## MODEL TMC430

# Pump Controller

- Controls up to 3 pumps with a 4-20mA input or 2 pumps with a 4-20mA input and backup floats
- Graphic display shows current depth, set-points, date/time and alarm status
- Allows Hand-Off-Auto from menu and USB
- Pumps can be auto disabled on contact failure and auto re-enable on contact failure correction

#### **DESCRIPTION**

The Time Mark model 430 pump controller is a versatile and advanced liquid level/pump management system. The Model 430 was designed to control up to three pumps with a 4-20mA input. It can also be used to control 2 pumps with a 4-20mA input and backup floats or to simply control two pumps with only float inputs. Alarm inputs are provided, if necessary, and may be disabled through the menu system if not used. Alarm inputs are: "SF" - seal fail, "OT" - over temperature, "CF" - contact failure, and "SP" - spare (eg. a second seal fail). A relay output is provided for the level alarm (either high or low), depending on pump configuration; "pump UP" or "pump DOWN".

The LCD screen displays the current depth in an easy to read large text format and also provides a graphical representation of the depth with the set points. Also shown are alarm status and the current date/time. The four buttons allow access to configuration settings (may be password protected), pump status with run time meters, alarm status and real time event logs which record the alarm type, date, time and what triggered the alarm.

Alternation functions may be selected, or a specific pump may be chosen as the "lead" pump. Both 4-20mA inputs and outputs (for re-transmission of the transducer signal) are scalable.

The Model 430 comes standard with serial communications for the MODBUS protocol over RS-485 (2 wire link) as well as a USB port for communicating to the proprietary Windows software. The Windows software allows for saving log data to a .CSV file for importing to a spreadsheet, as well as allowing the controller configuration to be saved for use as a backup or to easily and quickly program multiple controllers with the same configuration.



#### **SPECIFICATIONS**

MODEL	430
Display	Side-lit, graphic 128x64 pixel LCD
Control/Alarm Relays	4 SPDT (Form C); 10A @ 240VAC (Resistive)
Inputs	12 digital (4 pump alarms for pump 1 and 2, either 4 pump alarms for pump 3 or floats), 1 analog (4-20mA)
Signal Outputs	1 analog (4-20mA) for retransmission of transducer signal
Loop Power	12VDC @ 20mA
Memory	Battery backed NV (non-volatile) RAM with a 10 year life expectancy
Power	24VDC (External power supply not included)
Operating Temp.	-20°C to +70°C
Data Logging	Real time clock and calendar provides event logs with pump status, alarm type as well as date and time of alarms
Communications	RS-485; USB
Enclosure Material	NORYL plastic
Mounting	Panel Mount (Optional: DIN Rail or Flush/Surface Mount kits are available)
Accessories Included:	Brackets and hardware for panel mounting and a USB cable.
Weight	1.7 lb

#### OPTIONAL ACCESSORIES

Part #	Description
97080701	24VDC Power Supply (120VAC to 24VDC)
81008601	DIN Rail Mounting Kit
98096401	Flush Mount Kit

Telephone: Main - (918) 438-1220 Sales - (800) 862-2875

Fax: (918) 437-7584

E-mail: sales@time-mark.com http://www.time-mark.com



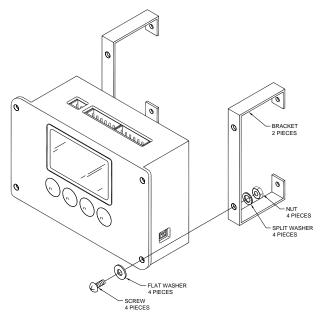
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## **Pump Controller**

DATASHEET IS FOR REFERENCE PURPOSES ONLY. PLEASE REFER TO THE MODEL TMC430 USER'S GUIDE FOR MORE DETAILED INFORMATION.

#### **TYPICAL APPLICATION - Panel Mount**



#### WARRANTY

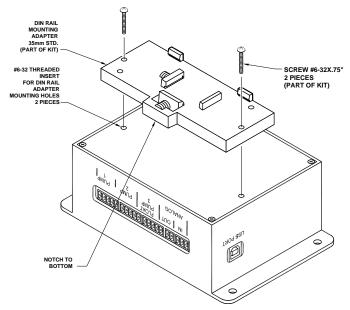
This product is warranted to be free from defects in materials and workmanship for one year. Should this device fail to operate, we will repair it for one year from the date of manufacture.

For complete warranty details, see the *Terms and Conditions of Sales* page in the front section of the Time Mark catalog or contact Time Mark at 1-800-862-2875.

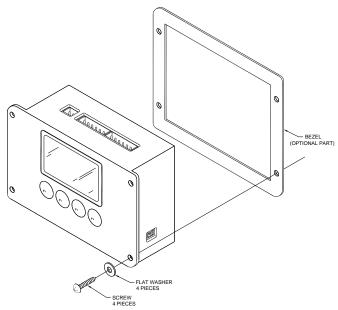
For more information on Installation, Configuration or Operation, please see the Model TMC430 Pump Controller User's Guide.

# Installation for Optional Mounting Accessories

### **TYPICAL APPLICATION - DIN Rail Mount**



### **TYPICAL APPLICATION - Flush Mount**



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