

# Digital Panel Meter FD3400

## DESCRIPTION

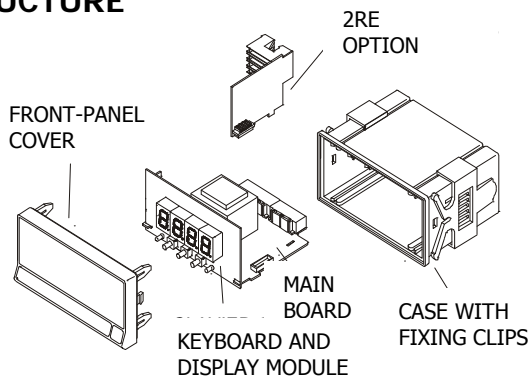
The FD3400 models accept, as selected via DIP-switch, the most usual transducers or pulse generators, to make the functions of a frequency meter, tachometer for rpm or rate meter with programmable display to measure velocity in engineering units.

The software inside allows selecting the measurement type (frequency, rpm, rate), scaling the display to suit desired units and modifying the internal sampling time and limit time to adapt the meter to the specific application.

Optionally, it can be equipped with a 2-relay control output card (2RE).



## STRUCTURE



## CODIFICATION

1	2	3	4	5	6	Description
F	D	3				<b>INPUT TYPE</b> Frequency, Tachometer, Magnetique pickup, NAMUR sensor, Encoder, PNP, NPN contact inputs, High voltage input
			4			
				1		<b>POWER SUPPLY</b> 115 / 230 Vac - 50/60Hz 12Vdc 24Vdc
				3		
				4		
				0		<b>ALARM</b> Without 2 alarm relay outputs (High & Low)
				1		

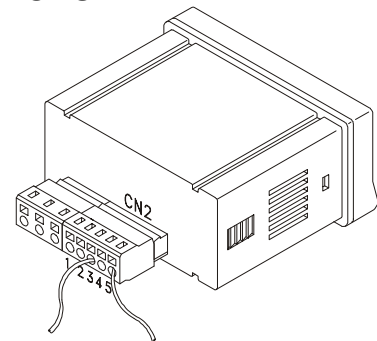
## STANDARD

- Panel-mounting 1/8 DIN case, depth 60mm.
- Electronics assembly :
  - Main board.
  - Keyboard and display module.
- Fixing clips for panel mounting.
- Frontal sealing gasket.
- Plug-in terminal block connectors.

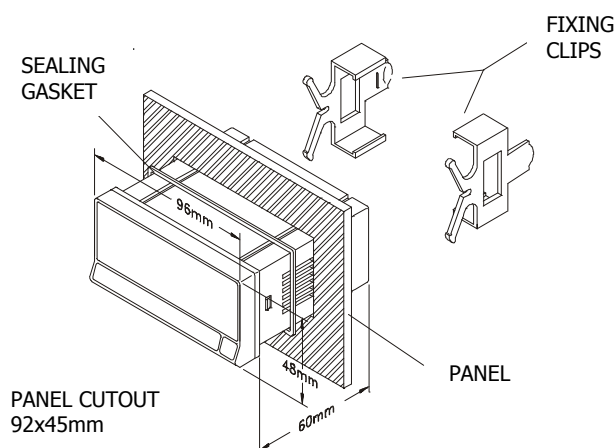
## OPTIONS

- 2 SPDT relays rated 8A @ 250V AC ..... Réf. 2RE

## CONNECTIONS



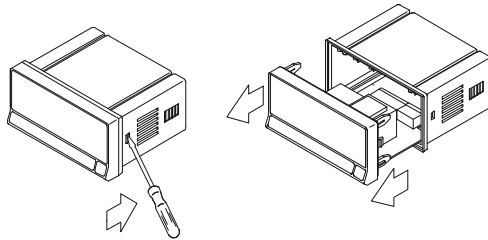
## DIMENSIONS AND MOUNTING



CN1		ALIMENTATION	
PIN		AC VERSION	DC VERSION
1		AC HI	+V DC
2		GND (GROUND)	-
3		AC LO	-V DC
CN2		INPUT SIGNAL	
PIN		TRANSDUCER	
1		NEGATIVE INPUT	
2		POSITIVE INPUT	
3		+EXCITATION 24V	
4		+EXCITATION 8V	
5		10-6000V AC	

