

ETP-MATIC NG

LOGIC CONTROLLER



Size: 144(Horizontal) X 144(Vertical) X 115(depth) mm

Cutout size: 138 X 138 mm

1

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com



TECHNICAL SPECIFICATIONS:

1) Size	144(H) X 144(V) X 115(D) mm
2) Cutout size	138(H) X 138(V) mm
3) Display	20 X 4 Alphanumeric LCD display
4) Settings	Through front panel keys(3 numbers)
5) Timings	Settable (Password protected)
6) Inputs	4 switch inputs 1 Pulse inputs for Flow 4 Analog Inputs:Can be configured as Blower current/Flow/D.O./pH
7) Outputs	10 (C NO) relay & RS 485 O/P
8) Supply	230 VAC \pm 15%

GUARANTEE CERTIFICATE

We certify that the instrument mentioned above has been tested by us and is guaranteed for a period of 12 months from the date of dispatch. We undertake to make good by replacement or repair defects arising due to faulty design, material or workmanship within the above mentioned period. Provided that the part in respect to which the complaint is made, is sent at the purchaser's expense.

The warranty is valid subject to:

- The meter or part there of not being subject to alteration, accidents or misuse.
- The installation having been done as per our guidelines in the manual.

Tested by:

Client:

Date of dispatch:

2

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com



Automation Philosophy:

Logic Controller is ideally suited for various ETP/STP plants. The process is continuous with most drives having a standby. The key to having a trouble free long-term operation of a well designed plant is

To follow the sequence of starting and stopping,

To automatically switch over to standby pump/blower after a preset time

Give alarm in case of

o Flow/PH/DO or Blower switchgear fault

Stop/Start plant based on levels in raw effluent tank.

Level interlock for Filter Feed pump.

Plant operating status known at any time on a four line alphanumeric display as well as system mimic diagram with LED indicators.

Sludge transfer pump to be ON for a set time periodically.

Controller has a provision for RS 485 output for displaying plant status on remote computer or data reception through SMS.

Instructions for Setting the Panel:

Use the following keys for settings.

- ▶ **START** : This key is used to start the operation and move the curser forward
- ▲ **STOP** : This key is used to end the operation and increase the value
- ◀ **MENU** : This key is used to go to Enter & save

TERMINAL CONNECTIONS:

No.	Description	Connections
1	MAINS SUPPLY 230VAC,50 Hz	PHASE
2		NEUTRAL
3		EARTH
4	POLE 1	Common for 5,6
5	ITP 1	NORMALY OPEN
6	ITP 2	NORMALY OPEN
7	POLE 2	Common for 8,9,10
8	BLOWER 1	NORMALY OPEN
9	BLOWER 2	NORMALY OPEN
10	BLOWER 3	NORMALY OPEN
11	POLE 3	Common for 12,13,14
12	STP 1	NORMALY OPEN
13	STP 2	NORMALY OPEN
14	FFP 1	NORMALY OPEN
15	POLE 5	Common for 16,17
16	FFP 2	NORMALY OPEN
17	ALRM	ALARM Output
18	NC	NOT CONNECTED
19	NC	NOT CONNECTED
20	V+	Supply to Flow Sensor,Smart Transm
21	GND	GROUND
22	EQ. TANK LVL	NORMALLY CLOSED
23	ST. TANK LVL	NORMALLY CLOSED
24	CLW TNK LVL	NORMALLY CLOSED
25	REMOTE TRIP	NORMALLY OPEN
26	NC	NOT CONNECTED
27	Common	Input Common
28	Analog I/P	Blower Current I/P
29	4-20 mA I/P1	Flow I/P
30	4-20 mA I/P2	DO I/P
31	4-20 mA I/P3	pH I/P
32	GND	Ground
33	FLOW SENSOR INPUT	R - Red
34		G - Green
35		B - Black
36	Serial Comm.	+
37		-

HOW TO DO THE SETTINGS:

Upon switching ON power supply display shows-
ASTER

ETPMATIC V3.0

And then status of plant. Follow the below instructions to do the Required settings.

SECTION 1.1 INPUT CONFIGURATION

Key Pressed	Display
START & STOP simultaneously	PASSWORD:0000
Enter the password 678 using START & STOP keys.	
MENU	FLOW SENSORS
MENU	FLOW SENSORS NO.OF SENSORS:
MENU	FLOW SENSORS NO.OF SENSORS: 1
The instrument has facility to connect one flow sensor directly to the terminal. If someone doesn't want to connect flow sensor then he can just make no.of sensors:0 with the help of STOP key.	
MENU	FLOW SENSORS SENSOR RESOL:0.1
MENU	FLOW SENSORS QUIT?
MENU	INST SENSORS:
MENU	INST SENSORS: CRNT IP:ON
What is this facility for? The instrument has a facility to take analog input from the current sensing transformer which can tell status of blower (ON/OFF)	
MENU	INST SENSORS:
MENU	CRNT IP:ON
MENU	CONTROL OP : ON
What is this facility for? One can use this input just as an indicator or can set high & low set points on the reading. In which case controller will trip the plant if blower is not ON.The control oprn can be switched OFF by using STOP key.	
MENU	INST SENSORS:
MENU	FLOW IP:ON
What is this facility for? The instrument has a facility to take 4-20 mA input from the MAG FLOW meter which can tell status of Inffluent transfer pump (ON/OFF)	
MENU	INST SENSORS:
MENU	FLOW IP:ON
MENU	CONTROL OP : ON
What is this facility for? One can use this input just as an indicator or can set high & low set points on the reading. In which case controller will trip the plant if blower is not ON. The control oprn can be switched OFF by using STOP key.	
MENU	INST SENSORS:
MENU	FLOW IP:ON
MENU	SPAN VALUE : 01.00
What is this ? This is value of Flow rate which will be shown when ETP-MATIC receives 20 mA current.	


