SWITCH AMPLIFIER

HIGHLIGHTS:

- 1 or 2 channel version
- Safe galvanic isolation between input / output / auxiliary voltage
- Functional safety up to SIL2 EN61508
- Inputs for switching contacts, Namur initiators, or optocouplers

TS 125 und TS 225

Switch amplifier

General:

Switch amplifiers of the series TS 125 and TW 255 are used in switch cabinets for the conversion and isolation of digital switching signals, as well as in explosion-prone areas. The devices are available in one- or two-channel versions.
Passive sensors, such as switching contacts, Namur initiators, or passive electronic outputs of third-party devices, can be connected to the intrinsically safe inputs. The TS125 series in 12.5 mm wide carrier rail housing offers relay outputs with output make circuit. The TW225 series in 22.5 mm wide carrier rail housing offers relay outputs with changeover function. The plug-in terminal strips enable simple and time-saving wiring. The configuration is also quick and easy with the front DIP switches.

Specifications:

Wide-range mains:	20 ... 125 V DC and 20 ... 250 V AC, (47 ... 63 Hz), max.1.5 W
Auxiliary voltage:	24 V DC +/-15 % max. 1.5 W
Test voltage:	3kV AC between input / output / auxiliary voltage
Working temperature:	-10 ... +60 °C
Storage temperature:	-20 ... +80 °C
Air humidity:	10 ... 90 % (non-condensing)
Measuring inputs (in accordance with EN60947-5-6 Namur)	
Open circuit voltage:	approx. 8 V
Short circuit voltage:	approx. 8 mA
Switching points:	inactive <= 1.2 mA, active >= 2.1 mA, hyst. < > 0.5 mA
Error recognition:	Wire break: <0.2 mA, ahort circuit: >7 mA
Relay outputs:	
Switching voltage:	<250 V AC <2 A <500 VA, <125 V DC <0.2 A <25 W, <30 V DC <2 A <60 W
Switching frequency:	max. 5 Hz
Delay:	max. 30 ms
Housing	
Dimensions (W x D x H):	TS125: 12,5 x 114 x 108 mm, TS225: 22,5 x 114 x 108 mm
Protection rating:	IP20
Terminals:	0.2 ... 2.5 mm², AWG 24 ... 14, removable coded terminals
Explosion protection:	specific data on request
Functional safety:	SIL2 in accordance with EN61508

TS - 1 - 2 - 3

Greisinger		
1.	**Device version**	
	125L	Housing width 12.5 mm, Relay NO contacts, Auxiliary voltage 24 V DC +/- 15 %
	125M	Housing width 12.5 mm, Relay NO contacts, Wide-range mains adapter
	225M	Housing width 22.5 mm, Relay changeover contacts, Wide-range mains adapter
2.	**Explosion protection**	
	00	Installation of the device TV125L in Zone 2 permitted, in accordance with ATEX ignition protection rating ‚n'
	Ex	With installation of the devices outside the Ex area: Inputs intrinsically safe in accordance with ATEX ignition protection rating ‚ia' for Zones 0 and 20. The device TS125L may be installed in Zone 2 in accordance with ATEX ignition protection rating ‚ic'.
3.	**Number of channels**	
	1	Single channel
	2	Dual channel
	F	Single channel with additional error relay or parallel relay

LIMIT VALUE SWITCH

HIGHLIGHTS:

- Universal input for unit signals,
- Pt100, thermocouple, potentiometer, switchable via front-side DIP switch
- 2-colour illuminated scales for limit value adjustment, colour depends on switch status

colour depends on switch status

GS 125

Limit value switch

General:

Limit value switches of the series GS125 are used in switch cabinets for process monitoring or for simple process regulation. Both temperatures and derived variables such as voltage, current and resistance are used as control signals. In the process, 1 or 2 limit values can be monitored. For assignment of the measuring unit to the scale labelling, 24 transparent adhesive labels are supplied. They can be glued between the adjusting wheels on the front panel.

Specifications:

Measurement inputs	Switchable via DIP switch
Unit signals:	0/2 ... 10 V, 0/4 ... 20 mA
Potentiometer:	500 Ω ... 20 kΩ
Pt100:	-50 ... +50 °C, 0 ... 50 °C, 0 ... 100 °C, 0 ... 150 °C, 0 ... 200 °C, 0 ... 300 °C, 0 ... 500 °C
Thermocouple:	FeCuNI, Type J: 0 ... 250 °C, 0 ... 500 °C NiCrNi, Type K : 0 ... 500 °C, 0 ... 750 °C, 0 ... 1000 °C PtRhPt, Type S: 0 ... 1500 °C
Wide-range power supply	
24 V power supply	
Rated voltage:	253 V AC
Test voltage:	3kV AC between input/relay output/auxiliary voltage
Working temperature:	-10 ... +60 °C
Storage temperature:	-20 ... +80 °C
Air humidity:	10 ... 90 % (non-condensing)
Relay outputs	
Switching voltage:	<250 V AC <2 A <500 VA, <125 V DC <0.2 A <25 W, <30 V DC <2 A <60 W
Switching frequency:	max. 5 Hz
Switching hysteresis:	approx. 1 %
Functional safety:	SIL2 in accordance with EN61508 (specific data available on request)
Setpoint setting:	Skalengenauigkeit: 2 %
Actual value output:	4 ... 20 mA, Bürde max. 120 Ω, keine galvanische Trennung zum Eingangssignal

Accessories and spare parts:

PRVK
Power Rail supply terminal

GS - 1 - 2 - 3 - 4

Greisinger		
1.	**Device version**	
	125L	Power supply 24 V DC +/- 15 %
	125LP	Power supply 24V DC +/-15% with carrier rail bus connection
	125M	Wide-range power supply 20 ... 125 VDC / 20 ... 253 V AC
2.	**Limit value contacts**	
	1	1 relay (changeover contact)
	2	2 relays (universal connection)
	3	2 relays (potential-free n.o. contacts)
3.	**Actual value output**	
	0	not provided
	1	Output 4 ... 20 mA
4.	**Options**	
	01	No options
	01	Push-in terminals (plug-in)