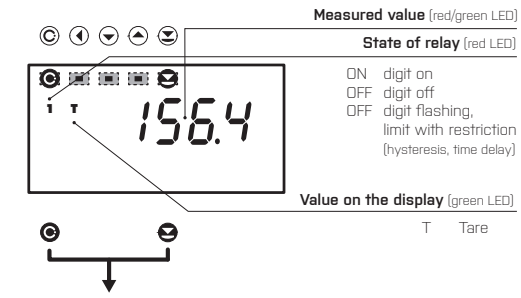
Programming diagram of the LIGHT MENU



Password to access the menu
range: 0...999

Selection of the instrument measuring range

Range selection

0.06	0...60 mV
0.3	0...300 mV
24	0...24 V
50	0...50 V
120	0...120 V
250	0...250 V
1. A	0...1 A
5. A	0...5 A

Setting display projection for minimum value of input signal
range: 0...1999

Setting display projection for maximum value of input signal
range: 0...1999

Setting projection of the decimal point
The projection can be either with fixed decimal point as well as with the floating decimal point „FL.P."

Selection of output type

Select. of out. type

CLO.	switch on relay
OPE.	switch off relay
rdy.	all OK
Err.	error indication

Setting of limit 1
range: 0...1999

These menu items can be accessed only if the instrument contains corresponding options

Selecting the menu type LIGHT/PROFI
L G. - simplified menu (minimal choice of settings)
PRO. - entire menu (for advanced users)

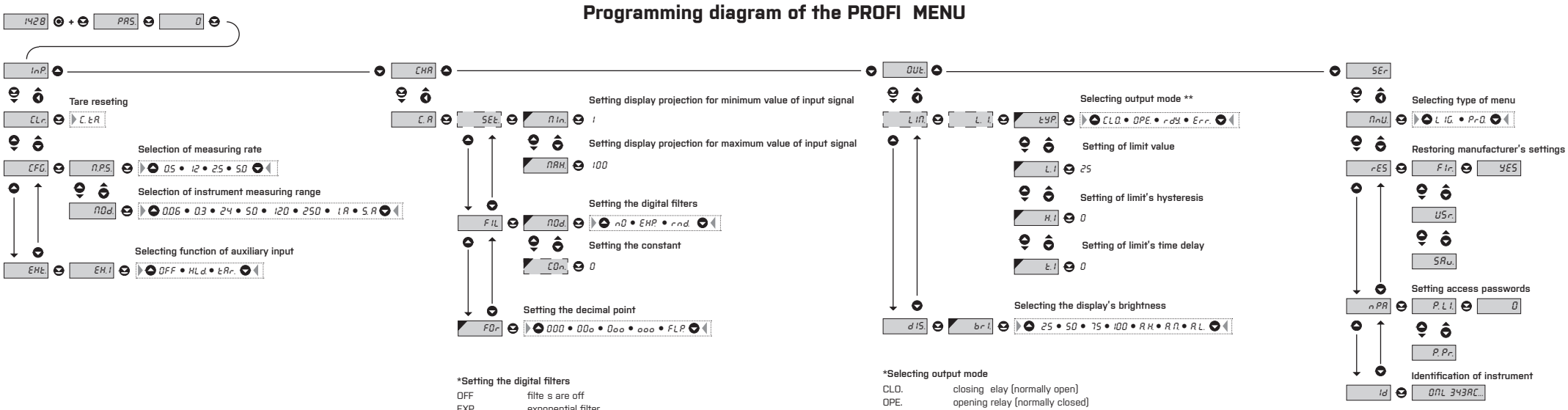
Return to the manufacturer's settings
Restores manufacturer's califrations and default setting of menu items (DEF)

Return to the user's settings
Restores user's setting, which means setting which was saved in the menu item SER./RES./SAV.

Setting a new user password for the LIGHT menu
range: 0...999

Displaying the instrument's SW version
Type of instrument, SW version and currectly selected input (Mode) are projected on the display

Programming diagram of the PROFI MENU



*Setting the digital filters

OFF	filte s are off
EXP.	exponential filter
nd.	rouding
COn.	setting of the ca ibration constant

*Selecting output mode

CLO.	closing elay (normally open)
OPE.	opening relay (normally closed)
rdY.	all OK
Err.	error indication

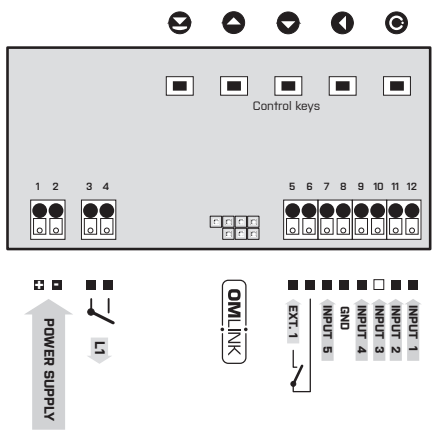
ERROR STATEMENTS

ERROR	CAUSE	ELIMINATION
E.dU.	number is too small (large negative) to be displayed	change DP setting, channel constant
E.dO.	number is too large to be displayed	change DP setting, channel constant
E. IU.	Input quantity is smaller than permitted input quantity range	change input signal value or input (range) setting
E. IO.	Input quantity is larger than permitted input quantity range	change input signal value or input (range) setting
EHW	a part of the instrument does not work properly	send the instrument for repair
EEE.	data in EEPROM corrupted	perform restoration of manufacture setting, upon repeated error statement send instrument for repair
Edt	data in EEPROM outside the range	perform restoration of manufacture setting, upon repeated error statement send instrument for repair
ECL.	memory was empty (presetting carried out)	upon repeated error statement send instrument for repair, possible failure in calibration
E. In	disconnected input circuit	check wiring

!

