

SWITCHING AMPLIFIER 521

ELECTRONIC ACCESSORY |
DISPLAY AND CONTROL DEVICES



APPLICATION

The switching amplifier is preferably used for binary signal transmission of water meters.

The switching amplifier is frequently used as pulse extension relay for fast running processes. It can be used as contact protection relay or non-bounce relay when being triggered by a volt-free contact transmitter (reed switch).

If required, the two binary inputs can be added to one output-channel (via turn switch).

FEATURES

- Snap-bar case version
- Triggered on choice by contact transmitter, infrared transmitter and two-wire primer (NAMUR)
- Each output is a opto-coupler with one no-contact
- Two volt-free outputs, solid state relay, no-contact
- Galvanically isolated measurement and supply circuits
- Adjustable impulse period
- 3 different pulse length, adjustable via turn switch
- Pulse-addition adjustable via turn switch
- Power supply 20 ... 250 V AC/DC

TECHNICAL DATA

SWITCHING AMPLIFIER 521

Supply voltage	Wide range power supply 20 ... 250 V AC/DC, 100 mA ... 20 mA
Display	LED display for output pulses
Storage temperature	°C -40 ... +70
Operating temperature	°C 0 ... +55
Output - type	Solid stay relay (SSR), output volt-free
Output - load	Max. 230 V / 100 mA ~
Min. input pulse duration	6 ms
Max. input pulse duration	Infinite
Outputs	Can be switched over via turn switch; S ₁ = Channel 1, S ₂ = Channel 2
Inputs	Initiator 571 / 572; Reed switch 570, IR transmitter 571, PV14
Housing - type	Snap-on housing
Housing - fixing	Mounting rail to EN 50022 (35 x 7.5)
Protection class - housing	IP 20
Protection class - terminal	IP 10
Weight	g 200

Separate working outputs (S_x = Channel 1 or Channel 2)

S_x = 0 | Output_x = Input_x --> direct transmission / permanent contact

S_x = 2 | Output_x = Input_x with 0.1 sec output pulse 

S_x = 3 | Output_x = Input_x with 0.3 sec output pulse 

S_x = 4 | Output_x = Input_x with 2 sec output pulse 

Input-Addition (Channel 1 + 2) --> Output_x (max. up to 100 pulses per channel in memory)

S_x = 9 | Output_x = E1 + E2 with 0.1 sec output pulse 

S_x = A | Output_x = E1 + E2 with 0.3 sec output pulse 

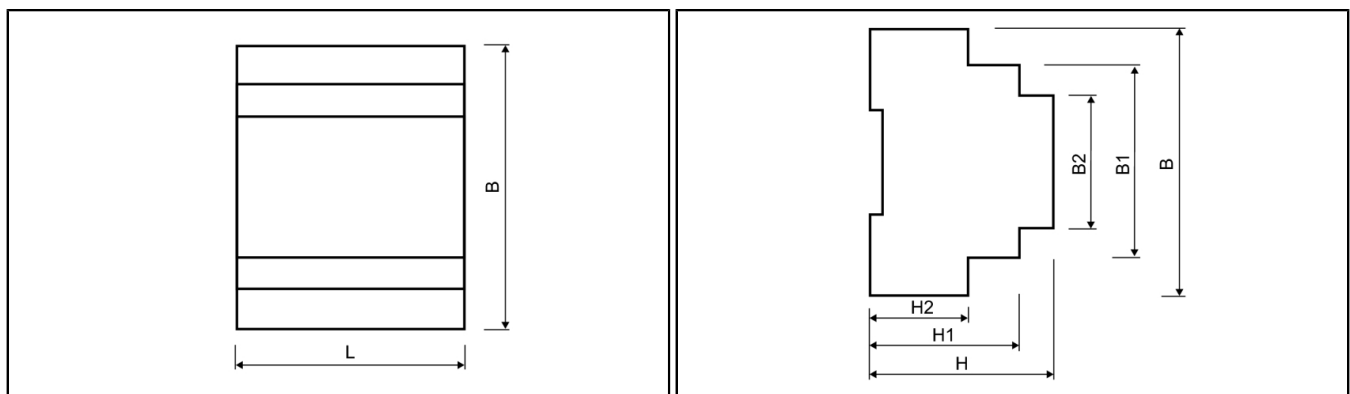
S_x = B | Output_x = E1 + E2 with 2 sec output pulse 

