



SLC-94

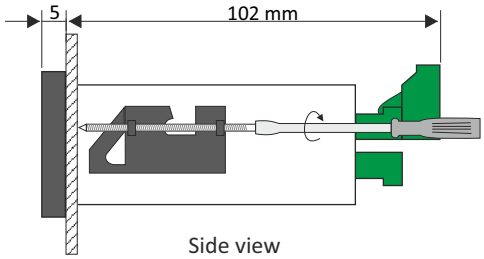
- timer and totalizer
- START/STOP pulse inputs
- 2 reset sources: manual or electronic
- 0 or 2 relay / OC outputs
- RS-485 / Modbus RTU
- wide range of precision and presentation formats
- ACCESS option - easy threshold modification

SLC-94 is designed for precision time (period) measurements, e.g. duration of time interval and mesurements of machine's operating time. Signals from push-buttons or contactors of control devices are connected to the terminals placed on back side of the counter. Properly programmed counter allows to measure time period between {START} and {STOP} signals. Other configuration allows to measure the activity time of {START} signal. In addition the measure can be started, stopped and cleared using local keyboard (on front of the device) or via RS-485 interface. Apart from basic function of time counting, totalizer is also available. Both counters are triggered and stopped simultaneously. Time counting is realised in range 0 ms to 999 99.9 hours. Build in two relay outputs allow use of this counter for control in many time depend processes.

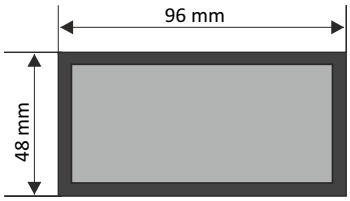
TECHNICAL DATA

Power supply **Power consumption**	19V ÷ 50V DC; 16V ÷ 35V AC or 85 ÷ 260V AC/DC or 12V AC/DC, all separated for 12V AC/DC, 85 ÷ 260V AC/DC and 16V ÷ 35V AC power supply: max. 4.5 VA; for 19V ÷ 50V DC: max. 4.5 W
Display	LED, 6 x 13 mm high, red, brightness adjustable in 8 steps
Displayed values range	depending on display format main timer: max. from 0 ms to 999 99.9 hours totalizer: max. from 0 sec. to 999 99.9 hours
Inputs	pulse, galvanically isolated: - start counting (START) - stop counting (STOP) - counter reset (RESET) - common (COM)
Input levels	low level: 0 V ÷ 1 V; high level: 10 V ÷ 30 V (12 mA @ 24V)
Inputs sampling frequency	≥ 10 kHz
Resolution	1 ms
Time between input signals edges	min. 500 µs
Binary outputs	0 or 2 x relay (REL) NO 5A/250V AC (resistance), 3A/250V AC (reactance) or OC I_{max}=30mA, U_{max}=30VDC, P_{max}=100mW
Power supply output	24V DC +5%, -10% / max. 100 mA, stabilized
Communication interface	RS-485, 8N1 and 8N2, 1200 bit/s ÷ 115200 bit/s, Modbus RTU (not galvanically isolated)
Data memory	non-volatile memory, EEPROM type
Operating temperature	0°C ÷ +50°C (standard), -20°C ÷ +50°C (option)
Storage temperature	-10°C ÷ +70°C (standard), -20°C ÷ +70°C (depending on option)
Protection class	IP 65 (front), optional integrated frame for panel cut-out sealing; IP 20 (case and connection clips)
Case	panel mounting; material: NORYL - GFN2S E1
Dimensions	case (WxHxD): 96 x 48 x 100 mm panel cut-out dimensions: 90.5 x 43 mm installation depth: min. 102 mm board thickness: standard 7 mm or other depending on used board thickness brackets (see Accessories)
Weight	220 g max.

