

Transmitter for Digital Signals Type G 3420 5501

Dupline®
Fieldbus Installationbus



- 8-channel transmitter
- Optoisolated contact or NPN transistor inputs
- H4-housing
- For mounting on DIN-rail (EN 50022)
- LED-indications for supply, input activated and Dupline® carrier
- AC or DC power supply
- Channel coding by GAP 1605

Product Description

Dupline® transmitter for external supply. Detects the states of 8 volt free contacts and signals from devices with open collector NPN transistor output, e.g. inductive proximity switch EI ... N...

Ordering Key

G 3420 5501 024

Type: Dupline®
H4-housing
Transmitter
No. of channels
Input type
Power supply

Type Selection

Supply	Ordering no. 8 channels Contact/NPN transistor
24 VAC	G 3420 5501 024
115 VAC	G 3420 5501 115
230 VAC	G 3420 5501 230
10 to 30 VDC	G 3420 5501 800

Input Specifications

Inputs	8 contacts or NPN transistors
AC version:	
Open loop voltage	7 VDC
Short-circuit current	3 mA
DC version:	
Open loop voltage	10 to 30 VDC
Short-circuit current	≤ 8 mA
Operating time for signal "1"	≤ 1 pulse train + 30 ms
Operating time for signal "0"	≤ 1 pulse train + 30 ms
Contact resistance	≤ 100 Ω
Cable length	≤ 25 m
Dielectric voltage	≥ 200 VAC (rms)
Inputs - Dupline®	

Supply Specifications

Power supply AC types	Overvoltage cat. III (IEC 60664)	Supply - Inputs	≥ 4 kVAC (rms)
Rated operational voltage through term. 21 & 22	230 VAC, ±15% (IEC 60038)	Power supply DC types	Overvoltage cat. III (IEC 60664)
115	115 VAC, ±15% (IEC 60038)	Rated operational voltage	800
024	24 VAC, ±15%	Ripple	10 to 30 VDC (ripple included)
Frequency	45 to 65 Hz	Reverse-polarity protection	≤ 3 V
Voltage interruption	≤ 40 ms	Rated operational current	yes
Rated operational power	typ. 2.5 VA	Power dissipation	≤ 100 mA
Power dissipation	≤ 4 W	Inrush current	≤ 3.5 W
Rated impulse withstand voltage	230	Rated impulse withstand voltage	≤ 1 A
115	4 kV	Dielectric voltage	800 V
024	2.5 kV	Supply - Dupline®	≥ 200 VAC (rms)
Dielectric voltage	800 V	Supply - Inputs	None
Supply - Dupline®	≥ 4 kVAC (rms)		

General Specifications

Power ON delay	typ. 2 s
Indication for	
Supply ON	LED, green
Input activated	LED, red
Dupline® carrier	LED, yellow
Environment	
Degree of protection	IP 20
Pollution degree	3 (IEC 60664)
Operating temperature	-20° to +50°C (-4° to +122°F)
Storage temperature	-50° to +85°C (-58° to +185°F)
Humidity (non-condensing)	20 to 80%
Mechanical resistance	
Shock	15 G (11 ms)
Vibration	2 G (6 to 55 Hz)
Dimensions	
Material	
(see Technical Information)	H4-Housing
Weight	250 g

Mode of Operation

8-channel transmitter with 8 inputs for contacts or NPN transistors. An external power supply is not required. Each input may be coded individually by means of the code programmer GAP 1605. For details, please refer to the respective data sheet.

When a contact is used to short-circuit terminals 24 and 25 (input 1), the transmitter transmits on the channel coded for input 1.

