# DOL START PUMP CONTROLLERS



# **HYDROTOUCH**



### HARDWARE FEATURES

#### Enclosure:

- IP56 weatherproof rating
- Powder coated mild steel
- Inner door and removable gland plate

### Protection:

- Padlockable mains power isolator switch
- Circuit breaker protected low voltage control and input
- Individual pump isolation
- Contactor and thermal overload protection of pumps
- Overload protection for strobe

#### Alarms

Visual (strobe) and audible (buzzer) alarms

### Control & interface:

- Hydrotouch colour touch screen interface
- Main screen with system, pump, fault and sensor status
- Individual pump monitoring screen with status, run hours and number of starts, auto/off/manual control of pumps
- Graphical overview screen for monitoring system operation
- Alarm screen with date and time stamped faults
- Logged data screen with water usage graphs, trend graphs for pressure, level and flow, pump run timers and and system event counters
- System diagnostics screen for easy fault finding, pump rotation testing
- Easy setup commissioning wizard
- Advanced parameter adjustment

#### Inputs:

- 2x analogue 4-20mA input for transducers
- 3x digital 24Vdc inputs for float/pressure/flow switches
- 1x digital, pulse input for flow meter
- Standard terminal setup: Primary and secondary level transducers, backup low level float and high level float

### Outputs:

- 1-12 pump supply outputs
- 5x assignable BMS volt free outputs
- 2x analogue 4-20mA BMS outputs for analogue readings
- Modbus RS485 connections

### **FUNCTION FEATURES**

#### Operation:

- Maximum run timer and auto alternation of pump duty
- Anti seize timer runs pumps periodically during low use
- Pump 1 can be configured as a main pump, jacking pump or a mixer
- Maximum idle time ensures minimum tank level is maintained
- Staggered pump start and stop
- Pump limiting
- Static lead pump for applications with low average flows but high peak flows
- Supply tank level monitoring (if using level transducer in supply tank instead of backup transducer)
- Manual override timer control when system is in fault shutdown

### Fault protection:

- Pump overload and prime loss shut-down
- Automatic changeover on pump fault
- High and low level/pressure shut-down
- Supply tank low level protection
- Pump cycle protection
- Transducer redundancy switches to backup transducer if first one fails (if using secondary tansducer)

### OPTIONAL MODIFICATIONS

- 316 stainless steel enclosure
- Modbus TCP gateway with ethernet port
- Netbiter remote access
- Mains bypass, tank top up or well wash control with solenoid valve
- UV lamp control
- Generator input socket and automatic changeover
- Energy consumption monitoring

## **COMMON APPLICATIONS**

### Level control

Water transfer

### Pressure control:

Pressure boosting

Temperature control:

- Hot Water Circulation With modifications:
- Rain/mains changeover



# DOL START PUMP CONTROLLERS



500x500x300mm

500x500x300mm

# **HYDROTOUCH**



# **SINGLE PUMP**

# **DUAL PUMP**

FPC-43241-D

FPC-43241-E

## SINGLE PHASE (230 VAC) - FPC-43141 RANGE

Code	Overload Rating	Enclosure Size
FPC-43141-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43141-A	2.5 - 4 Amp	500x500x300mm
FPC-43141-B	4 - 6 Amp	500x500x300mm
FPC-43141-BB	5.5 - 8 Amp	500x500x300mm
FPC-43141-C	7 - 10 Amp	500x500x300mm
FPC-43141-D	9 - 13 Amp	500x500x300mm
FPC-43141-E	12 - 18 Amp	500x500x300mm

# SINGLE PHASE (230 VAC) - FPC-43241 RANGE

Code	Overload Rating	<b>Enclosure Size</b>
FPC-43241-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43241-A	2.5 - 4 Amp	500x500x300mm
FPC-43241-B	4 - 6 Amp	500x500x300mm
FPC-43241-BB	5.5 - 8 Amp	500x500x300mm
FPC-43241-C	7 - 10 Amp	500x500x300mm

# 12 - 18 Amp THREE PHASE (400 VAC) - FPC-43243 RANGE

9 - 13 Amp

Code	Overload Rating	<b>Enclosure Size</b>
FPC-43243-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43243-A	2.5 - 4 Amp	500x500x300mm
FPC-43243-B	4 - 6 Amp	500x500x300mm
FPC-43243-BB	5.5 - 8 Amp	500x500x300mm
FPC-43243-C	7 - 10 Amp	500x500x300mm
FPC-43243-D	9 - 13 Amp	500x500x300mm
FPC-43243-E	12 - 18 Amp	500x500x300mm

## THREE PHASE (400 VAC) - FPC-43143 RANGE

Code	Overload Rating	Enclosure Size
FPC-43143-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43143-A	2.5 - 4 Amp	500x500x300mm
FPC-43143-B	4 - 6 Amp	500x500x300mm
FPC-43143-BB	5.5 - 8 Amp	500x500x300mm
FPC-43143-C	7 - 10 Amp	500x500x300mm
FPC-43143-D	9 - 13 Amp	500x500x300mm
FPC-43143-E	12 - 18 Amp	500x500x300mm

## TRIPLEX PUMP

## SINGLE PHASE (230 VAC) - FPC-43341 RANGE

Code	<b>Overload Rating</b>	<b>Enclosure Size</b>
FPC-43341-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43341-A	2.5 - 4 Amp	500x500x300mm
FPC-43341-B	4 - 6 Amp	500x500x300mm
FPC-43341-BB	5.5 - 8 Amp	500x500x300mm
FPC-43341-C	7 - 10 Amp	500x500x300mm
FPC-43341-D	9 - 13 Amp	500x500x300mm
FPC-43341-E	12 - 18 Amp	500x500x300mm

## **QUAD PUMP**

## SINGLE PHASE (230 VAC) - FPC-43441 RANGE

Code	Overload Rating	<b>Enclosure Size</b>
FPC-43441-AA	1.6 - 2.5 Amp	600x600x300mm
FPC-43441-A	2.5 - 4 Amp	600x600x300mm
FPC-43441-B	4 - 6 Amp	600x600x300mm
FPC-43441-BB	5.5 - 8 Amp	600x600x300mm
FPC-43441-C	7 - 10 Amp	600x600x300mm
FPC-43441-D	9 - 13 Amp	600x600x300mm
FPC-43441-E	12 - 18 Amp	600x600x300mm

## THREE PHASE (400 VAC) - FPC-43343 RANGE

Code	Overload Rating	<b>Enclosure Size</b>
FPC-43343-AA	1.6 - 2.5 Amp	500x500x300mm
FPC-43343-A	2.5 - 4 Amp	500x500x300mm
FPC-43343-B	4 - 6 Amp	500x500x300mm
FPC-43343-BB	5.5 - 8 Amp	500x500x300mm
FPC-43343-C	7 - 10 Amp	500x500x300mm
FPC-43343-D	9 - 13 Amp	500x500x300mm
FPC-43343-E	12 - 18 Amp	500x500x300mm

## THREE PHASE (400 VAC) - FPC-43443 RANGE

Code	Overload Rating	<b>Enclosure Size</b>
FPC-43443-AA	1.6 - 2.5 Amp	600x600x300mm
FPC-43443-A	2.5 - 4 Amp	600x600x300mm
FPC-43443-B	4 - 6 Amp	600x600x300mm
FPC-43443-BB	5.5 - 8 Amp	600x600x300mm
FPC-43443-C	7 - 10 Amp	600x600x300mm
FPC-43443-D	9 - 13 Amp	600x600x300mm
FPC-43443-E	12 - 18 Amp	600x600x300mm

Additional configurations for up to 12 pumps available