Upon delay exceeding 60 s the programming mode is automatically discontinued and the instrument itself restores the measuring mode

CONNECTING AND CONTROLING OF INSTRUMENT



Power supply cord should not be near low voltage input signal leads.

Contactors, large electrical motors and other power elements should not be operated in the vicinity of the instrument.

Input signal leads (measured value) should be separated from all power devices. If this is not possible to provide, the input leads have to be shielded and the shielding grounded (te minal E).

Our instruments are extensively tested and they comply with relevant standrads for use in industrial environment, however, adhering to the above mentioned measures is stronlgy advised.

CAUTION!

Always make sure the input signal is disconnected before setting up the instrument!

Risk of electric shock!

MEASURING RANGES - CONNECTION

TYPE	INPUT 1	INPUT 2	INPUT 3	INPUT 4	INPUT 5
AC	0...50/250 V	0...24/120 V		0...60/300 mV	0...1/5 A

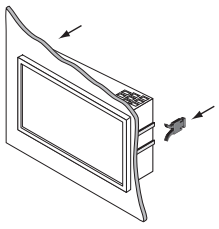
EXTERNAL INPUT

	DESCRIPTION	CONTROLS
EXT. 1	controlling input, its function is set in the menu (see. Menu > EXT. IN.)	upon contact, terminal (No. 5 + 6)

MOUNTING AND DIMENSIONS

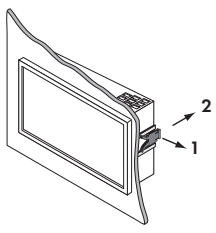
Mounting the instrument

1. insert the instrument into the panel cutout
2. insret the fixating sliders into side groves of the enclosure as shown
3. press the sliders tightly aginst the rear side of the panel

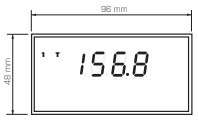


Removal of the instrument

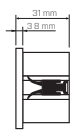
1. pry the rear end of the sliders away from the instrument's enclosure
2. slide the fixating sliders out of side groves of the enclosure as shown
3. remove the instrument from the panel cutout



Front view



Side view



Panel cut

Panel thickness 0,1 3,5mm

TECHNICAL DATA

MEASURING INPUT

INPUT	AC	Range	0...60 mV	1,2 kΩ	Input 4
			0...300 mV	1,2 kΩ	Input 4
			0...24 V	0,5 MΩ	Input 2
			0...50 V	1 MΩ	Input 1
			0...120 V	0,5 MΩ	Input 2
			0...250 V	1 MΩ	Input 1
			0...1 A	30 mV	Input 5
			0...5 A	150 mV	Input 5

INSTRUMENT'S ACCURACY

TK	50 ppm/°C
Accuracy	±0,3 % of the range + 1 digit
Rate	0,5...5 measurements/s
Overload capacity:	10x (t < 30 ms) - not for > 250 V and 5 A; 2x
Digital filtres	exponencialn filter, rounding
Functions	Hold - "freezing the measured value", Lock - blocking the control buttons, Tare (upon contact)
Exte nal inputs	1, with the possibility of assigning various functions in the instrument's menu
OM Link	Company communication interface for operating, setting and updating of instruments
Watch-dog	reset after 500 ms
Cal bration	at 25°C and 40 % r.v.

PROJECTION

Display	1999, red or green 7-segment LED, digit height 14 mm
Projection	0...1999
Decimal point	setting - in menu
Brightness	0%, 25%, 50%, 75%, 100% (selectable in the menu) or automatically at three steps Auto. H, Auto. M and Auto. L

COMPARATOR

Type	digital, menu selectable
Mode	Hysteresis, Once, Pulse
Limit	0...1999
Hysteresis	0...1999
Delay	0...99,9 s
Output	1x relay with a switch on contact (Form A), (250 VAC/30 VDC, 3 A)* 1x open collector, (30 VDC/100 mA)*
Relay	1/8 HP 277 VAC, 1/10 HP 125 V, Pilot Duty D300

* values given are for resistive load

POWER SUPPLY

	10...30 VDC/24 VAC, ±10 %, 3 VA, PF ≥ 0,4 I_{STR} < 45 A/1,1 ms, isolated

MECHANICAL PROPERTIES

Material	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions	96 x 48 x 30 mm
Panel cut out	92 x 44 mm

ENVIROMENTAL

Connection	terminal board, section < 1,5 mm^2
Stabilization period	15 minutes after switch on
Working temperature	-20°...60°C
Storage temperature	-20°...85°C
Cover	IP65 (front panel only, with the silicone gasket installed), rear of the instrument is open!
Provedení	security calss I
El. safety	EN 61010-1, A2
Dielectric strength	2,5 kVAC after 1 min between supply and input 4 kVAC after 1 min between supply and relay output
Insulation resistance*	for pollution degree II, measuring cat. III. power supply > 300 V (PI) input, output > 300 V (DI)
EMC	EN 61326-1 (Industrial area)

PI Primary insulation DI Double insulation

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