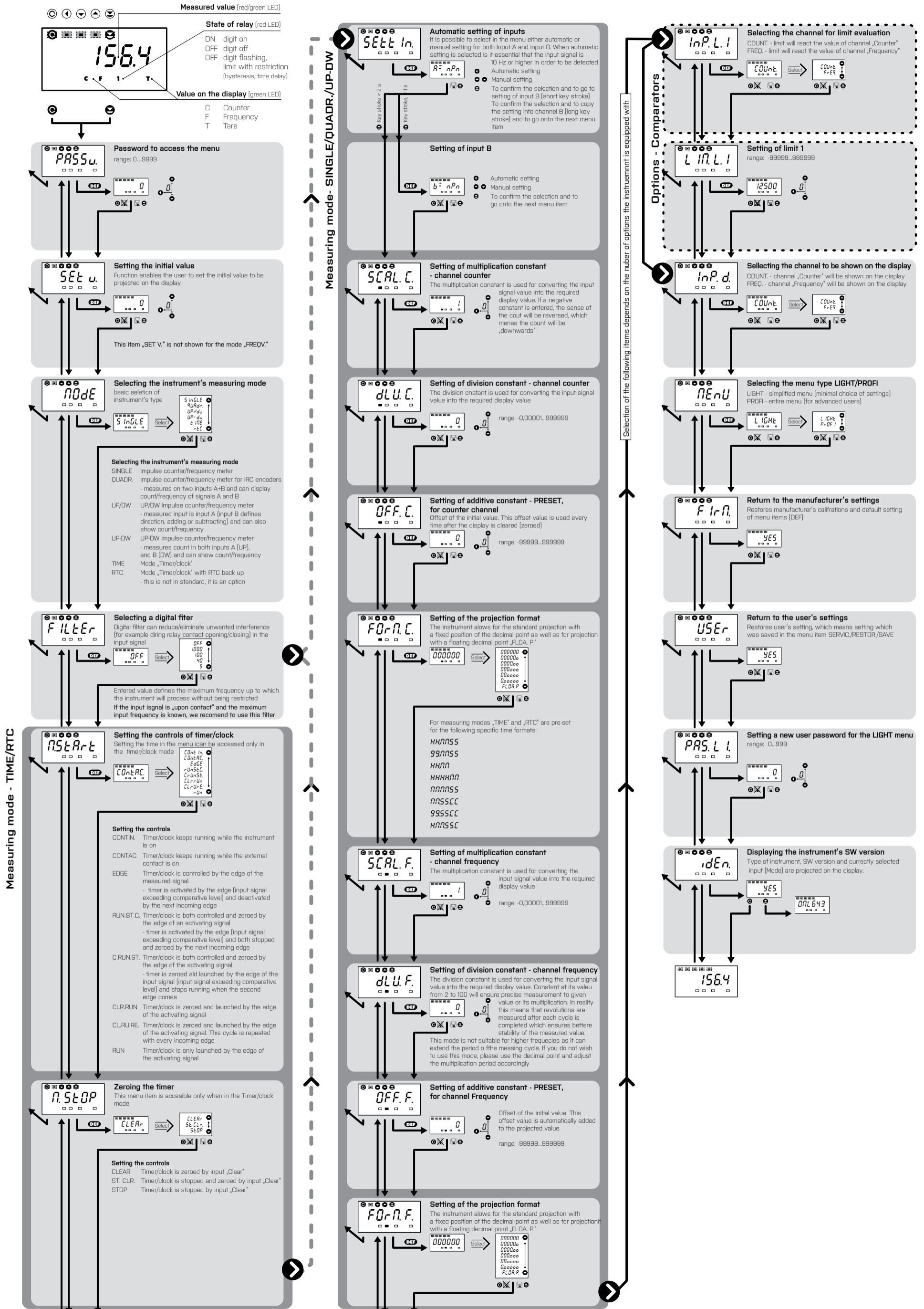
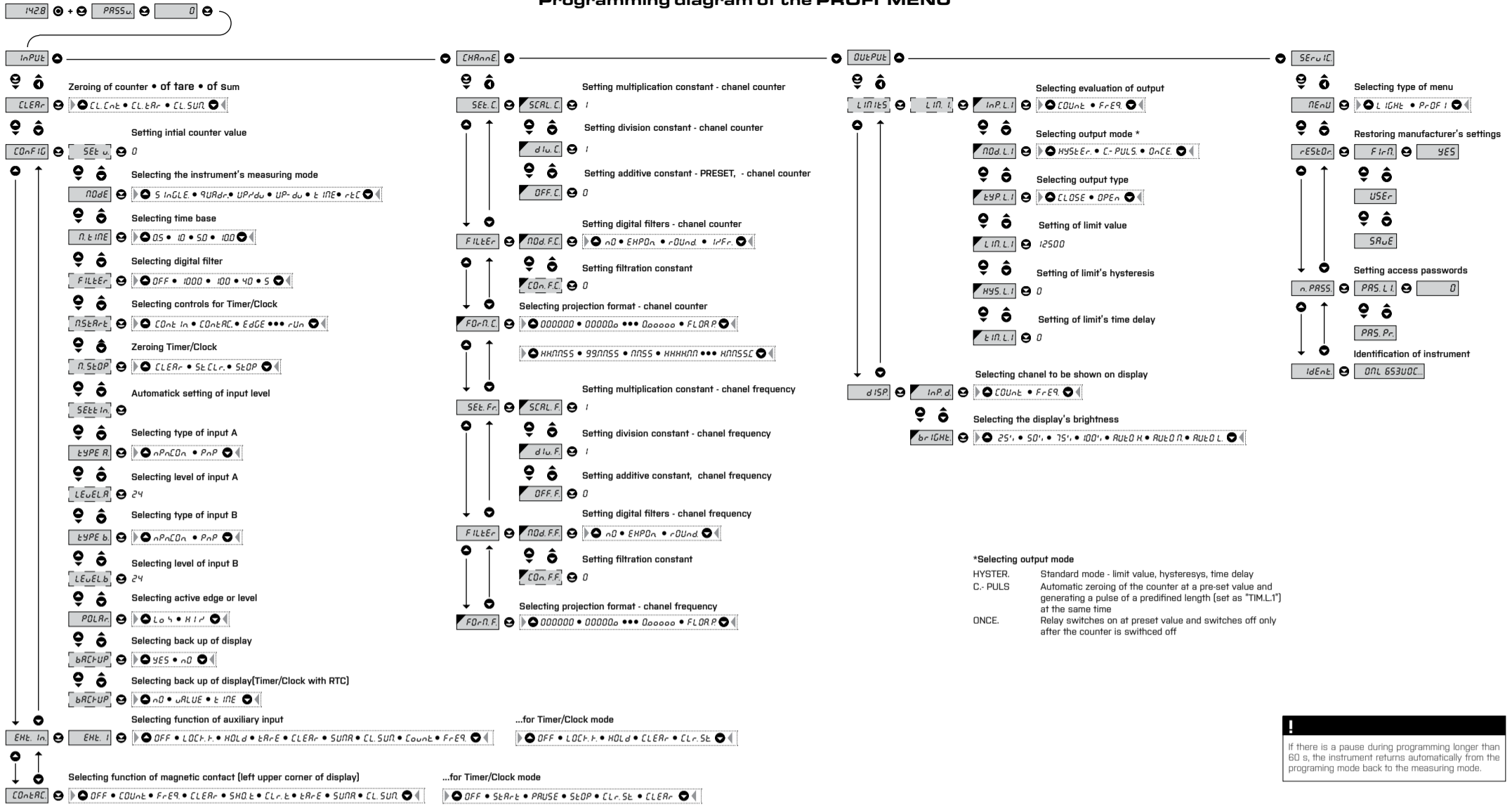


