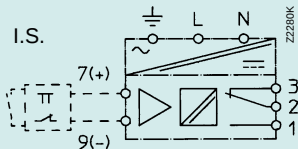
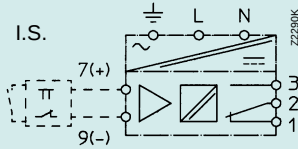
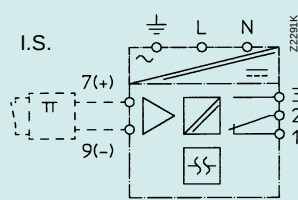


Selection table

Version	Description	Voltage	Ordering code	Weight [kg]
 8510 Relay repeater	Working current (non-inverting)	115 V; AC 230 V; AC	8510/112-06-13-100 8510/112-06-14-100	1,2
	Closed circuit current (inverting)	115 V; AC 230 V; AC	8510/112-06-13-200 8510/112-06-14-200	1,2
	Closed circuit current (inverting) with open-circuit monitoring	115 V; AC 230 V; AC	8510/112-06-13-300 8510/112-06-14-300	1,2

Technical data (see also page 11/83)

Fitted device	9250/01-40 oder 9250/01-60		
Explosion protection	EEx de [ia] IIC		
Test certificate	8510: BVS 95.D.2025 U 9250: PTB Nr. EX-89.C.2025		
Schematic	8510/112 – 06 – 1. – 100 8510/112 – 06 – 1. – 200 8510/112 – 06 – 1. – 300	  	Working current (non-inverting) Closed circuit current (inverting) Closed circuit current (inverting) with open- circuit monitoring
Terminals for flexible wires solid wires	0,75 ... 1,5 mm ² 0,75 ... 2,5 mm ²		
Ambient temperature Storage Operation U _C	– 60° C ... + 80° C – 20° C ... + 40° C		

Continuation →

Technical data (Continuation)	
Mains supply	
Rated voltage U_N	115 V, AC; 230 V, AC
Rated current I_N	≤ 45 mA; Capacitive
Max. power consumption	1 VA
Control input	to NAMUR or DIN 19234 Ex i control signal appearing at input is transmitted to output where it triggers output relay
Safety-related data	
max. voltage U_m	10,5 V
max. current I_m	32 mA
max. power P_m	84 mW
max. capacitance C_a	IIC: 510 nF IIB: 2000 nF
max. inductance L_a	IIC: 5 mH IIB: 5 mH
Insulation voltage U_M	250 V
Current for ON I_E	$\geq 2,1$ mA
Current for OFF I_E	$\leq 1,2$ mA
Switching current	1,65 mA
Hysteresis	0,2 mA
Internal resistance	1k Ω
No-load voltage	$\leq 8,2$ V
Short-circuit current	$\leq 8,2$ mA
Output	Relay output
Switching capacity	AC 250 V; AC 100 VA DC; L/R = 200 ms ≤ 24 V; DC 220 V; DC ≤ 48 W 22 W
Switching frequency	≤ 15 Hz
Switching delay	
ON $\rightarrow$ OFF	≤ 10 ms
OFF $\rightarrow$ ON	≤ 10 ms
Contact life	
electrical	$\geq 6 \times 10^5$ Operations (220 V / 2 A; $\cos \varphi = 1$)
mechanical	$\geq 7 \times 10^5$ Operations
Back-up fuse for contacts	4 A, 250 V

EEx de Enclosure Modular System

Relay Repeater 115 and 230 V AC

Series 8510

Selection table

Version	Description			Ordering code	Weight
	Function	Output			[kg]
 D4567P 8510 Relay repeater	Working current (non-inverting)	1 channel	2 changeover contacts per channel	8510/122-06-2□-100	1,6
		2 channel	1 changeover contact per channel	8510/122-06-3□-110	
	Closed-circuit current (inverting)	1 channel	2 changeover contacts per channel	8510/122-06-2□-200	
		2 channel	1 changeover contact per channel	8510/122-06-3□-220	
	Working current (non-inverting) with short-circuit monitoring	1 channel	2 changeover contacts per channel	8510/122-06-2□-300	
		2 channel	1 changeover contact per channel	8510/122-06-3□-330	
	Closed-circuit current (inverting) with open-circuit monitoring	1 channel	2 changeover contacts per channel	8510/122-06-2□-400	
		2 channel	1 changeover contact per channel	8510/122-06-3□-440	
Add. to ordering code:			Voltage	115 V; AC 230 V; AC	34

