

Type SBSL

Paperless Recorder for Indication, Registration and Telecommunication

Basic Features

- ▶ Low installation depth saves space and money
- ▶ Reliable data archiving with internal memory and separate CompactFlash card (mechanically locked)
- ▶ No data loss in event of power failure
- ▶ Integrated web server function allowing world-wide remote monitoring
- ▶ Data-transfer per CompactFlash-MemoryCard or USB-Stick

Technical Features

- ▶ 6 analogous inputs, 3 digital inputs max.
- ▶ Alarm Relay: 1 Relay with changeover contact
- ▶ Standard Relay: 3 Relays with NO contact for limit value messages (can be configured as NC contact)
- ▶ Supply voltage
100...230VAC(±10%)/24...48 VAC/DC
- ▶ Internal Memory 2 Mbyte Flash (non volatile), external Memory 512 MB with CF-Card
- ▶ 4,7" LC color graphic display

Construction and mode of action

The SBSL can be used in a range of applications throughout the process industries. It can be used to display and record critical parameters in production processes, ranging from quality and quantity monitoring in the water and wastewater industries through to recording temperatures in metal working and cold storage.

Data can be recorded on the SBSL's internal memory and CompactFlash card. Measured values are shown on the LC color graphic display. Up to 14 internal limit values can be assigned to the channels freely.

Limit value violations are recorded, and in addition, can be put out on up to 4 relays.



Recording: 1 s up to 12 h	Data medium: CF-card up to 512 MB
Input: Current, voltage and temperature can be directly connected	Network integration and remote data transmission: Ethernet, RS232/RS485 (modem) and USB
Installation depth: 171 mm	Display: LC-color graphic display

Input values (universal input)

- ▶ Measured variable
Current: 0...5/20 mA, 4...20 mA;
Voltage >1V: 0...5/10V, ±10V, ±30V;
Voltage ≤1V: ±1V, ±150mV; Resistance thermo-
meter (RTD): Pt100, Pt500, Pt1 000, Cu50, Cu53,
Cu100, Pt46, Pt50;
Thermocouples: Typ J, K, T, N, L, D, C, B, S, R
- ▶ Measured error: ± 0,1% of measuring range
- ▶ Scan rate: all channels within 100 ms
- ▶ Resolution: For all ranges: ≥ 18 Bit

Input values (digital input)

- ▶ Number of inputs: 3
- ▶ Input frequency: max. 25 Hz
- ▶ Pulse length: min. 20 ms
- ▶ Input current: max. 2mA
- ▶ Input voltage: max. 32 V
- ▶ Selectable function: Control input, ON/OFF message, pulse counter, operating time, message and operating time. Functions of the control input: start, recording, background illumination OFF, external memory cycle, operating lock, time synchronization.

Output values (auxiliary voltage output)

- ▶ Output voltage App. 24 V, max. 28 V
- ▶ Output current Max. 250 mA, short-circuit proof

Output values (Relay output)

- ▶ Alarm relay: 1 alarm relay with changeover contact
- ▶ Standard relay: 3 Relays with NO contact for limit value messages (can be configured as NC contact)
- ▶ AC contact load: max. 230 VAC/3 A or 50VDC/300 mA

Power supply

- ▶ Supply voltage 100...230VAC(±10%)/24...48 VAC/DC
- ▶ Power consumption 100...230V: max. 30 VA/24V: max. 24VA

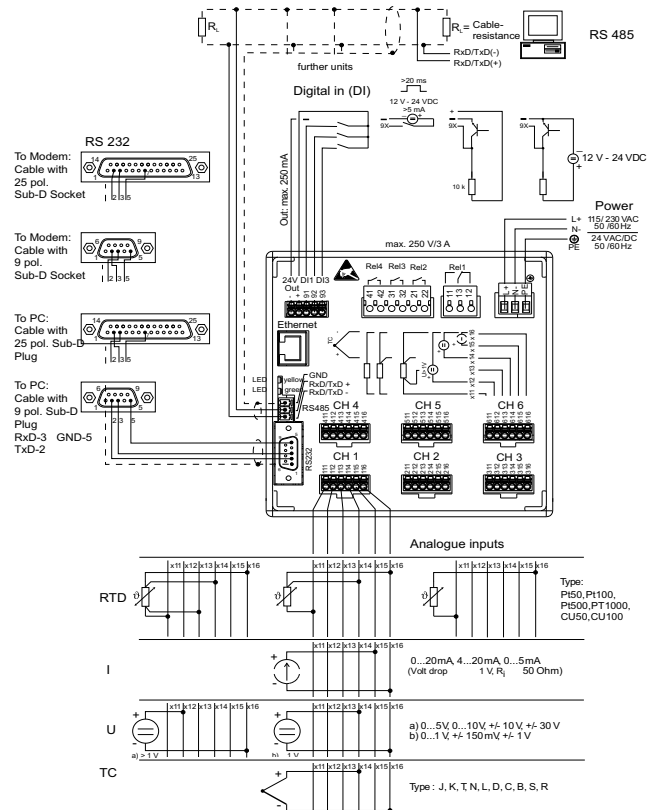
Connection data interface / communication