Programming diagram of the LIGHT MENU



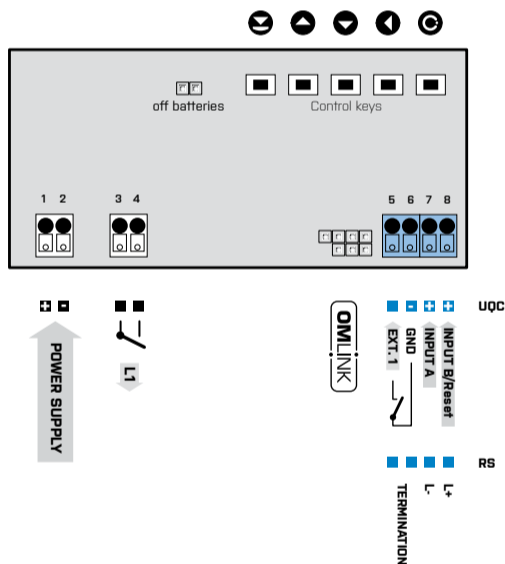
Programming diagram of the PROFI MENU



If there is a pause during programming longer than 60 s, the instrument returns automatically from the programming mode back to the measuring mode.

CONNECTING AND CONTROLLING OF INSTRUMENT

TECHNICAL DATA



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 (terminal E). Our instruments are extensively tested and they comply with relevant standards for use in industrial environment, however, adhering to the above mentioned measures is strongly advised.

