FTR100

Filter Timer
USER'S GUIDE

DEVICE DESCRIPTION

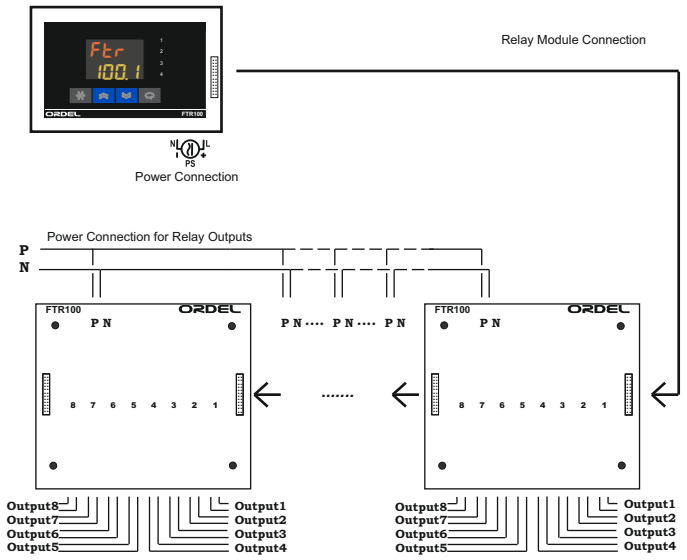
FTR100 Model devices are designed to be used in the cleaning systems of industrial environmental filters.These devices are based on microcontroller timer. Device is a combination of main controller and output modules. Each output module relay can switch resistive load up to 250Vac 10A. FTR100 Model devices can be programmed work as maximum 8 groups by user needs. User can define relay string as needed. Pause and pulse times can be programmed on the eight output channels. And user may define a hold time between strings. FTR100 Model devices have 100-240Vac/dc or 24Vac/dc supply voltage as the user needs.

WARNINGS

- Before using the device, please read the warnings below and this guide carefully.
- The accidents and damages resulting from not following the warnings included in this guide are under user's responsibility.
- This device prepared to use by authorized personal in industrial environments. Do not use other environments like home.
- Do not use this device in the environments that contain explosive or flammable gases.
- Take the necessary precautions in order to prevent accidents and damages that may result in case the device gets faulty.
- Do not allow metal fragments or lead wire scraps or liquid matters to fall inside this device.
- This device do not have circuit braker or fuse. These safety materials should be installed circuit by the user.
- Do no touch the terminals while the device is energized (power on)
- Device will be out of guaranteed when it gets faulty resulted from misusages.
- Do not power up the device before the connections related with the device are performed in accordance with connection diagram. Do not touch the terminals while device is energised.
- Device should be used in the limits of that is mentioned in this guide.
- Sensor and signalling cables should not be routed close to the power cables with high current and voltage.
- Default settings must be changed by the user before using the device. Damages that because of misconfiguration is under user's responsibility.
- This device designed to be working life as 10 years.
- Do not make changes and do not try to repair the device. These operations must be made by authorized service.

Producer and Technical service : ORDEL Ltd. Şti. Uzayçağı Cad. 1252. Sok. No:12 OSTİM / ANKARA
Tel:+90 312 385 70 96 (PBX) Fax: +90 312 385 70 78

Connection Diagram



Product Code

FTR100- _ /__/_

PS — OU

Supply Voltage :

0 = 100-240Vac (Universal)
1 = 24Vac/dc

Output Unit Number :

08 = 1 Group 8 Channel Output Unit
16 = 2 Group 16 Channel Output Unit
24 = 3 Group 24 Channel Output Unit
32 = 4 Group 32 Channel Output Unit
40 = 5 Group 40 Channel Output Unit
48 = 6 Group 48 Channel Output Unit
56 = 7 Group 56 Channel Output Unit
64 = 8 Group 64 Channel Output Unit

Output Type :

R =Output of Relay
T = Output for Transistor

Technical Specifications

Power Supply (PS)	100-240Vac/dc : +%10 -%15	24Vac/dc : +%10 -%20
Power Consumption	6W,7VA	
Memory	100 years or 100.000 switching	
Accuracy	+/- %0.2	
Sampling Period	400 ms	
Enviroment Temperature	Work : -10...+55C	Storage : -20...+65C
Protection	Ip65	
Group Number	Min: 1 Max: 8	
Output Number	Max: 64 item	
Output Relay Power	Under Resistive load: 250V AC; to 10A.	
Pulse Time	Adjustable (0.0 .....999.9 sn)	
Pause Time	Adjustable (0.0 .....999.9 sn)	
Group Passing Time	Adjustable (0.0 .....999.9 sn)	
Decimal Point	1 number	

DEVICE PARAMETERS

C.1	Security Password (User Defined, Default = 0)
GrPn	Group Number (Group No = 1 ... 8)
GrPt	Group Passing Time (Group Pass. Time= 0.0 ... 999.9 sn)
CYCt	Group Pause Time (0.0 ... 999.9 sn)
PLSt	Pulse Time (Pulse Time = 0.0 ... 999.9 sn)
btnt	Wait Time (Waiting Time = 0.0 ...999.9 sn)
rLYn	Relay Number (Relay Output No = 1 ... 64)
dP	Decimal Point (Decimal Point =1)
LUF	Start With Digital Input (oFF-on)
SC1	Security Code 1 (Security Code No 1 = -1999 ... 9999)

