

DESCRIPTION

The FD3100 model is instrument that accepts any voltage or current process signal to measure process variables with direct indication in engineering units.

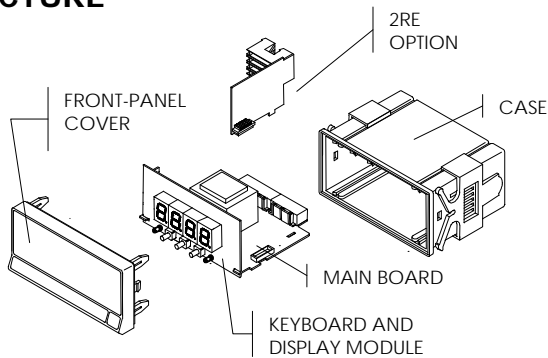
Fully software programmable, the FD3100 provide selectable input type ($\pm 10V$ DC or $\pm 20mA$ DC) and excitation output to feed the transducer @ 24V.

Two scaling methods to program the display to match desired 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				
			1			INPUT TYPE Entrée Procédé $\pm 10V$, $\pm 20mA$ et potentiomètre (avec alimentation capteur)
			1			POWER SUPPLY 115 / 230 Vca - 50/60Hz 12Vcc 24Vcc
			3			
			4			
				0		ALARM Without
				1		2 alarm relay outputs (High & Low)

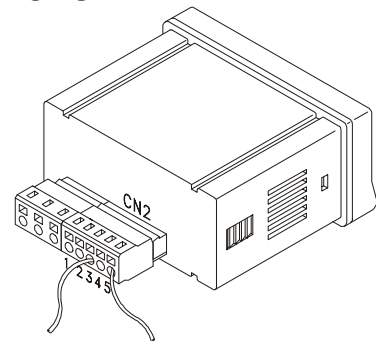
STANDARD

- 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.

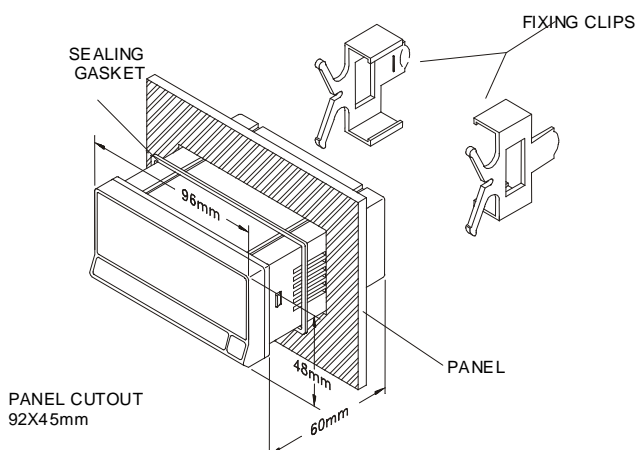
OPTIONS

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

CONNECTIONS



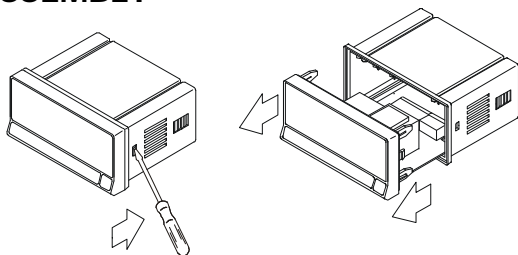
DIMENSIONS AND MOUNTING



CN1		POWER SUPPLY	
PIN		AC VERSION	DC VERSION
1		AC HI	+V DC
2		GND (TERRE)	-
3		AC LO	-V DC
CN2		INPUT SIGNAL	
PIN		INPUT VOLTS	INPUT MILLIAMPERES.
1		- INPUT	- INPUT
2		+ INPUT	-
3		-	+ INPUT
4		+ EXCITATION	+ EXCITATION
5		- EXCITATION	- EXCITATION

Current/Voltage Panel Meter FD3100

DISASSEMBLY



POWER SUPPLY (JUMPER SELECTION)

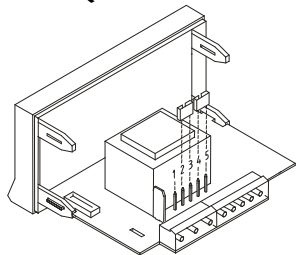
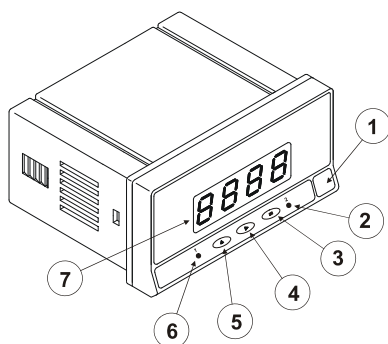


Table 1- Jumper settings.

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	Indicates setpoint 2 is active	Indicates 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.
Led 1	6	Indicates setpoint 1 is active	Indicates programming of the setpoint1
Display	7	Displays the variable being measured	Shows programming parameters

TECHNICAL CHARACTERISTICS

INPUT SIGNAL

Configuration	Differential asymetrical	
INPUT	VOLTAGE	CURRENT
Input	±10 V DC	±20 mA DC
Resolution	0.5 mV	10 µA
Input impedance	1 MΩ	12.1 Ω
Excitation	20 V DC ±5 V - 25 mA (à 230 V)	

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

ACCURACY

- Max error.....± (0.1% de la lecture +3 digits)
- Temperature coefficient 100 ppm/°C
- Warm-up time5 minutes
- Step response time 250 ms

FUSES (DIN 41661)

- FD3110 (115/230 V AC) F 0.1A / 250 V
- FD3130 (12 V DC) F 1A / 250 V
- FD3140 (24 V DC) F 0.5A / 250 V

A/D CONVERSION

- Technique..... Sigma-Delta
- Resolution..... ±15 bits
- Read rate.....25/s

DISPLAY

- Range.....-1999/ 9999, 20 mm red LED
- Decimal point programmable
- LED's.....2 indication état des seuils
- Display update time 250 ms
- Over range indication..... OvE

ENVIRONMENTAL

- Working temperature -10°C a +60°C
- Storage température.....-25°C a 80°C
- Relative humidity <95% a 40°C
- Altitude max..... 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..... FD3110
- 12 V DC power supply..... FD3130
- 24 V DC power supply..... FD3140

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