In executions without galvanic isolated power supply please beware of ground loops! Terminals no. 2 and 6 are galvanic conneted.

CONNECTIONS	DESCRIPTION	CONNECTION
INPUT A	input signal < 60 V	GND + Input A
INPUT B	input signal < 60 V	GND + Input B/Zeroing

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)

CONTROLLING	POPIS
BY MAGNET	in the left upper corner the instrument can be controlled according to function selected in item "CONTAC."

MEASURING INPUT

Type	upon contact, TTL, NPN/PNP
Measurement	1x counter/frequency UP or DOWN 1x counter/frequency UP/DOWN 1x counter/frequency for IRC encoders 1x timer/clock - measuring range is selectable
Input frequency	0.1..50 kHz (Mode SINGLE) 0.1..20 kHz (Mode UP/DW) 0.1..20 kHz (Mode UP-DW) 0.1..20 kHz (Mode QUADR - frequency) 0.1..10 kHz (Mode QUADR - counter)
Input levels	9.7 - 14.4 - 19.2 - 23.9 - 28.7 - 33.5 - 38.3 V

INSTRUMENT'S ACCURACY

TK	50 ppm/°C
Accuracy	±0.01% of the range + 1 digit (frequency)
Time base	0.5/1/5/10 s
Multiplication constant	±0.00001...999999
Division constant	±0.00001...999999
Filtration constant	enables the user to select maximum valid frequency, which is processed [OFF/5...1000 Hz]
Data back-up	stores the measured value after the device has been switched off (EEPROM)
Digital filters	exponential filter, rounding up/down, 1/frequency, measuring only completed revolutions (division constant)
Functions	Hold - "freezing the measured value", Lock - blocking the control buttons, Tare, Summation - adding values after each working shift is completed (upon contact)
Controlling the instrument	by sliding a magnet (across the right lower corner of the bezel) this function can be selected in the PROFI menu, item "CONTAC" with the following selection: OFF/counter/frequency/zeroing/show tare/zero tare/summaton/zeroing of summation. When in mode Timer/Clock the list is: OFF/start/pause/stop/zeroing+start/zeroing.
External inputs	1, with the possibility of assigning various functions in the instrument's menu
RTC	keeps the internal clock running when the instrument's power supply is off. Battery powered (it is possible to switch off - jumper inside the instrument), min. life 1 year
Battery	Lithium cell CR 2032RV, 3V/220 mAh
OM Link	Company communication interface for operating, setting and updating of instruments
Watch-dog	reset after 500 ms
Calibration	at 25°C and 40% r.v.

PROJECTION

Display	999999, red or green 7-segment LED, digit height 14 mm
Projection	999999
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	999999
Hysteresis	0...999999
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

POWER SUPPLY

	10...30 VDC/24 VAC, ±10 %, 3 VA 10...30 VDC/24 VAC, ±10 %, 3 VA, isolated
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MECHANICAL PROPERTIES

Material	Noryl GFN2 SE1, incombustible UL 94 V-0
Dimensions	98 x 48 x 30 mm
Panel cut out	92 x 44 mm

ENVIRONMENTAL

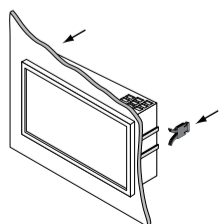
Connection	terminal board, section < 1.5 mm <sup>2</sup>
Stabilization period	15 minutes after switch on
Working temperature	-20°...60°C
Storage temperature	-20°...85°C
Cover	IP65 (front panel only), rear of the instrument is open!
Provedení	security class I
El. safety	EN 61010-1, A2
Dielectric strength	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

MOUNTING AND DIMENSIONS

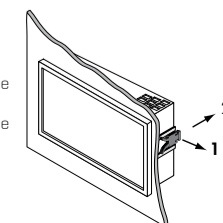
Mounting the instrument

1. insert the instrument into the panel cutout
2. insert the fixing sliders into side grooves of the enclosure as shown
3. press the sliders tightly against the rear side of the panel

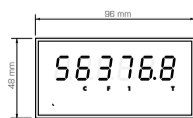


Removal of the instrument

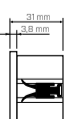
1. pry the rear end of the sliders away from the instrument's enclosure
2. slide the fixing sliders out of side grooves of the enclosure as shown
3. remove the instrument from the panel cutout



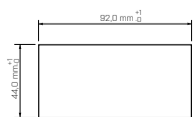
Front view



Side view



Panel cut



Panel thickness: 0.5..20 mm



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