5

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com



MENU	INST SENSORS:
MENU	DO IP:ON
What is this facility for? The instrument has a facility to take 4-20 mA input from the D.O. Meter which can tell amount of dissolved oxygen in aeration tank. based on which plant can be tripped if control operation is ON.	
MENU	INST SENSORS:
MENU	DO IP:ON
MENU	CONTROL OP : ON
One can select the control operation as ALARM(only alarm) or CNTRL (tripping of plant)	
MENU	INST SENSORS:
MENU	PH IP:ON
What is this ? One can use this input as an indicator of pH value in treated effluent.	
MENU	INST SENSORS:
MENU	EXIT ?
MENU	IT PMP AUTO :
MENU	IT PMP AUTO :
	ON TIME : 005
MENU	BLOWER AUTO :
MENU	BLOWER AUTO :
	ON TIME : 005
MENU	BLOWER AUTO :
	OFF TIME : 005 
MENU	FF PMP AUTO :
MENU	FF PMP AUTO :
	ON TIME : 005
MENU	DR SERV TIME:
MENU	DR SERV TIME:
	010(Previously set value)
What is this 'DR SERV TIME'?	
This is the service time(in minutes) after which Sludge Transfer pump would start for a set time(DRAINING TIME(in seconds))	
MENU	DRAINING TIME:
MENU	DRAINING TIME:
	010(Previously set value)
MENU	FAULT MESSGE:
MENU	FAULT MESSGE:
	REMOTE FAULT ! !
This message can be changed to MOTOR OVERLOAD !	
MENU	EQT LVL IP:
MENU	EQT LVL IP:ON
MENU	ST LO IP:
MENU	ST LO IP:ON
MENU	CLW LVL IP:
MENU	CLW LVL IP:ON
MENU	REMOT TRIP:
MENU	REMOT TRIP:ON
MENU	EXIT?

6

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com



SECTION 1.2 SETTING DISPALY	
MENU	SCROLL?
MENU	SCROLL?
	SCROLL? OFF
Use STOP key to make it ON.In that case display will scroll through Status & time of all pumps	
SECTION 1.3 SETTING THE SET POINTS:	
One can set the set points on different analog inputs (if Control oprn is ON)Enter the password 567 using START & STOP keys.	
MENU	CRNT SETPT?
MENU	CRNT SETPT?
	HIGH SP: (Previously set value).
Use START & STOP key to set required value	
MENU	CRNT SETPT?
	LOW SP: (Previously set value).
Use START & STOP key to set required value	
MENU	EXIT?
MENU	FLOW SETPT?
MENU	FLOW SETPT?
	HIGH SP: (Previously set value).
Use START & STOP key to set required value	
MENU	FLOW SETPT?
	LOW SP: (Previously set value).
Use START & STOP key to set required value	
MENU	EXIT?
MENU	DO SETPT?
MENU	DO SETPT?
	LOW SP: (Previously set value).
Use START & STOP key to set required value	
MENU	EXIT?
SECTION 1.3 CONFIGURING NO.OF PUMPS	
One can set the number of pumps/blowers using this routine. Enter the password 168 using START & STOP keys.	
MENU	IT PUMP :
MENU	IT PUMP : 2
Use STOP key to make it 1 (if only one pump is connected)	
MENU	FF PUMP :
MENU	FF PUMP : 2
Use STOP key to make it 1 (if only one pump is connected)	

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com



MENU	SLUDGE PMP :
MENU	SLUDGE PMP : 2
Use STOP key to make it 1 (if only one pump is connected)	
MENU	BLOWER :
MENU	BLOWER : 3
Use STOP key to make it 1 / 2 as per connected switchgear	
MENU	QUIT ?
MENU	

STP-MATIC NG MANUAL Dated 25/12/2014

Available with:

FILTRA CONSULTANTS AND ENGINEERS LTD.

Gala No. 2 & 3, Ground Floor, Neminath Industrial Estate No. 2, Navghar, Vasai (East), Dist.: Palghar - 401 219
 Tel.: +91 8691009127/26 Email: filtraw@gmail.com Website: www.ewatertreatmentindia.com

