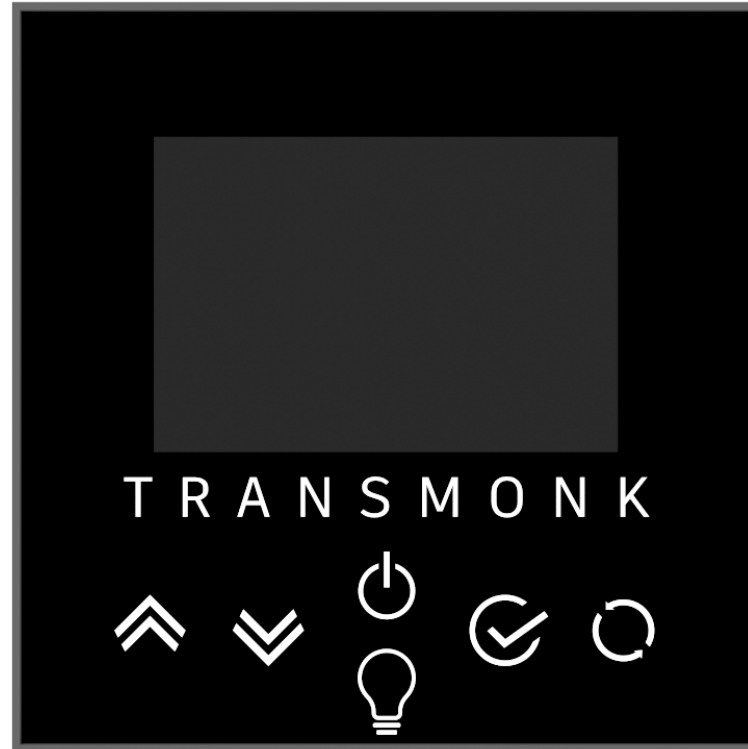


TPC-1W1S
PUMP CONTROLLER
MANUAL

DATASHEET-
OPERATIONAL GUIDE.

En-GB
METRIC.
M Series



TRANSMONK
simply precise.

The controller is designed/programmed to switch over working between 2 pumps in a controlled way as per set points. It is equipped to set and varies the working time of each pump while working. In case of any fault in one pump it automatically switches the complete working to another and create alarm signal which help to avoid any damage due to uncertain issues in pumps. The display is user friendly and keep on updating about health condition of both the pumps.

Key feature

- 2.4-inch TFT Screen with fan pump parameter
- Insert Mounting
- User-friendly 4 button interface
- Modbus RTU (RS485) communication for integration with BMS
- Lock timing for individual pump

Technical parameters

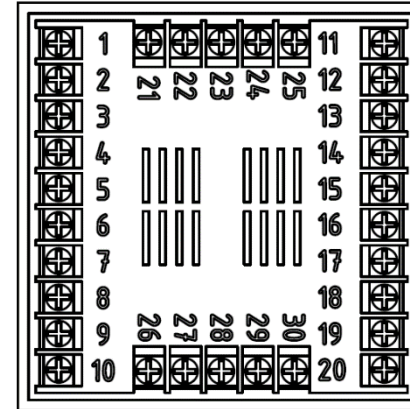
- Supply input: 230 V AC, 50-60Hz
- Indoor use only
- Temp range 0-60 degree C
- Potential free contact 7amp (Relay)
- Timing range settable
- Auto reset setting to previous setting

Display parameters

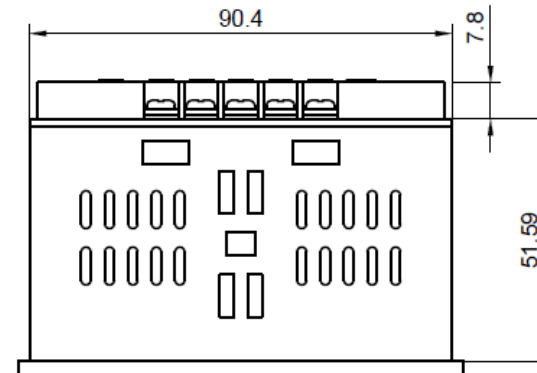
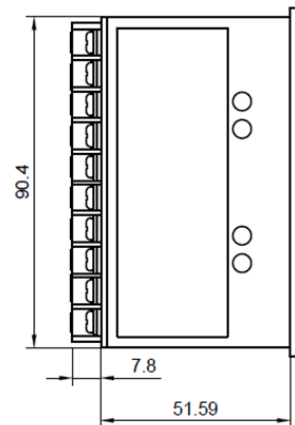
- Running hrs for individual pump
- Health condition of both the pump
- Fault alarm
- Modbus ID parameters