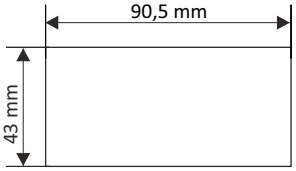
DIMENSIONS



Side view

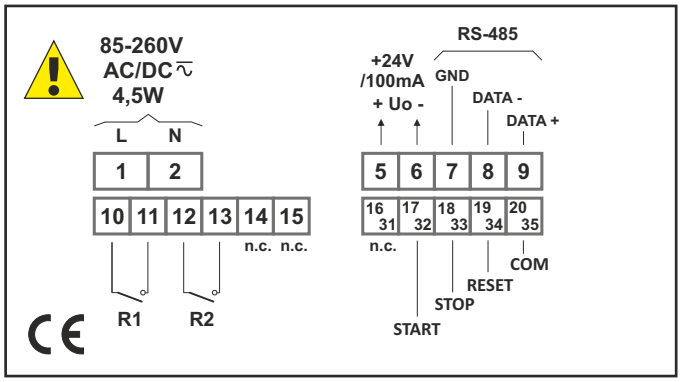


Case dimensions

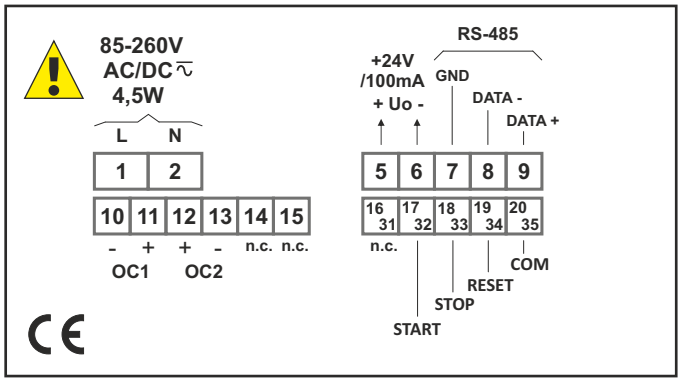


Panel cut-out dimensions

EXAMPLARY PIN ASSIGNMENT



version with 2 x REL



version with 2 x OC

ORDERING

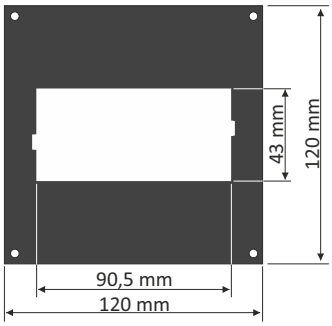
SLC-94-24XX-1-X-XX1

type of outputs:
00 : no output
21 : 2 x REL
22 : 2 x OC

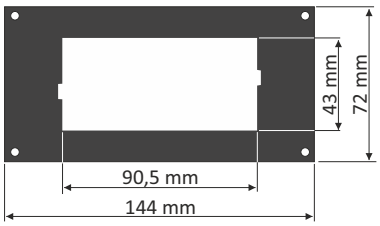
power supply:
3 : 24V AC/DC
4 : 85V ÷ 260V AC/DC
5 : 12V AC/DC

options:
00 : no options
01 : integrated frame for panel cut-out sealing
08 : operating temp. -20°C ÷ +50°C
0P : integrated frame for panel cut-out sealing + operating temp. -20°C ÷ +50°C

MOUNTING PLATES



SMP-99/94
to mount 96 x 48 mm
size unit in place
of 96 x 96 mm cut-out



SMP-147/94
to mount 96 x 48 mm
size unit in place
of 144 x 72 mm cut-out

BOARD THICKNESS BRACKETS / ADAPTORS



SPH-07
1 ÷ 7 mm board thickness
brackets (2 pcs)
standard included with device



SPH-45
1 ÷ 45 mm board thickness
brackets (2 pcs)

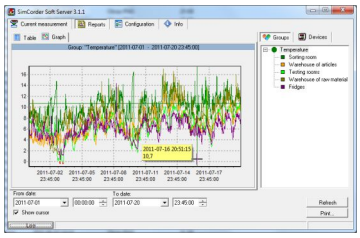


SPH-05
1 ÷ 5 mm board thickness
brackets (2 pcs)



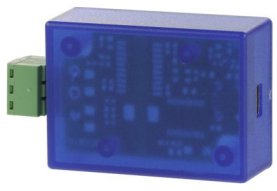
SRH-94
brackets for mounting devices
on DIN 35/7.5 or 15 rail (2 pcs)

SOFTWARE



SimCorder Soft is a visualisation application created to facilitate work with advanced networks of the SIMEX devices, for acquisition, visualisation, reporting, archiving, exporting and printing of measurement data from all network devices. You can download measurements from the devices automatically or on demand. There is a possibility of immediate notification about emergency states via SMS or e-mail, which will often allow to quickly resolve an arising problem while avoiding long and expensive stoppages. You can view the measurement data, emergency states and configuration via the internet at every time.

CONVERTERS



The **SRS-U4** converter is designed to connect a USB host to slave devices equipped with RS-485 interface. The PC with special software can be used as a host. The **SRS-U4** unit guarantees full galvanic isolation between USB and RS-485 circuits. The converter can work with any devices equipped with RS-485 interface and contains integrated circuit which supports USB 1.1 and USB 2.0 standards. The main purpose is connection of PC host computer with industrial data acquisition and visualisation systems based on RS-485 interface.
The **SRS-U4** can be also manufactured with DIN mounting adaptor.