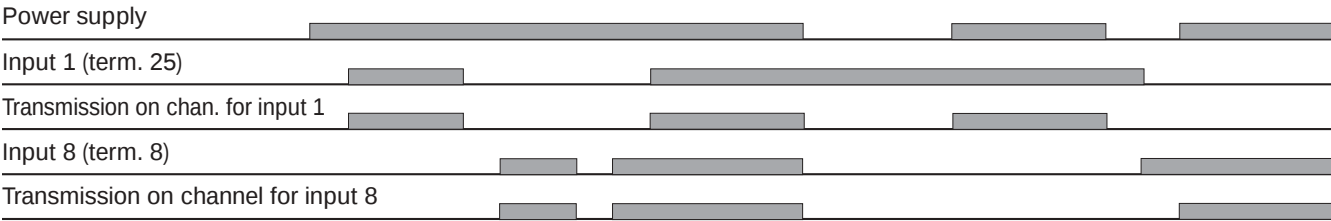
When an NPN open collector transmitter between terminals 24 and 28 (input 4) pulls the input low (< +1 V), the transmitter transmits on the channel coded for input 4.

Whenever the contact of the input is opened, the transmitter stops transmitting on the respective channel.

- Notes:
- Terminals 4 and 24 are internally connected.
 - Terminals 4 and 24 are common (minus).

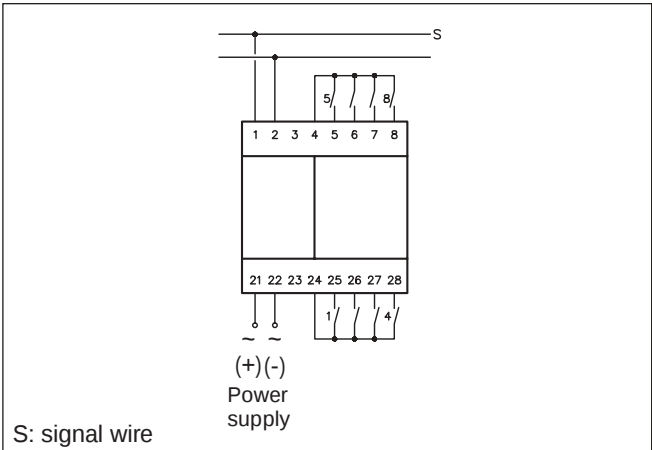
Input connections	
Input 1:	terminals 24 & 25
Input 2:	terminals 24 & 26
Input 3:	terminals 24 & 27
Input 4:	terminals 24 & 28
Input 5:	terminals 4 & 5
Input 6:	terminals 4 & 6
Input 7:	terminals 4 & 7
Input 8:	terminals 4 & 8

Operation Diagram

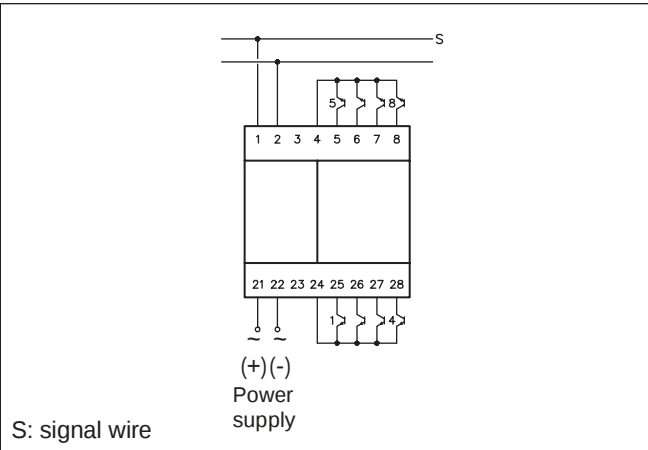


Wiring Diagrams

8 channels G 3420 5501 ...
Contact input

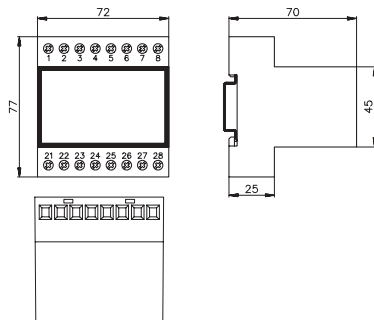


8 channels G 3420 5501 ...
NPN transistor input



Dimensions (mm)

H4-housing



Accessories

For further information, see "Accessories".