PICA-F   INSTRUCTIONS MANUAL

Size 48 x 24 mm frontal

KEYBOARD BOTTOM VIEW

⊙ ENTER
⊜ SHIFT
⊙ UP
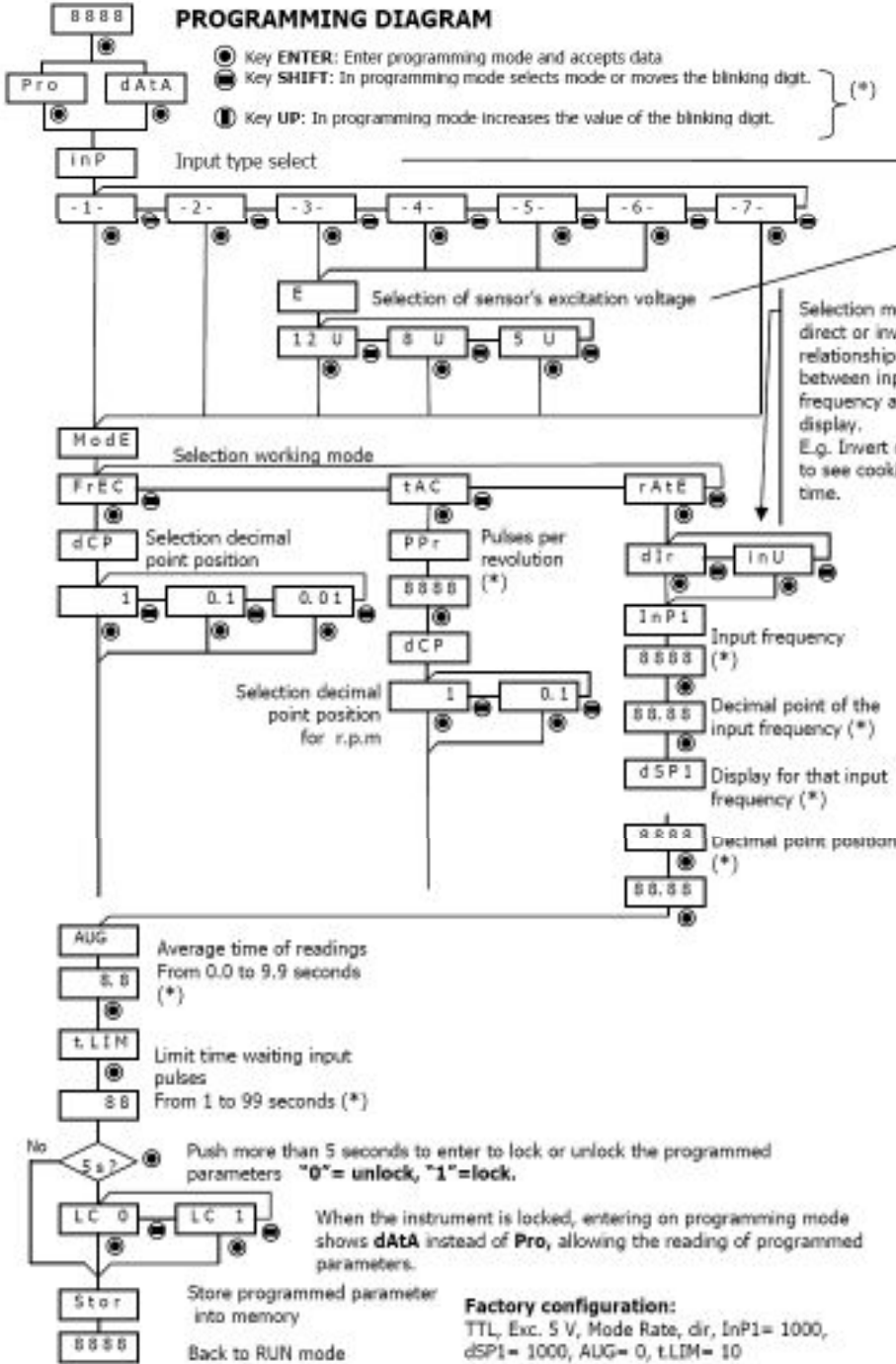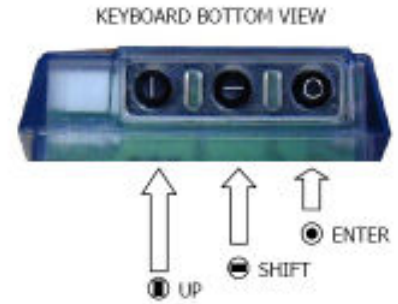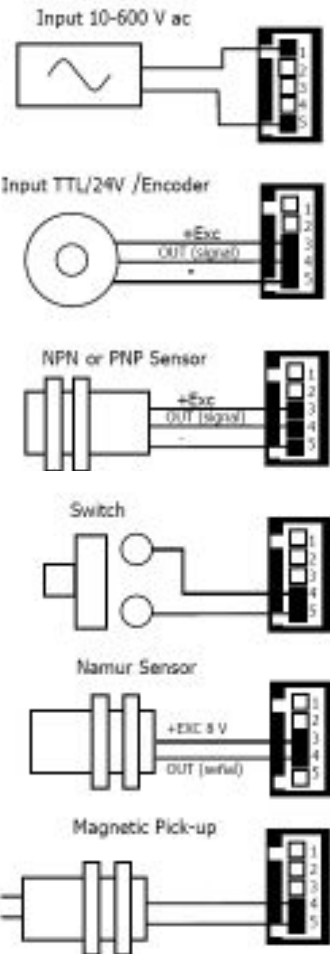
Panel instrument for measuring **frequencies, velocities in r.p.m. or lineal,** totally programmable by keyboard.
Display range from 0 ÷ 9999, decimal point position programmable.
Keyboard composed of three keys located on the bottom of display.
Accepts the connection of most Standard sensor: PicK-up Magnetic, Namur, PNP, NPN, switch, as well as the possibility of measuring frequencies from signals in the range of 10 to 600 V ac.   E.g. the frequency of main voltage supply.
Frequency ranges: 99,99 Hz, 999,9 Hz and 9999 Hz
Tachometer in mode TAC programming only the pulses per revolution or in mode Rate programming the relationship between Frequency / display (in desired engineering units)

