

JR/JR20-PRC

DESCRIPTION

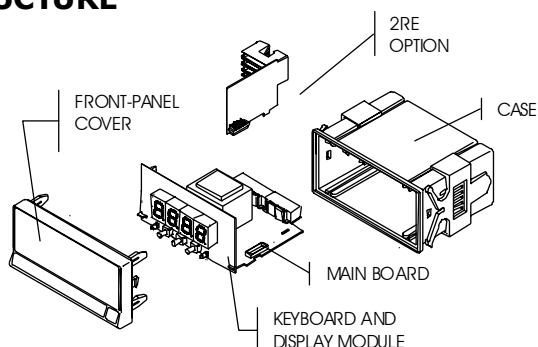
The JUNIOR-PRC and JUNIOR20-PRC models are instruments that accept any voltage or current process signal to measure process variables with direct indication in engineering units.

Fully software programmable, the JR-PRC and JR20-PRC 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



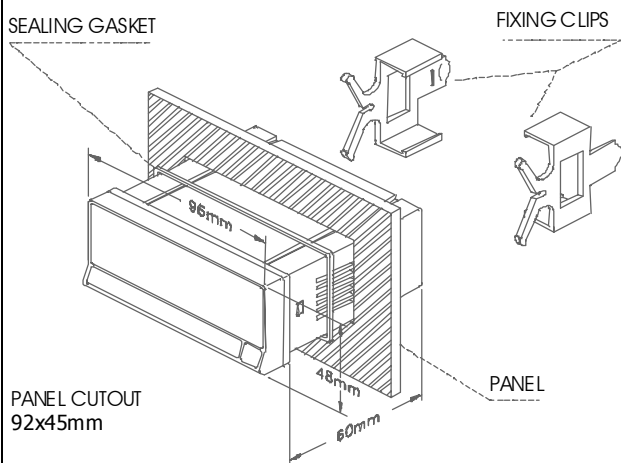
STANDARD

- 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 ACRef. **2RE**

DIMENSIONS AND MOUNTING



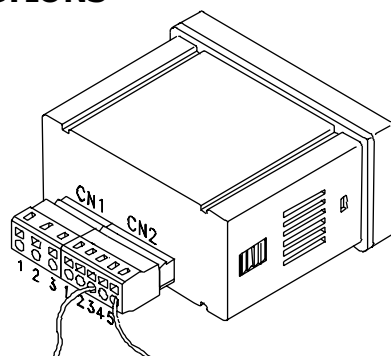
JUNIOR-PRC



JUNIOR20-PRC



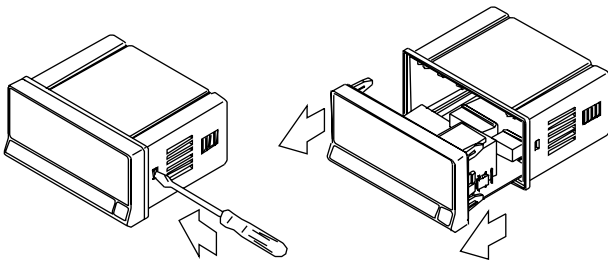
CONNECTIONS



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

JR/JR20-PRC

DISASSEMBLY



POWER SUPPLY (JUMPER SELECTION)

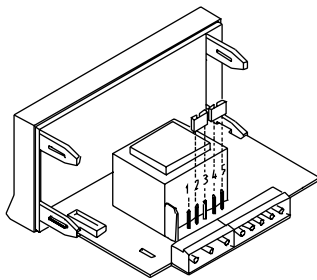
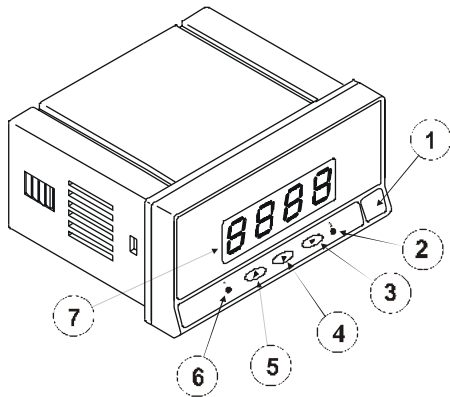


Table 1. Jumper settings.

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 mode	Validates programmed data. Advances one program step. Exit program mode.
➤ key	4	-	Shifts to the right
▲ key	5	-	Gives access to the setpoint values. Increments the active digit value.
Led 1	6	Indicates setpoint 1 is active	Indicates programming of the setpoint1
Display	7	Displays the variable being measured	

INPUT SIGNAL

- Configuration differential asymmetrical
- INPUT VOLTAGE CURRENT
- Input.....±10V DC ±20mA DC
- Resolution 0,5mV 10µA
- Input impedance 1MΩ12.1Ω
- Excitation.....20VDC ±5V @ 25mA (@230V)

POWER SUPPLY

- AC voltages..... 115V/230V 50/60Hz (±10%)
24V/48V 50/60Hz (±10%)
- DC voltages 12V (10.5 to 16V) DC
24V (21 to 32V) DC
48V (42 to 64V) DC
- Consumption.....3W

ACCURACY

- Max error..... ± (0.1% of the reading +3 count)
- Temperature coefficient..... ±100ppm/°C
- Warm-up time..... 5 minutes
- Step response time250ms

FUSES (DIN 41661) (Recommended)

- JR/JR20-PRC (115/230V AC) F 0.1A / 250 V
- JR/JR20-PRC2 (24/48V AC)..... F 0.2A / 250 V
- JR/JR20-PRC3 (12V DC) F 1A / 250 V
- JR/JR20-PRC4 (24V DC) F 0.5A / 250 V
- JR/JR20-PRC5 (48V DC) F 0.5A / 250 V

A/D CONVERSION

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

DISPLAY

- Range for:
JR-PRC -9999/9999, 14 mm red digits
JR20-PRC..... -1999/9999, 20 mm red digits
- Decimal point programmable
- LED's..... 2 output status
- Display update time.....250ms
- Over range indicationOvE

ENVIRONMENTAL

- Working temperature -10 °C to +60 °C (0°C to 50°C) s/UL
- Storage temperature -25 °C to +85 °C
- Relative humidity <95% at 40°C
- Altitude max. 2000 m

MECHANICAL

- Dimensions 96 x 48 x 60 mm
- Weight 250g
- Case material..... UL 94 V-0 polycarbonate
- Sealed front panel..... IP65 (Indoor use)

ORDERING REFERENCES

- 115/230V AC 50/60Hz powered JR/JR20-PRC
- 24/48V AC 50/60Hz poweredJR/JR20-PRC2
- 12V DC poweredJR/JR20-PRC3
- 24V DC poweredJR/JR20-PRC4
- 48V DC poweredJR/JR20-PRC5