

# Receiver for Digital Signals Types GAD 1111, GAD 1213



- 1- or 2-channel receiver
- Galvanically separated SPDT relay outputs
- Load: 1 x 10 A/250 VAC  
2 x 10 A/250 VAC
- D-housing
- Plug-in type module
- LED-indications for supply, outputs and Dupline carrier
- AC or DC power supply
- Channel coding by GAP 1605

## Product Description

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

## Ordering Key

**GAD 1213 024**

Type: Dupline®  
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
24 VAC	GAD 1111 024	GAD 1213 024
115 VAC	GAD 1111 115	GAD 1213 115
230 VAC	GAD 1111 230	GAD 1213 230
10 to 30 VDC	GAD 1111 800	GAD 1213 824
15 to 30 VDC		

## Output Specifications

	GAD 1111 ... (1 channel)	GAD 1213 ... (2 channels)
<b>Outputs</b>	1 SPDT relay	2 SPDT relays
Isolated in groups of	1 x 1	2 x 1
Contact ratings (AgCdO)	μ (micro gap)	μ (micro gap)
Resistive loads	10 A/250 VAC (2500 VA)	10 A/250 VAC (2500 VA)
AC 1	1 A/250 VDC (250 W)	1 A/250 VDC (250 W)
DC 1	10 A/25 VDC (250 W)	10 A/25 VDC (250 W)
or	2.5 A/230 VAC	2.5 A/230 VAC
Inductive loads	5 A/24 VDC	5 A/24 VDC
AC 15	≥ 30 x 10 <sup>6</sup> operations	≥ 30 x 10 <sup>6</sup> operations
DC 13		
Mechanical lifetime	≥ 2.5 x 10 <sup>5</sup> operations	≥ 2.5 x 10 <sup>5</sup> operations
Electrical lifetime	≤ 7200 operations/h	≤ 7200 operations/h
(at max load)		
Operating frequency		
Dielectric voltage	≥ 2 kVAC (rms)	≥ 2 kVAC (rms)
Outputs - Dupline®		
<b>Response time</b>	1 pulse train	1 pulse train

## Supply Specifications

Power supply AC types		Overvoltage cat. III (IEC60664)	Power supply DC types		Overvoltage cat. III (IEC60664)
Rated operational voltage through pins A1 & A2	230 115 024	230 VAC ± 15% (IEC 60038) 115 VAC ± 15% (IEC 60038) 24 VAC ± 15%	Operational voltage through pins A1 & A2	800 824	10 to 30 VDC 15 to 30 VDC
Frequency		45 to 65 Hz	Ripple		≤ 3 V
Voltage interruption		≤ 40 ms	Reverse-polarity protection		Yes
Rated operational power			Rated operational current		
GAD 1111 024/115/230		typ. 3.0 VA	GAD 1111 800		≤ 120 mA
GAD 1213 024/115/230		typ. 3.5 VA	GAD 1213 824		≤ 150 mA
Rated impulse withstand voltage	230 115 024	4 kV 2.5 kV 800 V	Inrush current		≤ 1 A
Dielectric voltage			Rated impulse withstand voltage		800 V
Supply - Dupline		≥ 2 kVAC (rms)	Dielectric voltage		≥ 200 VAC (rms)
Supply - Outputs		≥ 2 kVAC (rms)	Supply - Dupline®		≥ 2 kVAC (rms)
			Supply - Outputs		

## General Specifications

Output OFF delay upon loss of Dupline® carrier	20 ms
Power ON delay	typ. 2 s
Indication for	
Supply ON	LED, green
Output ON	LED, red (one per output)
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)	D-Housing
Weight	
AC types	200 g
DC types	125 g

## Mode of Operation

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

For details, please refer to datasheet on GAP 1605.

The output is coded 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® carrier the output goes off.

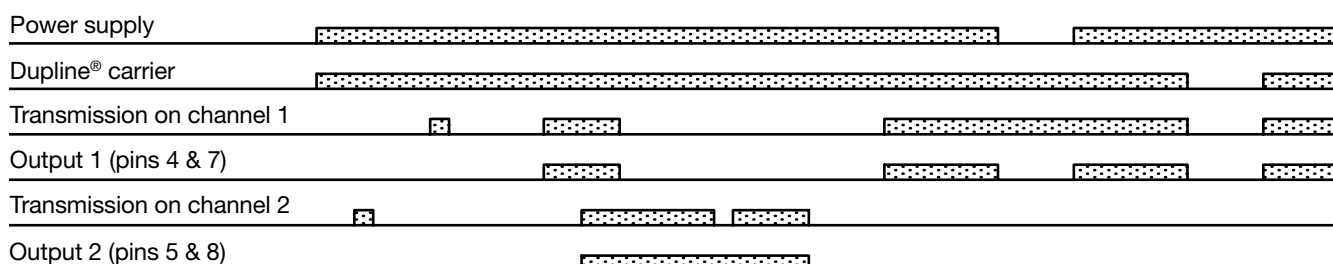
The output is normally OFF. When a transmitter coded to the selected channel is activated, the output turns on and remains on until the respective channel becomes deactivated. The default setting of the module is such that upon loss of Dupline® carrier the out-put goes off.

