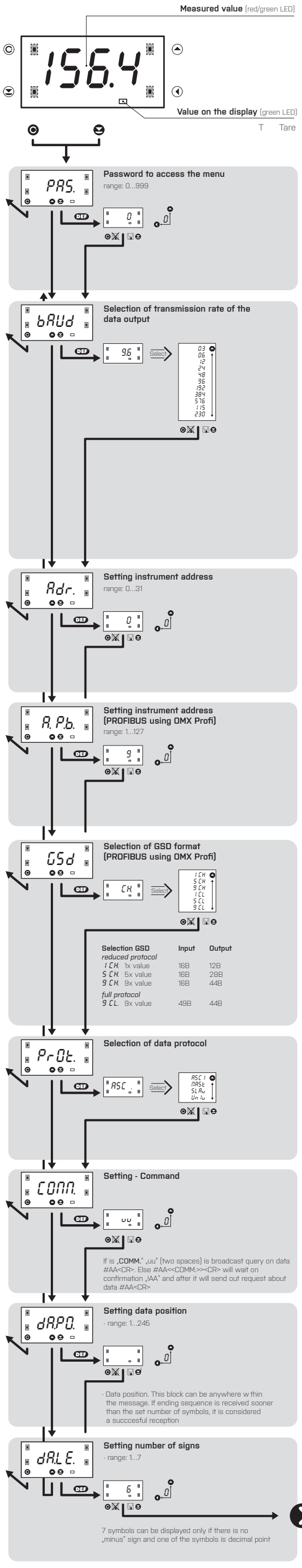
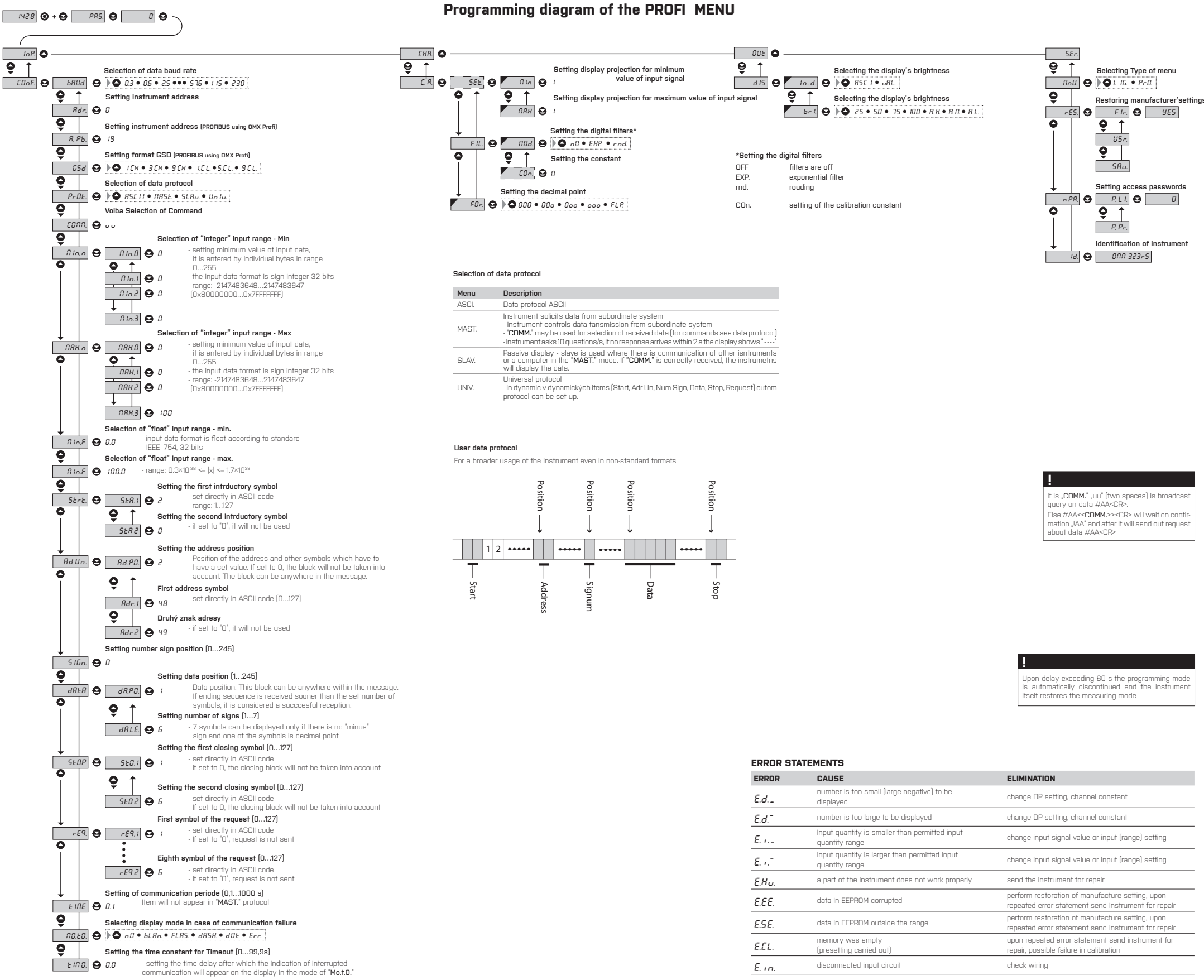
Programming diagram of the LIGHT MENU



