
	Accessories • Bottom entry gland plate		Paint Specifications • Red RAL3002 • Powder coating • Glossy textured finish
Isolation Means Motor Protection	<ul style="list-style-type: none"> • Three (3) pole fused disconnect switch complete with rotary door handle <ul style="list-style-type: none"> • Fuse NH_aM (3) • Door interlocked in the ON position 		
Electrical Readings	<ul style="list-style-type: none"> • Voltage phase to phase • Amperage at L1 when motor is running 		
Event recorder	<ul style="list-style-type: none"> • Event recording with date stamp • Under regular maintained operation, events can be stored in memory for up to 5 years. • Data viewable on operator interface display screen 		
Pressure Sensing	• Provision to connect to externally mounted pressure switch (by others)		
Visual Indications & Alarms	<ul style="list-style-type: none"> • Power available • Phase reversal • Motor run • Pump room alarm • Motor trouble • Phase loss 	<ul style="list-style-type: none"> • Low water level • Phase unbalance • Fail to start • Pump on demand/Automatic start • Manual start • Deluge valve start 	<ul style="list-style-type: none"> • Remote pressure switch • Remote manual start • Overcurrent • Undercurrent • Undervoltage • Overvoltage
Remote Alarm Contacts	SPDT-8A-250V.AC <ul style="list-style-type: none"> • Power available • Spare • Motor run • Common pump room alarm <ul style="list-style-type: none"> • Overvoltage • Undervoltage • Phase unbalance • Common motor trouble <ul style="list-style-type: none"> • Overcurrent • Undercurrent • Fail to start 		



ViZiTouch Light Operator Interface	<ul style="list-style-type: none"> • Embedded microcomputer with software PLC logic • 4.2" color touch screen (HMI technology) • Upgradable software • Expandable storage • Multi-language 		
Operation	Automatic Start	<ul style="list-style-type: none"> • Start on pressure drop (pressure switches by others) 	
	Manual Start	<ul style="list-style-type: none"> • Start pushbutton • Run test pushbutton • Deluge valve start • Remote start from manual device 	
	Stopping	<ul style="list-style-type: none"> • Manual with Stop pushbutton 	
	Timers	Field Adjustable & Visual Countdown	<ul style="list-style-type: none"> • Minimum run period time (off delay) • Sequential start timer (on delay) • Manual test timer

