

# Receiver for Digital Signals

## Types G 3430 1149, G 3430 2249, G 3430 4443



- 1-, 2- or 4-channel receiver
- Galvanically separated SPDT or SPST relay outputs
- Load: 1 x 10 A/250 VAC  
2 x 10 A/250 VAC  
4 x 5 A/250 VAC
- H4-housing
- For mounting on DIN-rail (EN 50022)
- LED-indications for supply, outputs and Dupline® carrier
- AC or DC power supply
- Channel coding by GAP 1605 (see the data sheet on GAP 1605 for details)

### Product Description

Dupline® receiver. SPDT relay outputs for control of 1 or 2 loads of up to 250 VAC/10 A or SPST relay outputs for control of 4 loads of up to 250 VAC/5 A.

### Ordering Key

**G 3430 4443 024**

Type: Dupline® \_\_\_\_\_  
 H4-housing \_\_\_\_\_  
 Receiver \_\_\_\_\_  
 No. of channels \_\_\_\_\_  
 Output type \_\_\_\_\_  
 Power supply \_\_\_\_\_

### Type Selection

Supply	Ordering no. 1 channel 10 A/250 VAC	Ordering no. 2 channels 10 A/250 VAC	Ordering no. 4 channels 5 A/250 VAC
24 VAC	G 3430 1149 024	G 3430 2249 024	G 3430 4443 024
115 VAC	G 3430 1149 115	G 3430 2249 115	G 3430 4443 115
230 VAC	G 3430 1149 230	G 3430 2249 230	G 3430 4443 230
10 to 30 VDC	G 3430 1149 800		
15 to 30 VDC		G 3430 2249 824	G 3430 4443 824

### Output Specifications

	G 3430 1149 ... (1 channel)	G 3430 2249 ... (2 channels)	G 3430 4443 ... (4 channels)
<b>Outputs</b>	1 SPDT relay	2 SPDT relays	4 SPST relays
Isolated in groups of	1 x 1	2 x 1	4 x 1
Contact ratings (AgCdO)	μ (micro gap)	μ (micro gap)	μ (micro gap)
Resistive loads	AC 1 10 A/250 VAC (2500 VA) DC 1 1 A/250 VDC (250 W) or 10 A/25 VDC (250 W)	10 A/250 VAC (2500 VA) 1 A/250 VDC (250 W) 10 A/25 VDC (250 W)	5 A/250 VAC (1250 VA) 0.25 A/250 VDC (62 W) 5 A/25 VDC (125 W)
Inductive loads	AC 15 2.5 A/230 VAC DC 13 5 A/24 VDC	2.5 A/230 VAC 5 A/24 VDC	2.5 A/230 VAC 5 A/24 VDC
Mechanical lifetime	≥ 30 x 10 <sup>6</sup> operations	≥ 30 x 10 <sup>6</sup> operations	≥ 30 x 10 <sup>6</sup> operations
Electrical lifetime (at max load)	AC 1 ≥ 2.5 x 10 <sup>5</sup> operations	≥ 2.5 x 10 <sup>5</sup> operations	≥ 2.0 x 10 <sup>6</sup> operations
Operating frequency	≤ 7200 operations/h	≤ 7200 operations/h	≤ 7200 operations/h
Dielectric voltage	≥ 4 kVAC (rms)	≥ 4 kVAC (rms)	≥ 4 kVAC (rms)
Outputs - Dupline®			
<b>Response time</b>	1 pulse train	1 pulse train	1 pulse train

## Supply Specifications

Power supply		Overvoltage cat. III (IEC 60664)		Power supply DC types		Overvoltage cat. III (IEC 60664)	
Rated operational voltage through term. 21 & 22	230 115 024	230 VAC ± 15% (IEC 60038)	115 VAC ± 15% (IEC 60038)	Operational voltage through term. 21 & 22	800 824	10 to 30 VDC (ripple included)	15 to 30 VDC (ripple included)
Frequency		24 VAC ± 15%		Ripple		≤ 3 V	
Voltage interruption		45 to 65 Hz		Reverse-polarity protection		Yes	
Rated operational power		≤ 40 ms		Rated operational current			
G 3430 1149 024/115/230		Typ. 3.5 VA		G 3430 1149 800		≤ 150 mA	
G 3430 2249 024/115/230		Typ. 4.5 VA		G 3430 2249 824		≤ 150 mA	
G 3430 4443 024/115/230		Typ. 3.5 VA		G 3430 4443 824		≤ 100 mA	
Power dissipation				Power dissipation			
G 3430 1149 024/115/230		≤ 6.5 W		G 3430 1149 800		≤ 5.5 W	
G 3430 2249 024/115/230		≤ 8 W		G 3430 2249 824		≤ 5.5 W	
G 3430 4443 024/115/230		≤ 8 W		G 3430 4443 824		≤ 6 W	
Rated impulse withstand voltage	230 115 024	4 kV		Inrush current		≤ 1 A	
		2.5 kV		Rated impulse withstand voltage		800 V	
		800 V		Dielectric voltage			
Dielectric voltage				Supply - Dupline <sup>®</sup>		≥ 200 VAC (rms)	
Supply - Dupline <sup>®</sup>		≥ 4 kVAC (rms)		Supply - Outputs		≥ 4 kVAC (rms)	
Supply - Outputs		≥ 4 kVAC (rms)					

## General Specifications

Output OFF delay	
Upon loss of Dupline carrier	20 ms
Power ON delay	Typ. 2 s
Power OFF delay	≤ 1 s
Indication for	
Supply ON	LED, green
Output ON	LED, red (one per output)
Dupline <sup>®</sup> 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 informations)	H4-housing
Weight	
G 3430 1149, G 3430 2249	250 g
G 3430 4443	300 g

## Mode of Operation

### 1-channel receiver with change-over contact output

The output is coded by means of the code programmer GAP 1605.

The output is normally OFF. When a transmitter coded to the selected channel is activated, the output turns on and remains on until the respective channel becomes deactivated. The default setting is such that upon loss of Dupline<sup>®</sup> carrier the output goes off.

### 2-channel receiver with two change-over contact outputs

Each output may be coded individually by means of the code programmer GAP 1605. The outputs are normally off.

When a transmitter coded to the selected channel is activated, the output turns on and remains on until the respective channel becomes deactivated. The default setting of the module is such that upon loss of Dupline<sup>®</sup> carrier **all** outputs go off.

### 4-channel receiver with four normally open contact outputs

Each output may be coded individually by means of the code programmer GAP 1605. The default setting of the module is such that upon loss of Dupline<sup>®</sup> carrier **all** outputs go off.

For changing the default setting, please refer to the data-sheet on GAP 1605.

## Operation Diagram

