

FEATURES

- Excellent fan controls
- Settable hysteresis to cut OFF & ON
- NTC(10K) temperature sensor
- Settable temperature setting
- Runs on 40-60 VDC
- Non volatile memory for data retention
- Fan failure indication and alarm
- Temperature sensor failure indication
- Indication of wrong hysteresis & temperature setting
- Fan selection from 1 to 6 fans
- LED indications : Sensor Fail, Alarm ON, FAN ON, FAN fail (up to 6 fans), wrong hysteresis & temperature setting
- Panel mounting

SPECIFICATIONS

| Model No. | | FFR-48V06F |
|---------------------|--|--------------------------------------|
| Input | System Supply | 40 - 60 VDC |
| | Fan Status | Active low input on normal condition |
| | Temperature sensor | NTC 10K |
| Ouput | Potential free contact for Alarm | 1 NO contact, 230VAC 5A |
| | Fan supply Voltage | 40 - 60 VDC |
| LED Indications | Fan fail | Upto 6 fans |
| | Sensor fail | Sensor open or not connected |
| | Alarm | Fan fail (1 to 6) |
| | Wrong Temperature & Hysteresis setting | If more than one or no switch is ON |
| DIP switch Settings | Temperature | 30°C, 35°C, 40°C, 45°C |
| | Hysteresis | 2°C, 3°C, 4°C, 5°C |
| | Precision | NTC10K : ±5% |
| | Operating Temperature | -5°C to +50°C |
| | Dimensions L x W (mm) | 98.5 x 95 mm |
| | Mounting | Panel mounting |

Notes:

1. Specifications are subject to change without prior notice due to constant improvement in design & technology.

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OPERATING MODES

- 1) FAN Selection Mode
- 2) Parameter Setting

1) Fan Selection Mode

- Keep all switches of TEMP DIP S/W and HYST DIP S/W in ON position & turn ON the power.
- WTS & WHS LED's will blink to indicate calibration mode is activated.
- Select FANs for status to be monitored as per your requirement by keeping respective Switch in OFF position as per below table-

| DIP S/W | S/W | FAN SELECTION | SELECT ^N CRITERIA |
|--------------|-----|---------------|------------------------------|
| TEMP DIP S/W | 1 | FAN 1 | OFF |
| | 2 | FAN 2 | OFF |
| | 3 | FAN 3 | OFF |
| | 4 | FAN 4 | OFF |
| HYST DIP S/W | 1 | FAN 5 | OFF |
| | 2 | FAN 6 | OFF |

- Store selected FANs by keeping HYST DIP S/W 3 & 4 in OFF Position.
- The moment you store selected Fans, it will go into operational mode and WTS and WHS LED will stop blinking. Refer parameter setting procedure to set Temperature and Hysteresis.

For Example:

If you want to select 3 no. of FANs (FAN 1, FAN 2, FAN 3), then keep TEMP DIP S/W 1 to 3 in OFF position. After that keep HYST. DIP S/W 3 & 4 in OFF position to store selected FANs. Then Controller will check status of only selected fans i.e FAN 1, FAN 2 & FAN 3, other fan status input will be ignored.

2) Parameter Setting

- There are two DIP switches for temperature & hysteresis setting.
- Temperature limit can be set from 30°C to 45°C by turning ON respective TEMP DIP S/W.

| DIP S/W | S/W | TEMP. SELECTION |
|--------------|-----|-----------------|
| TEMP DIP S/W | 1 | 30°C |
| | 2 | 35°C |
| | 3 | 40°C |
| | 4 | 45°C |

- You can set only one temp. at a time by selecting only one TEMP DIP S/W . If two or more than two Temp. DIP switches are ON then WTS LED will glow to indicate temp. setting error.
- Hysteresis limit can be set from 2°C to 5°C by turning ON respective HYST DIP S/W.

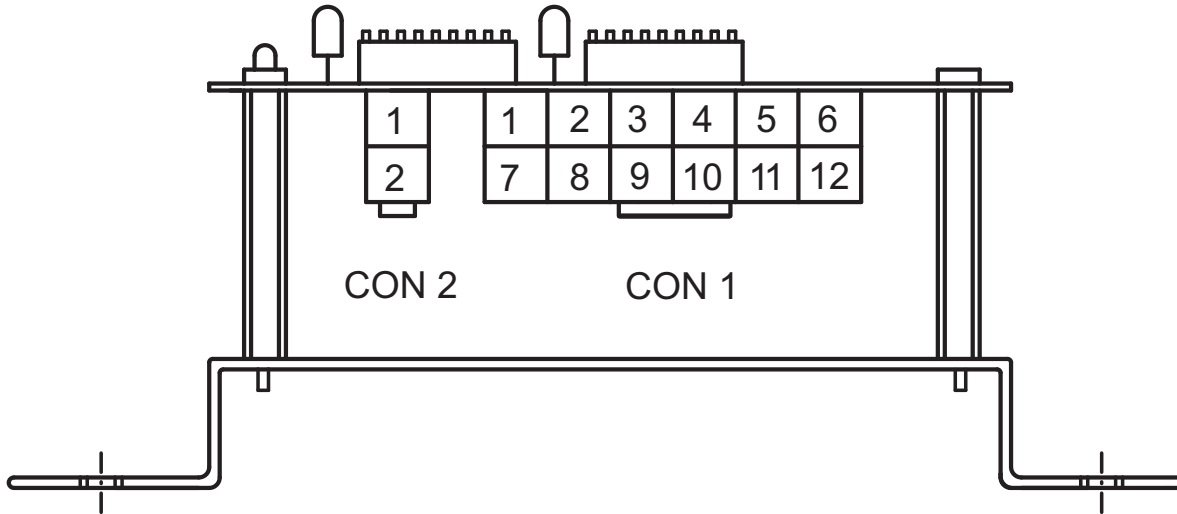
| DIP S/W | S/W | HYST. SELECTION |
|--------------|-----|-----------------|
| HYST DIP S/W | 1 | 2°C |
| | 2 | 3°C |
| | 3 | 4°C |
| | 4 | 5°C |

- You can set only one Hyst. at a time by selecting only one HYST DIP S/W . If two or more than two Hyst. DIP switches are ON then WHS LED will glow to indicate Hyst. setting error.

For Example :

If temperature is set to 35°C & hysteresis is 3°C, then fan will turn ON at 35°C & will turn OFF at (t-3)°C i.e 32°C

Fan Fail Relay Connector Terminals



CON 1

Pin No. 1 :- Fan 4
Pin No. 2 :- Fan 3
Pin No. 3 :- Fan 2
Pin No. 4 :- Fan 1
Pin No. 5 :- +48 V
Pin No. 6 :- GND
Pin No. 7 :- Fan 5
Pin No. 8 :- Alarm Comman
Pin No. 9 :- Alarm NO
Pin No. 10 :- Fan 6
Pin No. 11 :- Fan out 48V
Pin No. 12 :- Fan out GND

CON 2

Pin No. 1 :- Sensor Input
Pin No. 2 :- Sensor Input