LABEL	MIN.	MAX.	U.M.	DEF.	SERIAL NETWORK (EVCOBUS)
L1	1	15	—	1	instrument address
L2	0	7	—	0	instrument group
L4	0	3	—	1	baud rate (0 = 1,200 baud, 1 = 2,400 baud, 2 = 4,800 baud, 3 = 9,600 baud)

(3) the unit of measure depends on the parameter /d

(4) if the parameter /9 has value 0, the parameter will not be showed

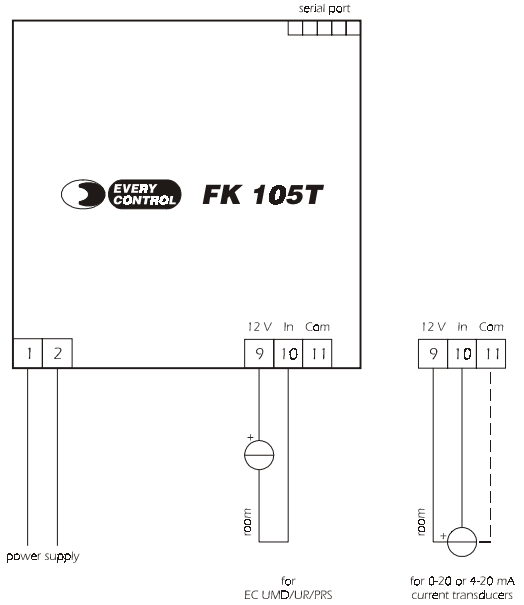
(5) the value depends on the range of the transducer the instrument has been preset

(6) if the immediate change of the process variable is minor than the one you have set with the parameter, the process variable will be updated every 7.5 s by an algorithm of the instrument

(7) if the parameter has value 2, no LED will indicate the unit of measure of the process variable.

8 ELECTRICAL CONNECTION

8.1 Electrical connection



FK 105T

Digital humidity/pressure indicator

smart guide

Version 1.00 of March the twenty-fourth, 2003

File fk105te_v1.00.pdf

PT

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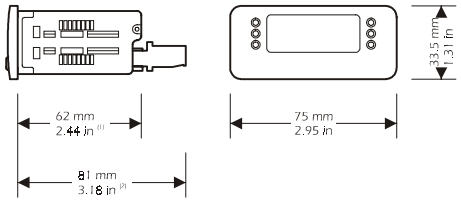
ENGLISH

1 PREPARATIONS

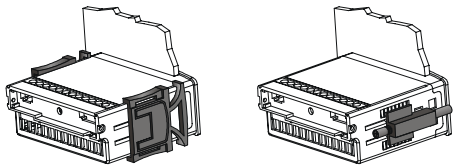
1.1 How to install the instrument

Panel mounting, panel cut out 71 x 29 mm (2.79 x 1.14 in), with click brackets (they are supplied by the builder) or screw brackets (by request).



(1) maximum depth with screw terminal blocks (by request)

(2) maximum depth with extractable terminal blocks (standard model).



installation with click brackets (on the left-hand side, they are supplied by the builder) and screw brackets (on the right-hand side, by request); if you are using screw brackets, you have to moderate the clamping torque, in order not to damage the box and screw brackets.

2 OPERATION

2.1 Preliminary information

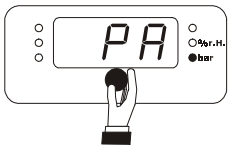
During the normal operation the instrument shows the process variable.

3 CONFIGURATION PARAMETERS

3.1 How to set the configuration parameters

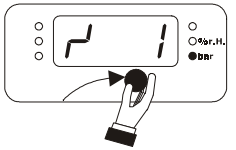
If you have to gain access the procedure:

- position the magnet (it is supplied by the builder) below the digit there is in the middle of the display for 4 s: the instrument will show PA



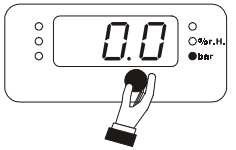
If you have to select a parameter:

- move the magnet from the left towards the digit there is in the middle of the display (keep the magnet below the display) as long as the instrument shows the parameter you prefer

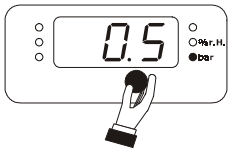


If you have to modify the value of the parameter:

- move the magnet from the left towards the digit there is in the middle of the display (keep the magnet below the display) in order to select the parameter and keep the position for 4 s



- keep the position as long as the instrument show the value you prefer



If you have to quit the procedure:

- move the magnet from the left towards the digit there is in the middle of the display (keep the magnet below the display) as long as the instrument shows the process variable or do not operate for about 60 s.