Technical data (see also page 11/83)

Fitted device		
1 channel	9251/01-40;9251/01-60	
2 channel	9251/02-40;9251/02-60	
Explosion protection	EEx de [ia] IIC	
Test certificate	8510: BVS 95.D.2025 U 9251: PTB Nr. EX-87.B.2131	
External terminals for flexible wires	0,75 ... 1,5 mm ²	
solid wires	0,75 ... 2,5 mm ²	
Ambient temperature storage	- 40° C ... + 70° C	
operation at U _C	- 20° C ... + 40° C	
Mains supply		
1 channel	8510/122-06-2-...	8510/122-06-2-...
2 channel	8510/122-06-2-...	8510/122-06-2-...
Rated voltage U _N	115 V, AC	
Rated current I _N at U _N	≤ 115 mA	≤ 230 mA
Voltage range	100 ... 140 V	190 ... 255 V
Frequency range	48 ... 62 Hz	48 ... 62 Hz
Max. power consumption	2,5 VA	2,5 VA
Control input	to NAMUR or DIN 19234 Ex i control signal appearing at input is transmitted to output where it triggers output relay	
Safety-related data		
max. voltage U _m	10,5 V	
max. current I _m	32 mA	
max. power P _m	84 mW	
max. capacitance C _a	II C: 510 nF	II B: 2000 nF
max. inductance L _a	II C: 5 mH	II B: 5 mH
Insulation voltage U _M	250 V	
Current for ON I _E	≥ 2,1 mA	
Current for OFF I _E	≤ 1,2 mA	
Switching current	1,65 mA	
Hysteresis	0,2 mA	

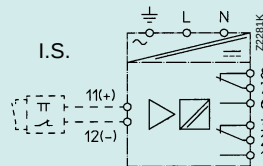
Continuation →

Technical data (Continuation)

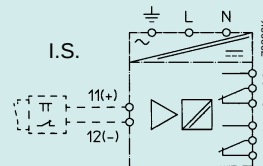
Internal resistance	1 k Ω
No-load voltage	$\leq 8,2$ V
Short-circuit current	$\leq 8,2$ mA
Output	
Switching current	DC; L/R = 50 ms ≤ 24 V; DC 220 V; DC ≤ 2 0,1 A AC ($\cos \varphi = 0,7$) 250 V; AC 2 A AC 11 ($\cos \varphi = 0,7$) 230 V; AC 2 A
Switching frequency	≤ 15 Hz
Switching delay ON $\rightarrow$ OFF OFF $\rightarrow$ ON	≤ 10 ms ≤ 10 ms
Contact life electrical mechanical	$\geq 6 \times 10^5$ Operations (220 V/2 A; $\cos \varphi = 1$) $\geq 5 \times 10^7$ Operations
Back-up fuse for contacts	4 A, 250 V
Schematics	

Single channel

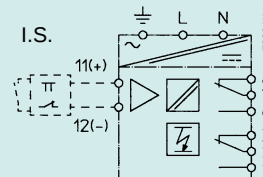
8510/122-06-2.-100



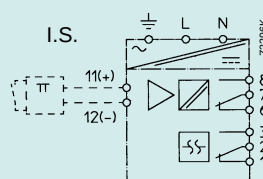
8510/122-06-2.-200



8510/122-06-2.-300

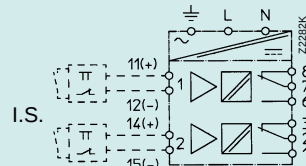


8510/122-06-2.-400



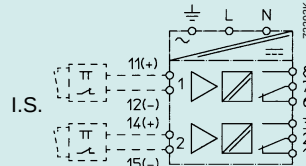
Double channel

8510/122-06-3.110



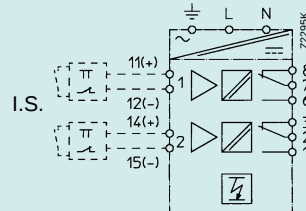
Working current
(non-inverting)

8510/122-06-3.220



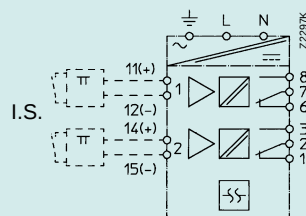
Closed-circuit
current
(inverting)

8510/122-06-3.330



Working current
(non-inverting),
with short-circuit
monitoring

8510/122-06-3.-440



Closed-circuit
current (inverting)
with open-circuit
monitoring