TECHNICAL DATA INPUTS

SWITCHING AMPLIFIER 521

Initiator 572, 573	8 mA (short-circuit-current), 1.6 mA (switching point)
Reed switch 570	8 mA (short-circuit-current), 1.6 mA (switching point)
IR transmitter 571	5 mA (short-circuit-current), 1.0 mA adjustable by front trimmer (switching point)
PV14	5 mA (short-circuit-current), 1.0 mA (switching point)

DIMENSIONS



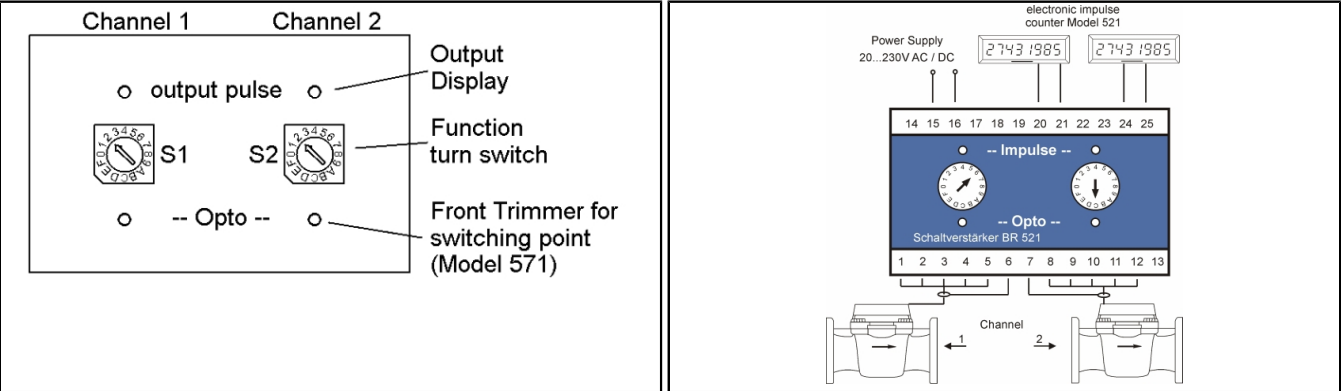
SWITCHING AMPLIFIER 521

Length	L	mm	72
Width	B	mm	91
Width	B1	mm	65
Width	B2	mm	46
Height	H	mm	62
Height	H1	mm	51
Height	H2	mm	33

ORDER REFERENCES

SWITCHING AMPLIFIER 521	
Remark	Switching Amplifier (Snap Bar) (SSR) 20 ... 250 V AC/DC
Article number	521 000 16

