Output Module Type G 3430 4445



Product Description

Dupline receiver®designed to be a part of the Dupline® concept for Building Automation. SPST relay outputs for control of 4 loads of up to 250 VAC/16 A.

4-channel receiver

- Relay load: 16 A
- Module load: 64 A (16 A per relay)
- Galvanically separated SPST relay outputs
- H4-housing
- For mounting on DIN-rail (EN 50022)
- LED-indications for supply, Dupline® carrier and outputs

CARLO GAVAZZI

- AC power supply
- Address coding by GAP 1605
- The relay outputs can be connected to different phases

Ordering Key G 3430 4445 024 Type: Dupline® H4-housing Receiver Number of channels Output type Power supply

Type Selection

Supply	Ordering no.
24 VAC	G3430 4445 024
115 VAC	G3430 4445 115
230 VAC	G3430 4445 230

Output Specifications

Outputs	4 SPST relays		
Contact ratings (AgSn02)	μ (micro gap)		
Resistive loads AC1	16 A / 250 VAC		
Mechanical lifetime	5x10 ⁶ operations		
Electrical lifetime	1x10 ⁵ operations/250 V, 12 A		
Minimum load	100 mA/12 V		
Operating frequency	60 operations/min.		
Dielectric voltage			
Outputs – Dupline®	≥ 4 kVAC (rms)		
Output – Output	> 4 kVAC (rms)		
Response time	≤ 1 pulse train		

Supply Specifications

Power Supply Rated operational voltage	Overvoltage cat. III (IEC 60664)
Through term. 21 & 22	230 VAC, +/- 10% (IEC 60038) 115 VAC, +/- 10% (IEC 60038) 24 VAC, +/- 10%
Frequency Rated operational power Max. power dissipation	45 to 65 Hz Typ. 2,5 VA 7 W

Supply Specifications (cont.)

Power supply (cont.)

Rated impulse withsta	nd volt.	
	230	4 kV
	115	2,5 kV
	024	800 V
Dielectric voltage		
Supply – Dupline [®]		≥4 kVAC (rms)
Supply – Outputs		≥2 kVAC (rms)

General Specifications

Fail polarity state delay		
Upon loss of Dupline [®] carrier	≤ 20 ms	
Power ON delay	typ. 2s	
Indication for:		
Supply ON	LED, Green	
Dupline [®] carrier	LED, Yellow	
Output ON	LED, red (one per output)	
Environment		
Degree of protection	IP 20	
Pollution degree	3 (IEC 60664)	
Operating temperature	-5 to +50°C (+23° to +122°F)	
Storage temperature	-40 to +85°C (-40° to +185°F)	
Humidity (non-condensing)	20 to 80%	
Mechanical resistance		
Shock	5 G (11ms)	
Vibration	2 G (6 to 55Hz)	
Housing	H4-housing	
Weight	400 g	



Operation Diagram

Power supply					
Dupline [®] carrier					
Transmission on channel for	output 1 📃				
Output 1 (term. 24 & 25)					
Transmission on channel for output	ut 2 📩				
Output 2 (term. 27 & 28)					

Mode of Operation

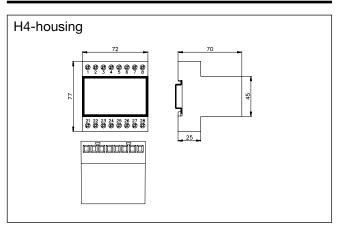
4-channel receiver with 4 normally open contact outputs. Each output is individually coded by means of the code programmer GAP 1605. For changing the default setting, please refer to the datasheet on GAP 1605.

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 is such that upon loss of Dupline[®] carrier all the outputs go OFF.

Note: At delivery some of the relays might be ON due to transportation bumps. To be sure that the relays are OFF, connect the module to power and Dupline and transmit on channels A1-4 once.

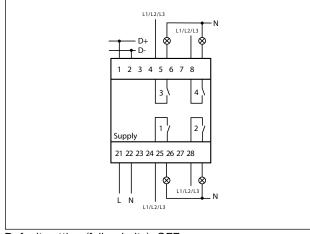
Note: Due to the construction with bistable relays, the module is intended for heating and light control only.

Dimensions (mm)



Wiring Diagram

4 channels G 3430 4445 ... SPST relay output



Default setting (fail polarity): OFF

Accessories

DIN-rail

FMD 411

Output Specifications, Relay Data

Load	Test conditions	Typical number of operations
250 V, 12 A, cos φ =1	1800/h, 50% DC, +70°C	1.0 x 10⁵
250 V, 8 A, cos φ =1	1800/h, 50% DC, +70°C	3.5 x 10⁵
250 V, 4 A, cos φ =1	1800/h, 50% DC, +70°C	5.0 x 10⁵
250 V, 3 A, cos φ =1	1800/h, 50% DC, +70°C	7.5 x 10⁵
$\begin{array}{l} 230 \text{ V}, 550 \text{ W} \\ \text{filament lamps} \\ I_{\text{in}} \leq 40 A_{\text{peak}} \\ I_{\text{off}} = 2.5 A \end{array}$	60/h, 8% DC, +22°C	2.0 x 10⁵
$\begin{array}{l} 230 \text{ V}, \ 1000 \text{ W} \\ \text{filament lamps} \\ I_{\text{in}} \leq 71.5 \text{ A}_{\text{peak}} \\ I_{\text{off}} = 4.5 \text{ A} \end{array}$	60/h, 8% DC, +25°C	7.0 x 10⁴
230 V, 900 W fluorescent tubes (25 x 36 W) parallel compensated, 30 μF	360/h, 50% DC, +25°C	1.0 x 104
$\label{eq:linear} \begin{array}{l} 230 \text{ V, compressor} \\ I_{\text{in}} \leq 21 \text{ A}_{\text{peak}} \\ I_{\text{off}} = 3.5 \text{ A} \\ \cos \phi = 0.5 \end{array}$	500/h, 20% DC, +25°C	1.7 x 10⁵
$250 \text{ V}, 8 \text{ A}, \cos \varphi = 0.3$	360/h, 50% DC, +25°C	1.0 x 10⁵