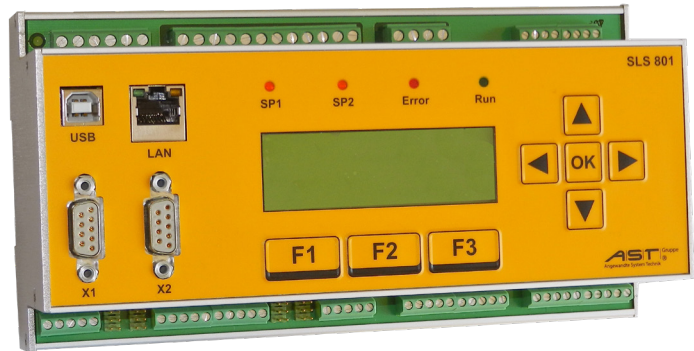


SLS 801.01 / SLS 801.02 Safety Switching Amplifier

Applications

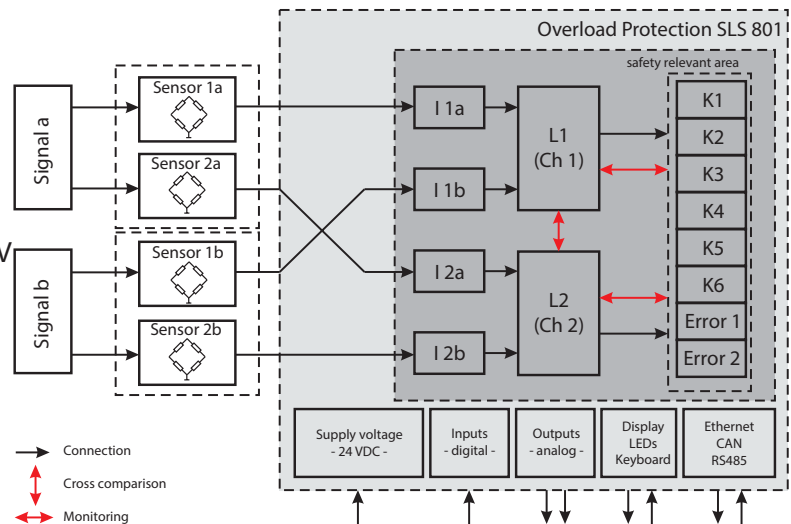
The amplifier with integrated overload protection SLS 801 is used in machines and systems for monitoring and comparing the output signal. The control system is built with 100% redundancy as well as diversity for the critical safety function. Exceeding programmable signal limits will be generating digital fault signals.



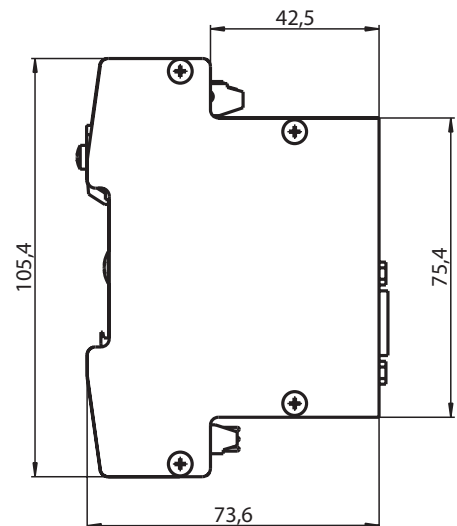
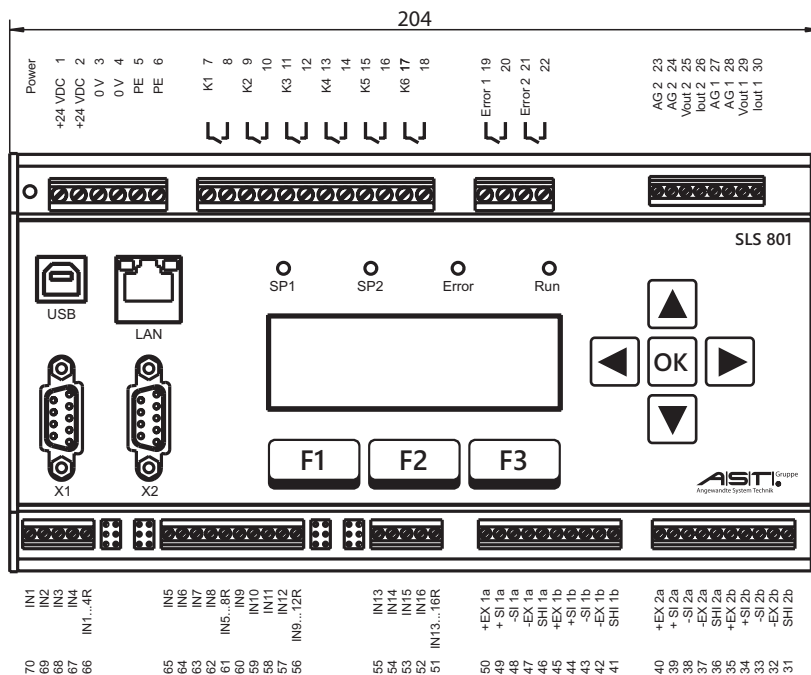
Features