ENTERING THE CONFIGURATION PAGE and CALIBRATING PARAMETERS

Entering The Configuration Page:

- While device is energised, press and hold on to "[*]" and "[⟲]" buttons same time until "C. F" message appears on the screen to enter the configuration page.
- While upper display shows "C. F" message, enter configuration page password by using "[⌃]" and "[⌄]" buttons. (Default password is "0").
- If the password is incorrect when you push the"[⟲]" button program returns to first screen; if it is correct first page of the configuration appears.
- In the parameters screen, upper display shows parameter name and lower display shows its options.
- Now you can reach other configuration parameters by pressing "[⟲]" button in terms.
- To change setup options of parameter press "[⌃]" or "[⌄]" buttons. To step next parameter, press "[⟲]" button. When press and hold short time to "[*]" button, program returns to first page, pressing and holding this button long time returns program to first screen.

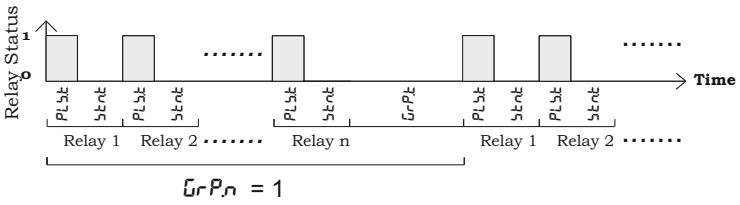
If GrP.n = 1 is chosen:

rLY.n: Parameter is used to crate a group that refers output number that user needs. Pulse time of the relays in the group defines with PLS.t parameter. By using StnE parameter, user can define waiting time after pulse time of relays. Created group's repeating time is defines by GrP.t parameter. This situation can be seen as a graphic in figure-1.

While PLS.t time is running, number 1 led lights in red on the controller unit. At the same time, on the output unit, led that belongs to active relay is lights too.

While StnE time is running, number 2 led lights in green on the controller unit.At the same time, on the output unit, led that belongs to active relay is off position.

GrP.t parameter defines waiting time between complated group of relays and next group. Time that defined with GrP.t parameter, steps in after group serie that defined with rLY.n parameter. While GrP.t is running, before next group starts, number 3 led lights in yellow on the controller unit.



Figurel-1 GrP.n =1 (Graphical shown of 1 group selection)

If GrP.n = 2,3,...,8 is chosen; (It requires least 2 relay output unit.)

rLY.n: Parameter is used to crate a group that refers output number that user needs. Pulse time of the relays in the group defines with PLS.t parameter. By using StnE parameter, user can define waiting time after pulse time of relays. Created group's repeating time is defines by GrP.t parameter. When working of all groups is finished, system waits some time before start again. This waiting time is defined by CYC.t parameter.

For example: Device has 2 relay output module. GrP.n = 3 is choosen and rLY.n = 5 is choosen by user. This sytems working analysis is shown in figure - 2.

While PLS.t time is running, number 1 led lights in red on the controller unit. At the same time, on the output unit, led that belongs to active relay is lights too.

While StnE time is running, number 2 led lights in green on the controller unit.At the same time, on the output unit, led that belongs to active relay is off position.

GrP.t parameter defines waiting time between completed group of relays and next group. Time that defined with GrP.t parameter, steps in after group serie that defined with rLY.n parameter. While GrP.t is running, before next group starts, number 3 led lights in yellow on the controller unit.

When the working mode of groups that defined by GrP.n parameter is finished, waiting time that defined by CYC.t parameter steps in. In this waiting time, number 4 led on the controller unit, lights in red.

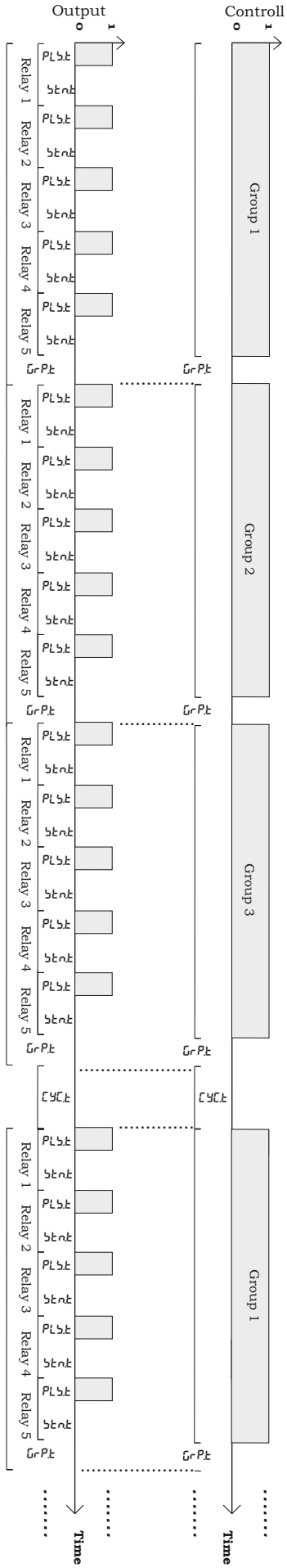


Figure-2: Graphical system analysis of 2 relay output module, 3 groups defined as each contains 5 relays.

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