Dupline® Field- and Installationbus Transmitter for Digital Signals Type G 3420 5502

- **8-channel transmitter**
- **8 opto-isolated voltage inputs: 6 to 265 VAC/DC**
- **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 signals from 8 devices with voltage outputs of up to 265 VAC/DC, e.g. the presence of mains supply to machinery.

Ordering Key

G 3420 5502 024

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

Type Selection

Supply	Ordering no. 8 channels 6 to 265 VAC/DC
24 VAC	**G 3420 5502 024**
115 VAC	**G 3420 5502 115**
230 VAC	**G 3420 5502 230**
10 to 30 VDC	**G 3420 5502 800**

Input Specifications

Inputs	8 voltage-type
Input voltage range V_{BB}	6 to 265 VAC/DC
Frequency range on AC	45 to 400 Hz
Input voltage for signal "0"	≤ 1 VAC/DC
Input voltage for signal "1"	≥ 6 VAC/DC
Input current for signal "1"	Typ. 10 mA (V_{BB} 10-18 VDC) lower at other input voltages
Input current limiter	Yes
Inrush current	≤ 450 mA (at V_{BB} = 265 VDC)
Operating time for signal "1"	≤ 1 pulse train + 3 ms
Operating time for signal "0"	≤ 1 pulse train + 50 ms
Cable length	≤ 25 m
Dielectric voltage	
Inputs - Dupline	≥ 4 kVAC (rms)

Supply Specifications

Power supply AC types		Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. 21 & 22	230	230 VAC, ±15%
	115	115 VAC, ±15%
	024	24 VAC, ±15%
Frequency		45 to 65 Hz
Voltage interruption		≤ 40 ms
Rated operational power		Typ. 4.5 VA
Rated impulse withstand voltage	230	4 kV
	115	2.5 kV
	024	800 V
Dielectric voltage		
Supply - Dupline		≥ 4 kVAC (rms)
Supply - Inputs		≥ 4 kVAC (rms)
Power supply DC type		Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. 21 & 22	800	10 to 30 VDC (ripple included)
Ripple		≤ 3 V
Reverse-polarity protection		Yes
Power consumption		< 1 W
Inrush current		≤ 1 A
Rated impulse withstand voltage		800 V
Dielectric voltage		
Supply - Dupline		≥ 200 VAC (rms)
Supply - Inputs		≥ 4 kVAC (rms)

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General Specifications

Power ON delay	Typ. 2 s
Power OFF delay	≤ 1 s
Output OFF delay	
upon loss of Dupline carrier	≤ 20 ms
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 voltage inputs (6 to 265 VAC/DC).

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 voltage (6 to 265 VAC/DC) is applied to terminal 25 (input 1), the transmitter transmits on the channel coded for input 1.

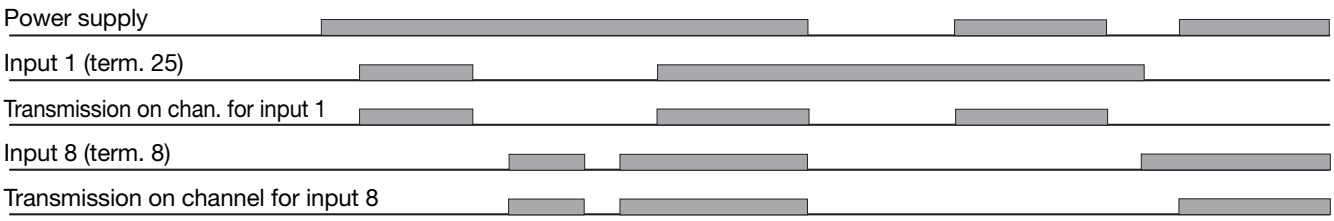
Whenever the voltage of the input is < 1 V, the transmitter stops transmitting on the respective channel.

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

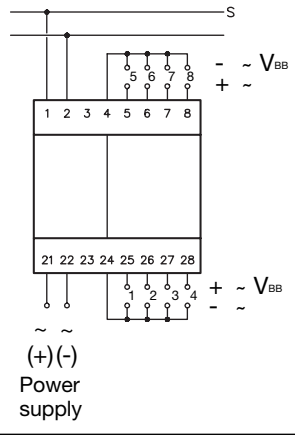
Input connections

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 Diagram



S: signal wire

Accessories

DIN-rail	FMD 411

For further information, see "Accessories".