- Protection: EN ISO 13849-1: available for performance level PLd
- Sensor inputs: 2x2 Strain gauge Sensors or 2x2 4...20mA-Sensors (also 2-wire)
- Digital inputs: 16 channels optically isolated
- Analog outputs: 2x 4...20mA or 2x 0-10V
- Output control panel: 8x DC1: 24V/2A
- Interfaces:
LAN
X1: RS485 / RS232 optional
X2: CAN

Principle Overview



Dimensions/ Wiring Code



Specifications

Sensor Inputs		SLS 801.01 for DMS-Sensors	SLS 801.02 for 4 ... 20mA-Sensors
Input signal range (+Si/-Si)		-5.0 ... +5.0mV/V	4mA ... 20mA
Impedance range	Ω	Bridge resistance 350 ... 1000	Load resistor: 22
Excitation voltage (+Ex/-Ex)	VDC	5.0 respectively 3.3	24 ± 10%
Conversation rate ADU	Sps	480	480
Supply Voltage		LED display	
Operating voltage	VDC	18 ... 36	
Maximum power consumption	W	approx. 15	
Terminal block, wire size (maximum)	mm ²	1.5	
Switching Inputs IN 1 ... 16		LED display	
Opto coupler groups 4 x 4		"direct" or "+24VDC" or "0V"	
Return lines per jumper "IN__R"		1.0	
Terminal block, wire size (maximum)	mm ²	1.0	
Switching Outputs K1 ... 6 and Error 1 ... 2		LED display	
Guided contacts		DC1: 24V/2A	
Switching voltage/ contact current		60mW ... 50W(VA)	
Switching power		80	
Datarate	1/ s	100.000	
Electrical lifetime	cycles	> 10 ⁶	
Mechanical lifetime	cycles	1.5	
Terminal block, wire size (maximum)	mm ²	1.5	
Analog Outputs		LED display	
2x current output / max. load resistance	mA/ Ω	4mA ... 20mA/ 350Ω	
OR			
2x voltage output signal / minimum load	V/ kΩ	0V ... 10V/ 2kΩ	
Datarate	1/ s	20	
Terminal block, wire size (maximum)	mm ²	1.0	
Digital Interfaces		RJ45 / parameterization	
Ethernet		9-pin SUB-D	
X1: RS 485 alternatively RS 232		9-pin SUB-D	
X2: CAN			
Load spectrum recorder - LSR		D - theoretical use	
Input values	h	S - Start value consumed use	
Time base		1/3600	
Output values	h	indicator in the display	
Display / Keyboard		4 lines LED display, 16 characters per line	
Display		7 LED status indicators	
LED		Keypad: cross cursor, three function keys F1 ... F3	
Keyboard			
Environmental Conditions		Metal Housing for DIN-Rail	
Operating temperature range	°C	- 20 ... +60, rel. humidity < 95% at 40°C	
Storage temperature range	°C	- 25 ... +70, rel. humidity < 95% at 40°C	
EMI resistance		DIN EN 61000-6-2	
EMI transmission		DIN EN 55011-B	
Vibration resistance		DIN EN 60068-2-6	
Shock resistance		DIN EN 60068-2-27/-29	
Construction		Metal Housing for DIN-Rail	
Weight	kg	1	
Dimensions (W x H x D)	mm	102 x 105 x 205	
Mounting		on DIN-rail TS 35	
Environmental protection EN 60529		IP 40	

Order Example

Type code	description
SLS 801.01	Overload protection SLS 801 for strain gauge sensors
SLS 801.02	Overload protection SLS 801 for for 4 ... 20mA-sensors