Programming diagram of the PROFI MENU



*Setting the digital filters

OFF	filters are off
EXP.	exponential filter
rnd.	rouding
COn.	setting of the calibration constant

Selection of data protocol

Menu	Description
ASCI.	Data protocol ASCII
MAST.	Instrument solicits data from subordinate system - instrument controls data tansmission from subordinate system - "**COMM.**" may be used for selection of received data (for commands see data protoco) - instrument asks 10 questions/s, if no response arrives within 2 s the display shows "----"
SLAV.	Passive display - slave is used where there is communication of other isntruments or a computer in the "**MAST.**" mode. If "**COMM.**" is correctly received, the instrumetns will display the data.
UNIV.	Universal protocol - in dynamic v dynamických items (Start, Adr-Un, Num Sign, Data, Stop, Request) cutom protocol can be set up.

User data protocol

For a broader usage of the instrument even in non-standard formats

!

If is „**COMM.**" „uu" (two spaces) is broadcast query on data #AA<CR>.

Else #AA<<**COMM.**>><CR> wi l wait on confirmation „!AA" and after it will send out request about data #AA<CR>

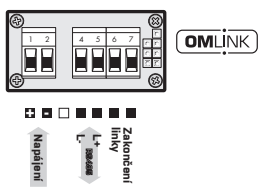
!

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

ERROR STATEMENTS

ERROR	CAUSE	ELIMINATION
E.d._	number is too small (large negative) to be displayed	change DP setting, channel constant
E.d.¯	number is too large to be displayed	change DP setting, channel constant
E. i._	Input quantity is smaller than permitted input quantity range	change input signal value or input (range) setting
E. i.¯	Input quantity is larger than permitted input quantity range	change input signal value or input (range) setting
E.HW.	a part of the instrument does not work properly	send the instrument for repair
E.EE.	data in EEPROM corrupted	perform restoration of manufacture setting, upon repeated error statement send instrument for repair
E.SE.	data in EEPROM outside the range	perform restoration of manufacture setting, upon repeated error statement send instrument for repair
E.CL.	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

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.

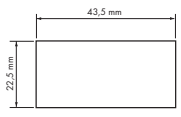
Input signal leads (measured value) should be separated from all power devices.

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.

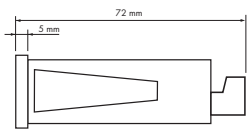
MOUNTING AND DIMENSIONS

Front view

Panel cut



Side view



Panel thickness: 0,5...20 mm

TECHNICAL DATA

INPUT

Type	RS 485
Protocol	ASCII, MODBUS-RTU, Master, Slave, Universal
Data format	8 bit + no parity + 1 stop bit
Rate	300...230 400 Baud
RS 485	isolated, two-way communication, addressing (max. 31 instruments)

INSTRUMENT'S ACCURACY

TC	50 ppm/°C
Data back-up	stores the measured value after the device has been switched off (EEPROM)
Digital filtres	exponencialn filter, rounding
External inputs	1, termination of commuication line RS 485
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.h.

PROJECTION

Display	9999, red or green 7-segment LED, digit height 9,1mm
Projection	9999
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

POWER SUPPLY

	10...30 VDC/24 VAC, ±10 %, 0,2...1,5 VA
	10...30 VDC/24 VAC, ±10 %, 0,2...1,5 VA, isolated

MECHANICAL PROPERTIES

Material	Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions	48 x 24 x 72 mm
Panel cut out	43,5 x 21,5 mm

ENVIROMENTAL

Connection	terminal board, section < 1,5 mm²
Stabilization period	15 minutes after switch on
Working temperature	-20°...60°C
Storage temperature	-20°...85°C
Cover	IP42 (front panel only)
Construction	security calss I
El. safety	EN 61010-1, A2
Dielectric strength	2,5 kVAC after 1 min between supply and input
Insulation resistance*	for pollution degree II, measuring cat. III. power supply > 300 V (PI)
EMC	EN 61326-1 (Industrial area)

*PI Primary insulation DI Double insulation

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