4 SIGNALS

4.1 Signals

LED	MEANING
%r.H.	Relative humidity LED if it is lighted, the unit of measure of the process variable is relative humidity
bar	Bar LED if it is lighted, the unit of measure of the process variable is bar

5 ALARMS

5.1 Alarms

CODE	REASONS	REMEDIES	EFFECTS
E2 corrupted memory data	there is the corruption of the configuration data of the memory of the instrument	switch off the power supply of the instrument: unless the alarm disappears, you will have to change the instrument	you can not gain access the setting procedures
E0 room probe alarm	▪ the kind of room probe you have connected is not right ▪ the room probe plays up ▪ the connection instrument-room probe is wrong	▪ look at the parameter /0 ▪ test the integrity of the probe ▪ test the instrument-probe connection	the instrument will not show the process variable
	▪ the process variable is outside the limits allowed by the working range of the instrument	▪ test the process variable close to the probe (it has to be between the limits allowed by the working range)	
SAt saturation of the display	the process variable is outside the limit you have set with the parameter rA7	test the process variable close to the probe (look at the parameters /3, /9 and rA7)	if the parameter /9 has value 1, the instrument will work as if the process variable were always the value you have set with the parameter rA7
process variable process variable out of scale	the process variable is outside the limit you have set with the parameter rA6 or rA7	test the process variable close to the probe (look at the parameters /9, rA6 and rA7)	if the parameter /9 has value 1, the instrument will work as if the process variable were always the value you have set with the parameter rA6 or rA7

The instrument shows the indications above flashing.

6 TECHNICAL DATA

6.1 Technical data

Box: self-extinguishing grey.

Size: 75 x 33.5 x 81 mm (2.95 x 1.31 x 3.18 in) the model with extractable terminal blocks (standard model), 75 x 33.5 x 62 mm (2.95 x 1.31 x 2.44 in) the model with screw terminal blocks (by request).

Installation: panel mounting, panel cut out 71 x 29 mm (2.79 x 1.14 in), with click brackets (they are supplied by the builder) or screw brackets (by request).

Frontal protection: IP 65.

Connections: extractable terminal blocks with pitch 5 mm (0.19 in, standard model) for cables up to 2.5 mm² (0.38 sq in, power supply and input) or screw terminal blocks with pitch 5 mm (0.19 in, by request) for cables up to 2.5 mm² (0.38 sq in, power supply and input), 5 poles single line male connector with pitch 2.5 mm (0.09 in, serial port).

Ambient temperature: from 0 to 55 °C (32 to 131 °F, 10 ... 90% of relative humidity without condensate).

Power supply: 230 Vac, 50/60 Hz, 1.5 VA (standard model) or 115 Vac, 50/60 Hz, 1.5 VA (by request).

Measure inputs: 1 (room probe) for 0-20 or 4-20 mA current transducers.

At terminal 9 there are 12 V you can use in order to supply the transducer.

Working range: configurable (it depends on the range of the transducer).

Resolution: 0.1 or 1 %r.H./bar.

Display: one red LED 3-digit display 13.2 mm (0.51 in) high, process variable unit of measure indicators.

Serial port: TTL with EVCOBUS communication protocol (for the configurer/cloner system CLONE and supervision system RICS).

7 CONFIGURATION PARAMETERS

7.1 Configuration parameters

LABEL	MIN.	MAX.	U.M.	DEF.	RESERVED
PA	—	—	—	—	reserved

LABEL	MIN.	MAX.	U.M.	DEF.	MEASURE INPUTS
/0	30	31	—	30	kind of probe (30 = 4-20 mA, 31 = 0-20 mA)
/1	-25	25.0	%r.H./bar[3]	0.0	room probe calibration
/2	0	6	—	3	probe reading speed (0 = fast, ... , 6 = slow)
/3	0	1	—	0	indication "SAt" flashing on the display during the saturation of the display (it is important if /9 ≠ 0; 1 = YES) [4]
/5	0	1	—	1	process variable resolution (0 = 1 %r.H./bar, 1 = 0.1 %r.H./bar)
/6	-99	999	points	[5]	minimum value of the range of the transducer
/7	-99	999	points	[5]	maximum value of the range of the transducer
/9	0	4	—	0	display mode (0 = during the normal operation the instrument shows the process variable, 1 = during the normal operation the instrument shows the process variable, as soon as the process variable falls below the threshold you have set with the parameter rA6 or rises above the threshold you have set with the parameter rA7 the instrument will show the value of the threshold flashing and the instrument will work as if the process variable were always the value you have set with the parameter rA6 or with the parameter rA7, 2 = during the normal operation the instrument shows the process variable, as soon as the process variable falls below the threshold you have set with the parameter rA6 or rises above the threshold you have set with the parameter rA7 the instrument will show the value of the threshold flashing, 3 = reserved, 4 = reserved)
/b	0.0	25.0	%r.H./bar[3]	0.0	minimum immediate change of the process variable in order that it can immediately be considered by the instrument (0.0 = the funcion will not be enabled) [6]
/d	0	2	—	1	process variable unit of measure (0 = bar, 1 = %r.H. , 2 = dimensionless) [7]

LABEL	MIN.	MAX.	U.M.	DEF.	REGULATOR
rA6	-99	rA7	%r.H./bar[3]	0.0	lower process variable value the instrument freezes the display (it is important if /9 ≠ 0)
rA7	rA6	999	%r.H./bar[3]	100	upper process variable value the instrument freezes the display (it is important if /9 ≠ 0)