Wiring Connection

Pin 1-EARTH	Pin 11- Modbus (-)
Pin 2- LINE	Pin 12- Modbus (+)
Pin 3-NEUTRAL	Pin 13-PUMP 1 Earth
Pin 7- PUMP 1 Sensor (-)	Pin 14- PUMP 1 Neutral
Pin 8- PUMP 1 Sensor (+)	Pin 15- PUMP 1 Line
Pin 9- PUMP 2 Sensor (-)	Pin 16-PUMP 2 Earth
Pin 10- PUMP 2 Sensor (+)	Pin 17- PUMP 2 Neutral
	Pin 18- PUMP 2 Line



Dimensional details



Operating Instructions

Keys

On/off Button/

Increase value (up keys)





Decrease value (down keys)

Enter Menu and toggle down the set point

Reset the value /switch off the alarm







Setting working hours for PUMP1

Initiating process: Press (Menu)  and hold for 1 second until cursor box appeared on screen. To move cursor between the parameters, use same  keys. Move cursor box to P1 time and set the time using up  and down  keys.

Setting working hours for PUMP2

Repeat the same process as done in PUMP1 and move the cursor box to PUMP2 time.

Initiating process : Press (Menu)  and hold for 1 second until cursor box appeared on screen. To move cursor between the parameters use same  keys. Move cursor box to P2 time and set the time using up  and  down keys

Modbus Communication/RS485

Baud Rate: 9600/19200/115200

Word Length: 8 bits

Parity: None





Stop Bit: 1

ID: 1 to 127





Holding Register

Address	Description	Value
40001	Pump 1 ON/OFF status	1=ON, 0=OFF
40002	Pump 1 remaining Hrs	xx
40003	Pump 1 remaining mint	xx
40004	Pump 1 set hrs	xx
40005	Pump 1 set min	xx
40006	Pump 2 ON/OFF status	1=ON, 0=OFF
40007	Pump 2 remaining Hrs	xx
40008	Pump 2 remaining mint	xx
40009	Pump 2 set hrs	xx
40010	Pump 2 set min	xx
40011	Pump Status	1= Both healthy 2= Pump 1 Faulty 3= Pump 2 Faulty 4= Both Pump Faulty


Setting Modbus ID

Initiating process : Press (Menu)  and hold for 1 second until cursor box appeared on screen. To move cursor between the parameters, use same  keys. Move cursor box to ID and set the ID using up  and down  keys to toggle between 1 to 127