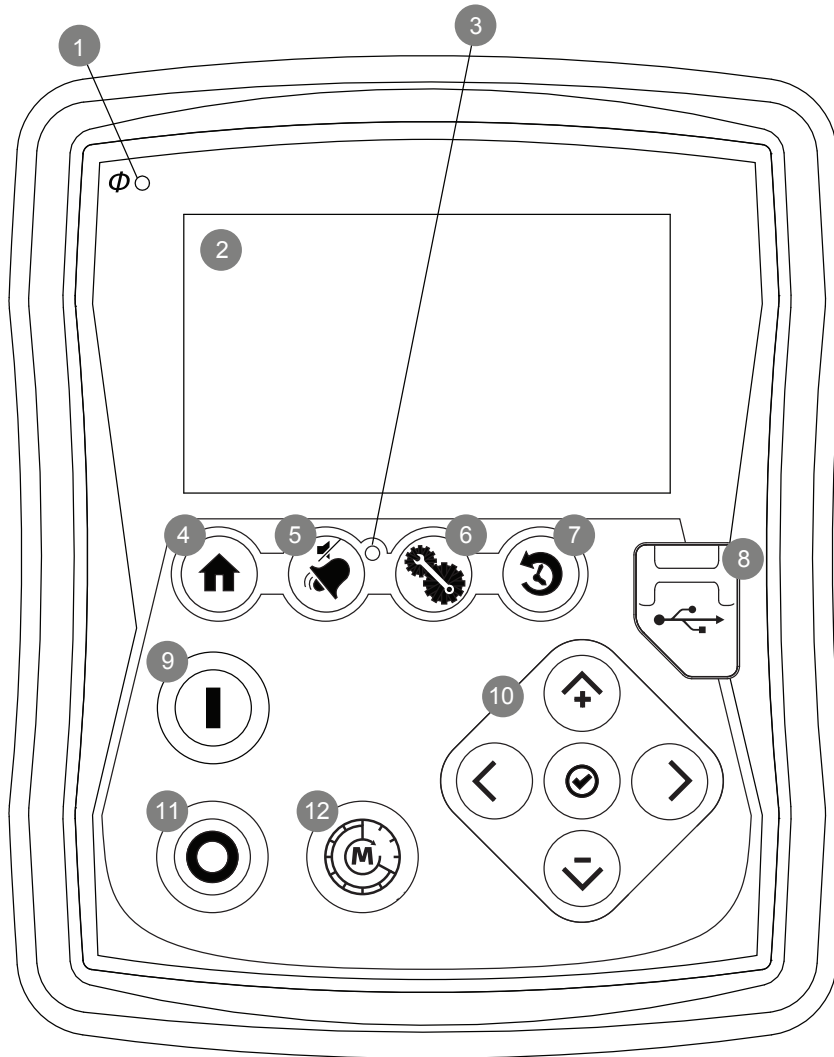


Options

<input type="checkbox"/> D14	Anti-condensation heater & thermostat
<input type="checkbox"/> I01	Permanent isolation controller for direct on line start (CPI)
<input type="checkbox"/> I02	Manu off auto key selector switch
<input type="checkbox"/> I03	Permanent isolation controller for y-delta start (CPI)

<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
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<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