PROGRAMMING DIAGRAM

⊙ Key **ENTER**: Enter programming mode and accepts data
⊜ Key **SHIFT**: In programming mode selects mode or moves the blinking digit.   (*)
⊙ Key **UP**: In programming mode increases the value of the blinking digit.

inP   Input type select

- 1 -   - 2 -   - 3 -   - 4 -   - 5 -   - 6 -   - 7 -

E   Selection of sensor's excitation voltage

12 U   8 U   5 U

ModE   Selection working mode

FrEC   tAC   rAtE

dCP   Selection decimal point position

1   0.1   0.01

PPr   Pulses per revolution (*)

8888

dCP

Selection decimal point position for r.p.m

1   0.1

Selection mode, direct or invert of relationship between input frequency and display.
E.g. Invert method to see cooking time.

dIr   InU

InP1   Input frequency (*)
8888

88.88   Decimal point of the input frequency (*)

dSP1   Display for that input frequency (*)

8888   Decimal point position (*)

88.88

AUG   Average time of readings From 0.0 to 9.9 seconds (*)
8.8

t.LIM   Limit time waiting input pulses From 1 to 99 seconds (*)
88

No
5 s ?   Push more than 5 seconds to enter to lock or unlock the programmed parameters   "0"= unlock, "1"=lock.

LC 0   LC 1   When the instrument is locked, entering on programming mode shows **dAtA** instead of **Pro**, allowing the reading of programmed parameters.

Stor   Store programmed parameter into memory
8888   Back to RUN mode

Factory configuration:
TTL, Exc. 5 V, Mode Rate, dir, InP1= 1000,
dSP1= 1000, AUG= 0, t.LIM= 10

Pro   dAtA

INPUT TYPE

1	10-600 V
2	Magnetic Pick-up
3	NAMUR
4	PNP
5	NPN
6	TTL/24 V dc / Encoder
7	Switch

5 V	TTL
8 V	Namur
12 V	Sensor or encoders

INPUT CONNECTIONS

Input 10-600 V ac

Input TTL/24V /Encoder
+Exc
OUT (signal)

NPN or PNP Sensor
+Exc
OUT (signal)

Switch

Namur Sensor
+EXC 8 V
OUT (signal)

Magnetic Pick-up

TECHNICAL CHARACTERISTICS

INPUT
Max. Frequency..7 kHz
Min. Frequency ....0.01 Hz
Excitation.......5, 8, 12 V dc @ 60 mA (keyboard programmable)
High Voltage Input ....10 to 600 V ac
Pick-up magnetic .... Vin > 30 mV eff. (60 Hz)
.... Vin > 300 mV eff. (6kHz)
NAMUR Sensor
- Rc... 1.5 kΩ
- I on .... < 1 mA
- I off .... > 3 mA

NPN y PNP Sensors
- Rc.. (NPN) 3k9 Ω, (PNP) 1k5 Ω
- Logical levels........................"0" < 2.4 V, "1" > 2.6 V dc

TTL/24 V dc (encoder)
- Logical Levels......................"0" < 2.4 V, "1" > 2.6 V dc

Switch
- Vc...5 V (internal)
- Rc...3,9 kΩ (included)
- Fc...... 20 Hz (automatically connected when selected switch input)

ACCURACY
Max. Error ....±(0.01 % of reading + 1 digit)
Temperature coefficient...50 ppm/ °C
Warm up ....5 minutes

SUPPLY and FUSES (DIN 41661)   (not included)
PICA- F   85 – 265 V ac 50/60 Hz y 100-300 Vdc.... F 0.1A/ 250V
PICA-F6 21-53 VAC 50/60Hz y 10,5-70VDC............. F 0.5A/ 250V
Consumption 2,2W

DISPLAY
Range .... 0 to 9999
Type .... 4 red digits, 10 mm
Rate...10/s
Overflow indication .... $O\overline{v}E$

ENVIRONMENTAL
Operating temperature..-10ºC ÷ +60ºC
Storage temperature..-25ºC ÷ +85ºC
Relative humidity (non condensed) ....<95% ÷ 40ºC
Maximum altitude ....2000 m.
Panel sealing IP65

DIMENSIONS
Dimensions...48 x 24 x 70 mm.
Panel cutout .... 45 x 22 mm.
Weight .... 50 g.
Case material....................................Poly carbonate s/ UL 94 V-0

INSTALLATION AND CONNECTIONS

Keyboard detail (bottom view)

1. Input 10-600 V ac
2. Free
3. + Exc.
4. Signal Input
5. - Common