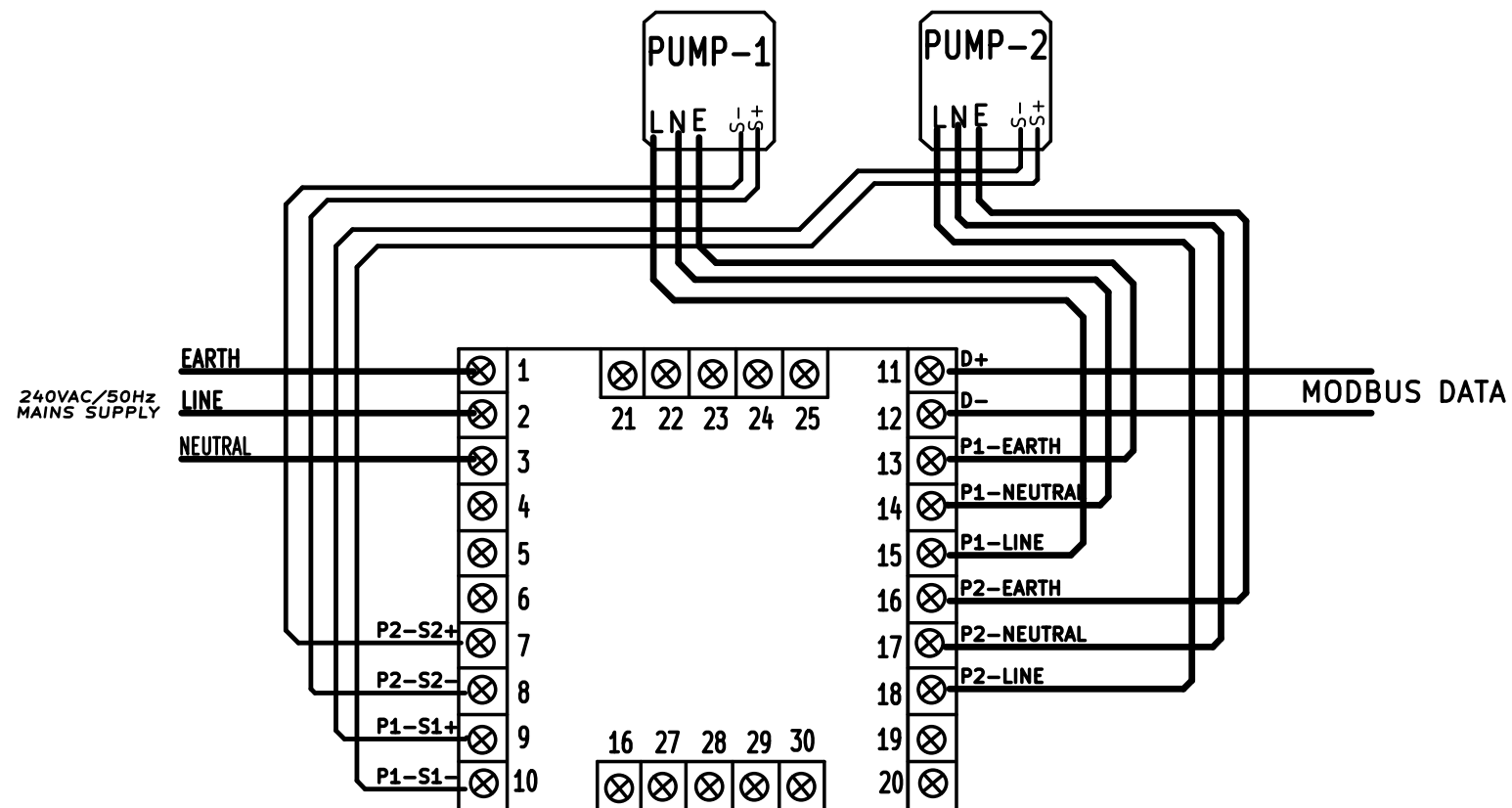
Setting Setting Modbus ID

Initiating process: Press (Menu)  and hold for 1 second until cursor box appeared on screen. To move cursor between the parameters, use same  keys. Move cursor box to baud rate for Modbus and use up  and down  keys to toggle between 9600/19200/115200

Pump Fault Alarm

If there is any fault in pump it will give an alarm and show it in display which one pump is faulty, in that case to switch off alarm use to reset  the pump and change the faulty pump.

Connection Diagram



PIN CONFIGURATION

PUMP 2 SENSOR		PUMP 1 SENSOR					240VAC/50Hz MAINS SUPPLY		
P2-S2+	P2-S2-	P1-S1+	P1-S1-				NEUTRAL	LINE	EARTH
10	9	8	7	6	5	4	3	2	1
RS485 Connection		PUMP 2 RELAY CONNECTION			PUMP 1 RELAY CONNECTION				
D+	D-	P1-EARTH	P1-NEUTRAL	P1-LINE	P2-EARTH	P2-NEUTRAL	P2-LINE		
11	12	13	14	15	16	17	18	19	20

PIN DISCRPTION

EARTH	EARTH
LINE	LINE
NEUTRAL	NEUTRAL
P2-S2+	+PUMP SENSOR-2
P2-S2-	-PUMP SENSOR-2
P1-S1+	+PUMP SENSOR-1
P1-S1-	-PUMP SENSOR-1
D-	MODBUS DATA-
D+	MODBUS DATA+
P1-EARTH	PUMP-1 EARTH
P1-NEUTRAL	PUMP-1 NEUTRAL
P1-LINE	PUMP-1 LINE
P2-EARTH	PUMP-2 EARTH
P2-NEUTRAL	PUMP-2 NEUTRAL
P2-LINE	PUMP-2 LINE