ViZiTouch Light Operator Interface


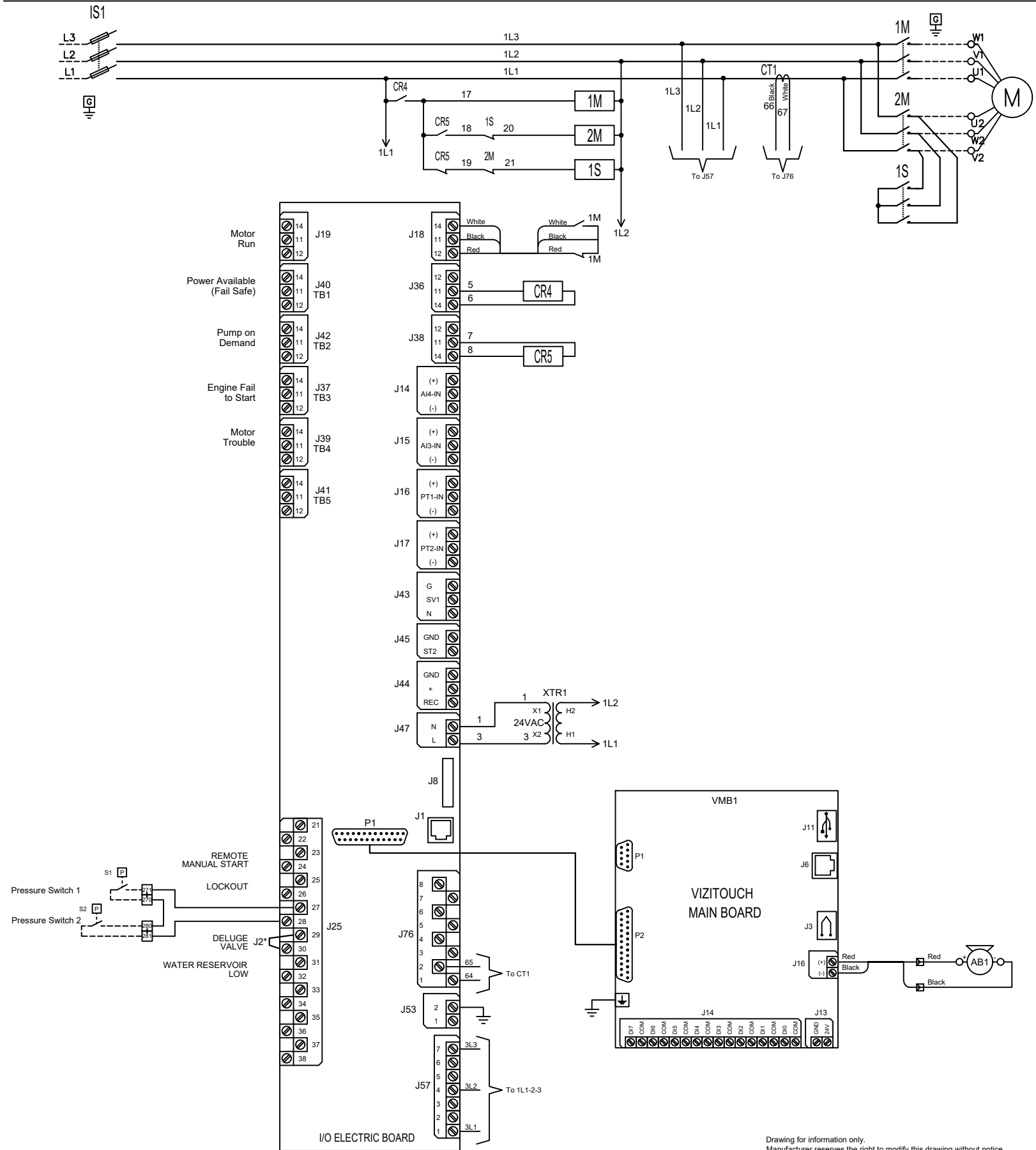
- | | |
|-------------------------------|--------------------------------|
| 1 - Power on LED | 8 - USB port |
| 2 - Color touch screen | 9 - START button |
| 3 - Alarm LED | 10 - Contextual navigation pad |
| 4 - HOME page button | 11 - STOP button |
| 5 - ALARM page button | 12 - RUN TEST button |
| 6 - CONFIGURATION page button | |
| 7 - HISTORY page button | |