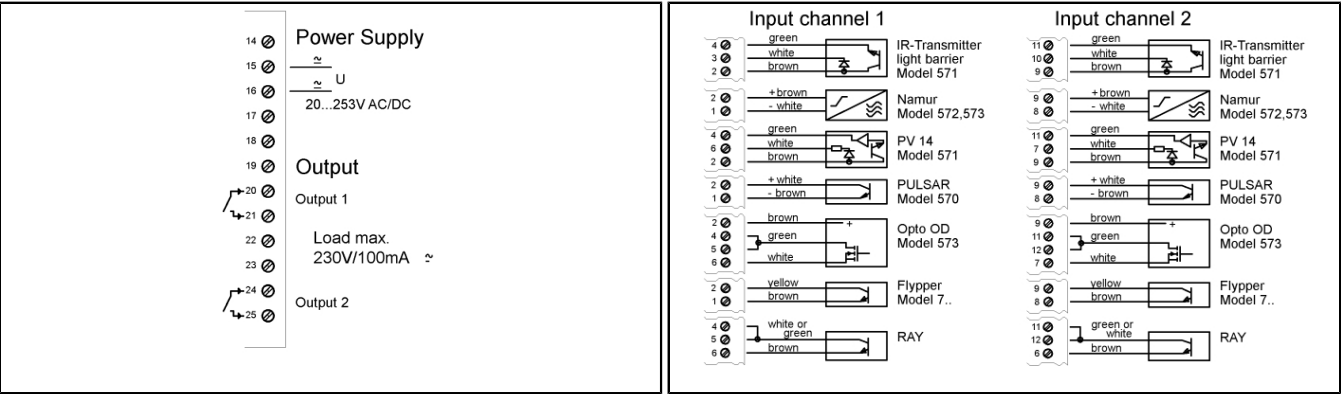
OPERATION TURN SWITCH | CONNECTIONS



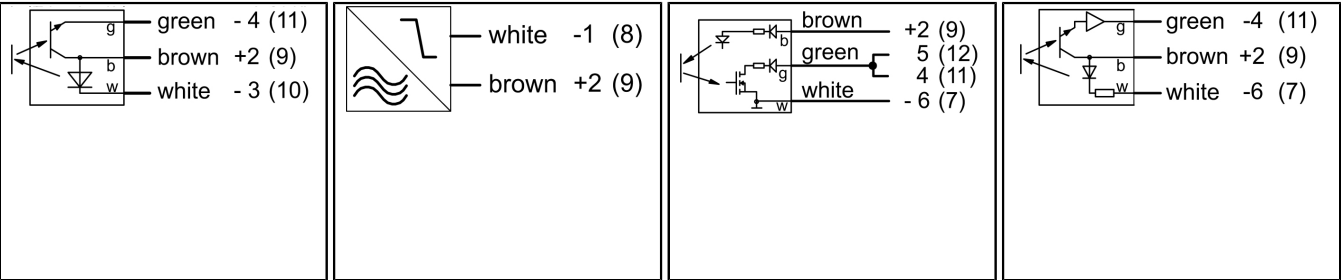
Operation turn switch

Connections

PIN ASSIGNMENT



CONNECTION OF SENSORS



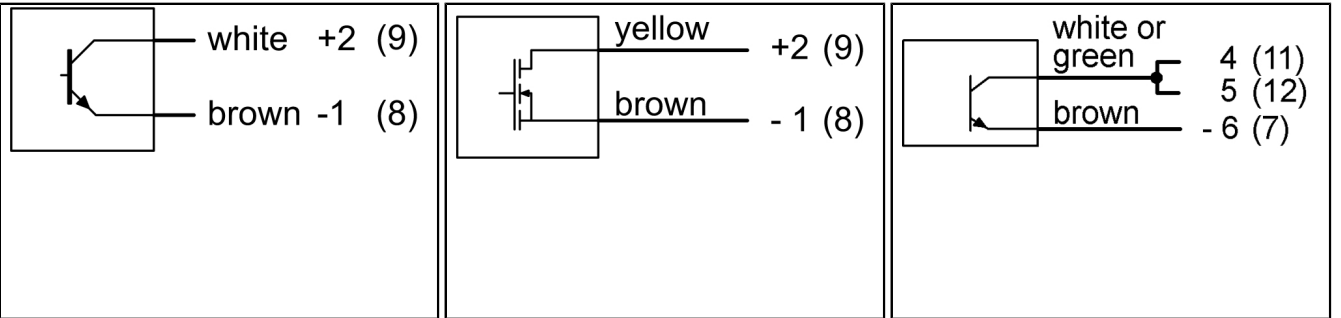
Reflex light barrier (571)

Namur (572, 573)

Open drain (573)

Reflex light barrier PV 14

CONNECTION OF SENSORS / METERS



Pulsar

Electronic counter module

RAY

Economic Actor Information

Applicable regulation and legal obligations for products may change.

DIEHL METERING monitors applicable regulation to ensure their products comply at the date of placing on the market.

Each economic actor making products available on the market thereafter must independently keep informed about the current applicable regulation.

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