# Digital Panel Meter FD3400

## DISASSEMBLY



## POWER SUPPLY (JUMPER SELECTION)

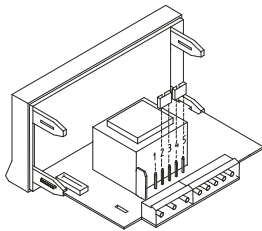
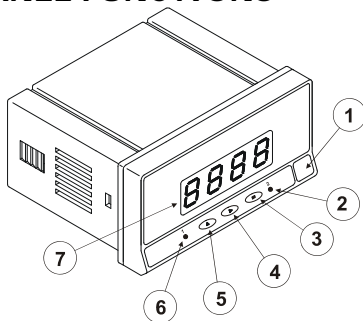


Table 1- Jumper setting.

Pin	1	2	3	4	5
230V AC	-	■	■	■	■
115V AC	■	■	■	■	-
48V AC	-	■	■	■	■
24V AC	■	■	■	■	-

## FRONT-PANEL FUNCTIONS



	MODE	RUN	PROG
Label	1	Measurement unit	
Led 2	2	Setpoint 2 is active	Programming of the setpoint2
□ key	3	Shows programming data. Gives access to PROG	Validates programmed data. Advances one program step. Exit
➤ key	4	-	Shifts to the right
▲ key	5	-	Gives access to the setpoint values. Increments the active digit value.
Led 1	6	Setpoint 1 is active	Programming of the setpoint1
Display	7	Displays measured variable	Shows programming parameters

## TECHNICAL CHARACTERISTICS

### INPUT SIGNAL

- Frequency max ..... 7kHz

- Frequency min ..... 0.1Hz
- Excitation..... 8V @ 20mA or 22V ±5 @ 20mA
- Magnetic pickup
- Sensitivity .....  $V_{in} (AC) > 120mV \text{ eff.}$
- NAMUR sensor
- Rc1KΩ(incorporated)
- Ion..... < 1mA DC
- Ioff ..... > 3mA DC
- 5V TTL or 24V DC (encoder)
- Logic levels ..... "0" < 2.4V DC, "1" > 2.6V DC
- NPN and PNP
- Rc1KΩ (incorporated)
- Logic levels ..... "0" < 2.4V DC, "1" > 2.6V DC
- Contact closure
- Vc5V
- Rc3.9KΩ (incorporated)
- Fc100Hz
- High voltage input
- Input range ..... 10 to 600 V AC

### POWER SUPPLY

- AC voltages..... 115 V/230 V 50/60 Hz (±10%)
- DC voltages..... 12 V (10.5 à 16 V) DC  
24 V (21 à 32 V) DC
- Consumption ..... 3.5 W

### FUSES (DIN 41661)

- FD3310 (115/230 V AC) ..... F 0.1A / 250 V
- FD3330 (12 V DC) ..... F 1A / 250 V
- FD3340 (24 V DC) ..... F 0.5A / 250 V

### DISPLAY

- Range..... -1999/ 9999, 20 mm LED rouge
- Decimal point ..... programmable
- LEDs..... 2 indication état des seuils
- Reading rate ..... 250 ms
- Display overrange indication ..... OvE

### ENVIRONNEMENTAL

- Working temperature ..... -10°C a +60°C
- Storage Temperature ..... -25°C a 80°C
- Relative humidity ..... <95% a 40°C
- Max. Altitude..... 2000 m

### MECHANICAL

- Dimensions ..... 1/8 DIN 96 x 48 x 60 mm
- Weight..... 250 g
- Case material ..... UL 94 V-0 Poly carbonate
- Sealed front panel ..... IP65 (Indoor use)

### ORDERING REFERENCES

- 115/230 V AC 50/60 Hz power supply..... FD3210
- 12 V DC power supply..... FD3230
- 24 V DC power supply..... FD3240

## Fuji Electric France S.A.S.

46, Rue Georges Besse - Z I du Brézet - 63 039 Clermont-Ferrand cedex 2 FRANCE

France : Tél. 04 73 98 26 98 - Fax 04 73 98 26 99 - International : Tél. (33) 4 7398 2698 - Fax. (33) 4 7398 2699

E-mail : sales.dpt@fujielectric.fr – WEB : www.fujielectric.fr