Electric Fire Pump Controller Reduced Voltage / Wye-Delta (Open Transition)

Model: HFY

Wiring schematic

Built to the latest edition of the EN 12845 standard



* REMOVE JUMPER TO USE THIS FEATURE

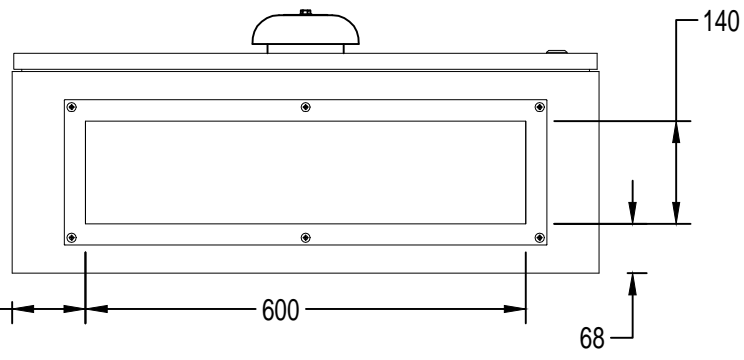
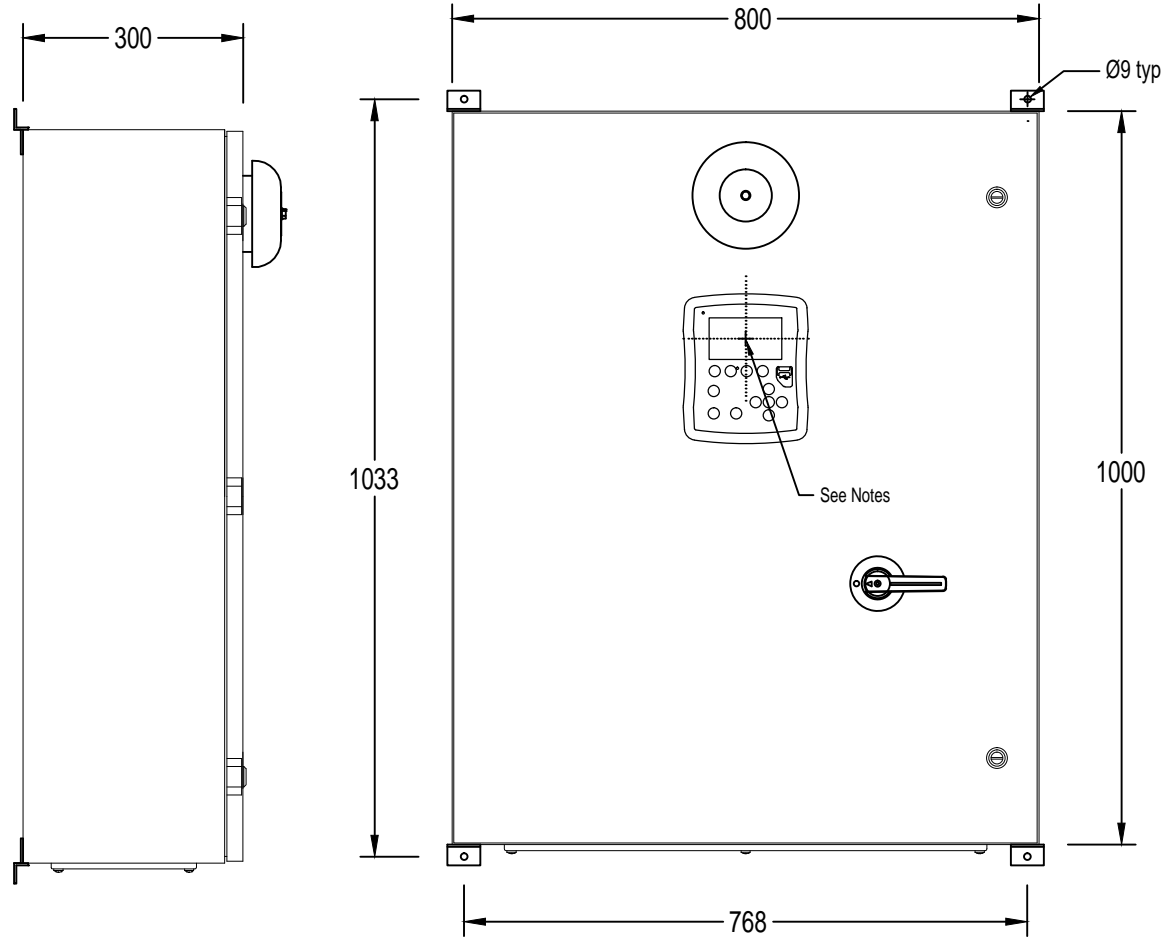
Drawing for information only.
Manufacturer reserves the right to modify this drawing without notice.
Contact manufacturer for "As Built" drawing.



REV.	DESCRIPTION	DD/MM/YY	Drawing number
1	Added Alarm Bell Circuit	20/02/17	HFY-WS500 /E
2	General revision	22/08/17	
3	Revised logo	18/06/18	

Dimensions

Built to the latest edition of the EN 12845 standard

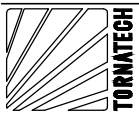
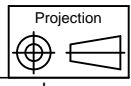


Voltage / Power Table		
Voltage	Min	Max
380 - 400 - 415	45 kW	250 kW

Notes:

- Standard: IP55
- Standard Paint : Textured Red RAL 3002.
- All Dimensions are in Millimeters.
- Center of ViZiTouch Screen: 690mm 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.