- ▶ Standard: USB port
- ▶ Advanced options: Ethernet interface; Serial RS232 /RS485 interface

Mechanical Construction

- ▶ Weight Panel-mounted version app. 700g(1.54lb)
- ▶ Materials Front frame/removable media door: plastic (ABS); Housing: fiber-glass reinforced plastic (PC); Protective cover in front of display: plastic PC

Electrical connection



Operating conditions

- ▶ Ambient temp.: 0...50°C
- ▶ Storage temp.: -20...+60°C
- ▶ Climate class As per IEC 66514-1:B1
- ▶ Protection class: front-panel IP 54, rear panel IP20
- ▶ EMC Interference immunity as per IEC 61326, Class B (industry) and NAMUR NE 21; Emission to IEC 61326: Class A (oper. in industrial environment)

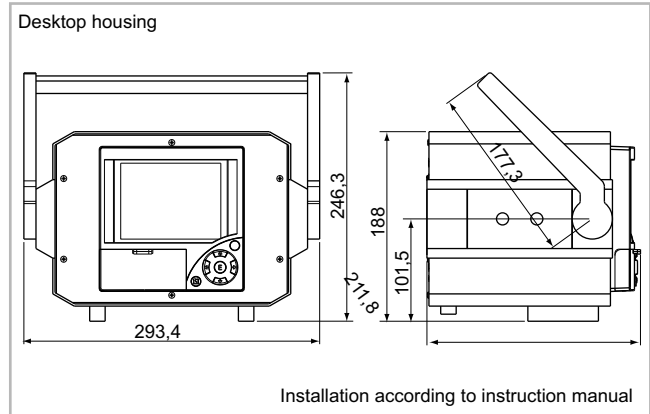
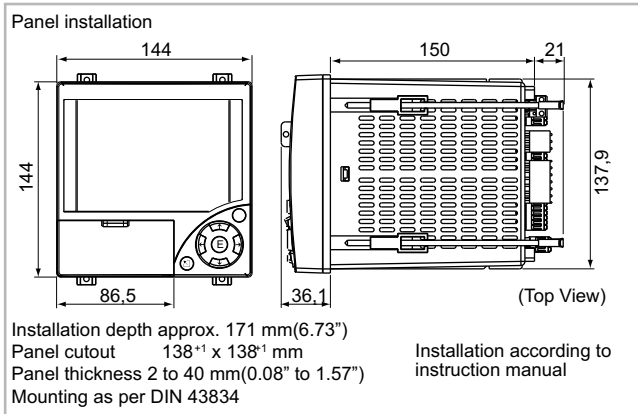
Human interface

- ▶ Display LC-color graphic displ. /120mm/4,7"
- ▶ Real time clock: Switchable summer-/normal time, power reserve: buffering via lithium battery, deviation < 10 min./year
- ▶ Languages german, engl., french., spanish, Ital.

Data Recording

- ▶ Selectable memory cycle: 1,2,3,4,5,10,15,20,30s; 1,2,3,4,5,10,30min;1,6,12h
- ▶ Internal Mem: Program memory: 2MB Flash (non-volatile), main memory: 2MB SRAM, data buffering and RTC-buffering with lithium cell (replace after 10 Years)
- ▶ External Memory: Supported CF memory cards: 32,64,128,256,512 MB

Information: 1 measured value/min. corresponds to 20 mm/h paper feed; internal memory: 28 days;CF-card 128 MB: 6.5 years; CF-card 256 MB: 13 years



Order Code

SBSL- - - - - - - - - - - **SE**

Input:

3x universal U, I, TC, RTD

A

6x universal U, I, TC, RTD

B

Power supply

100/230 VAC (± 10%)

1

24 VAC/DC

2

Interface

USB

A

USB + RS232/485 + Ethernet

B

Storage Medium

without CF Card

1

CF Card Industry standard, 256MB

3

CF Card Industry standard, 128MB

4

Housing

Panel 144x144mm, IP54, NEMA 2x

A

Desktop, Cable Plug Schuko

C

Field housing, IP 65, NEMA 4x

F

Languages

Central / Western Europe (de,en,fr,es,it,nl)

B

Eastern Europe (de,en,pl,ru,cz,sl)

D

peripheral equipment

Standard

A

Integration + Evaluation + Maths

C