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

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

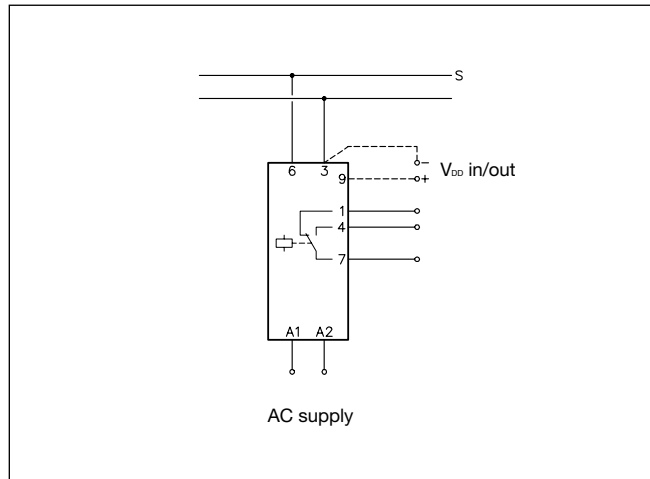
Each output may be coded individually by means of the code programmer GAP 1605.

## Operation Diagram

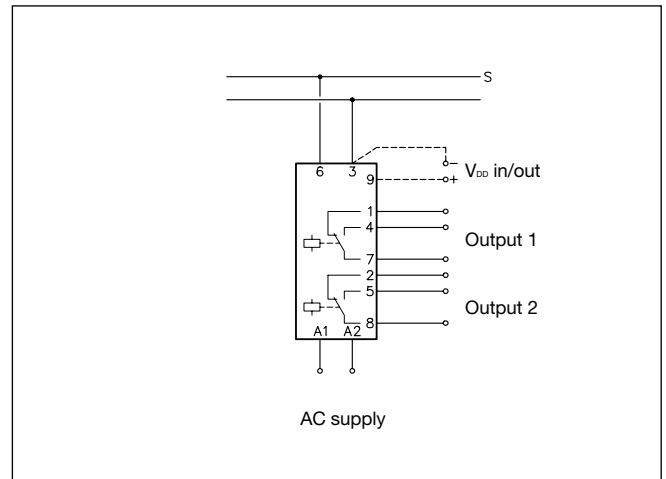


## Wiring Diagrams

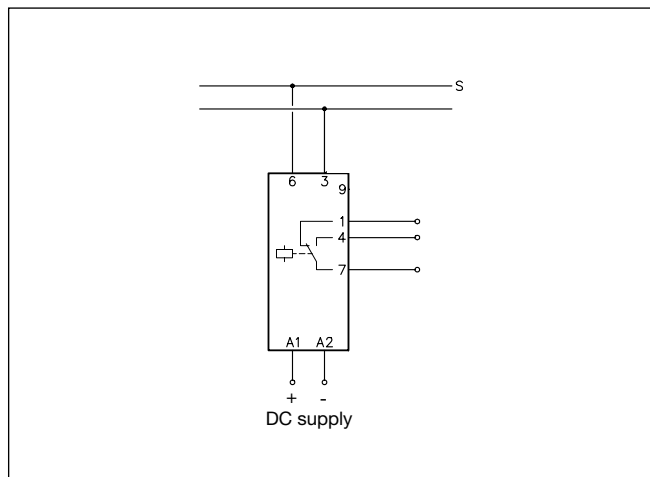
**1 channel GAD 1111 024/115/230**  
**AC supply**



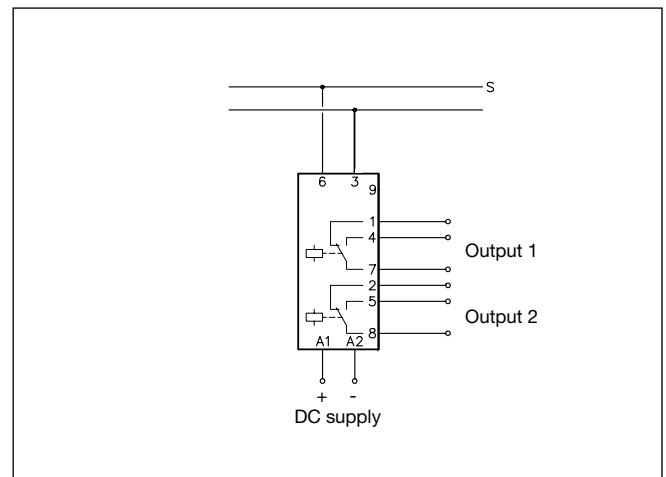
**2 channels GAD 1213 024/115/230**  
**AC supply**



**1 channel GAD 1111 800**  
**DC supply**



**2 channels GAD 1213 824**  
**DC supply**



S: signal wire

## Accessories

Socket ◇	D 411
Socket cover	BB 5
Hold down spring ◇	HF
Front mounting bezel	FRS 3
DIN-rail for D 411	FMD 411

For further information, see "Accessories".