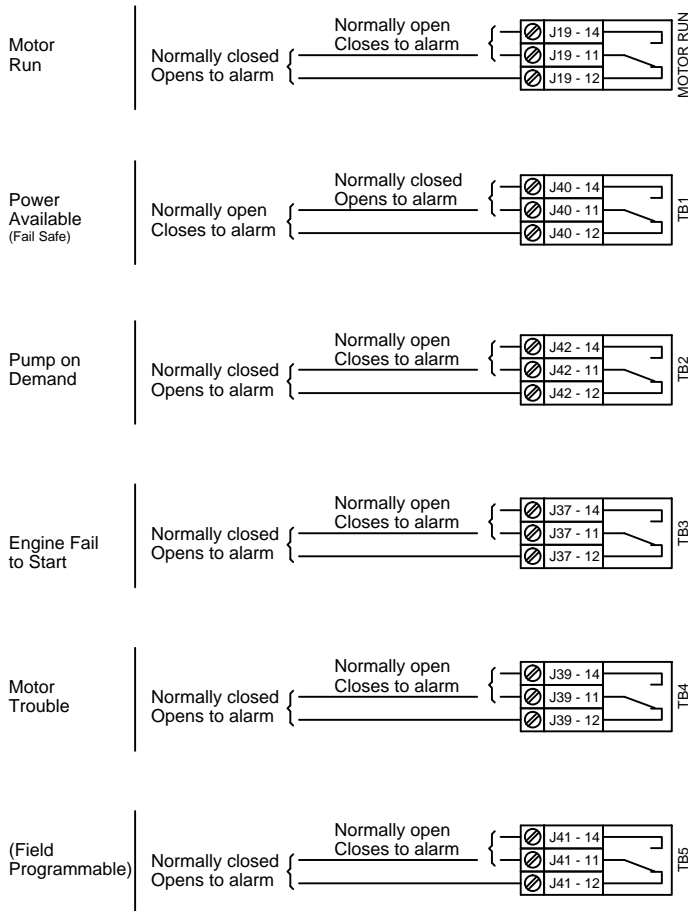
Drawing for information only.
 Manufacturer reserves the right to modify this drawing without notice.
 Contact manufacturer for "As Built" drawing.



REV.	DESCRIPTION	DD/MM/YY	Drawing number
1	Modified the Enclosure	04/08/16	HFX-DI501 /E
2	General revision	23/08/17	
3	Revised logo	18/06/18	

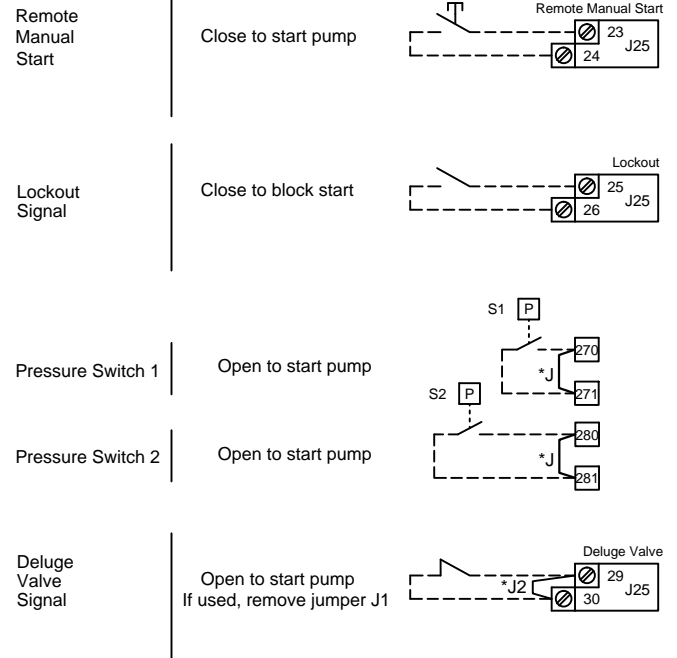
Remote Alarm Terminals (I/O Electric Board)

Terminals Wire Size:
0.5 - 2.5 mm²
0.5 Nm



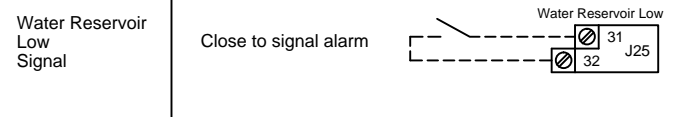
Control Terminals (I/O Electric Board)

Terminals Wire Size:
0.5 - 4 mm²
0.5 Nm



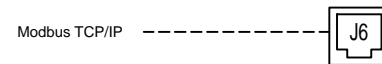
Filed Connections for External Devices (I/O board)

Terminals Wire Size:
12 - 24 AWG
0.5 Nm



Network Connection (VMB1)

Shielded Female Connector RJ45



Drawing for information only.
Manufacturer reserves the right to modify this drawing without notice.
For drawing for approval or installation, please contact manufacturer.

* Remove jumper to use this feature

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

