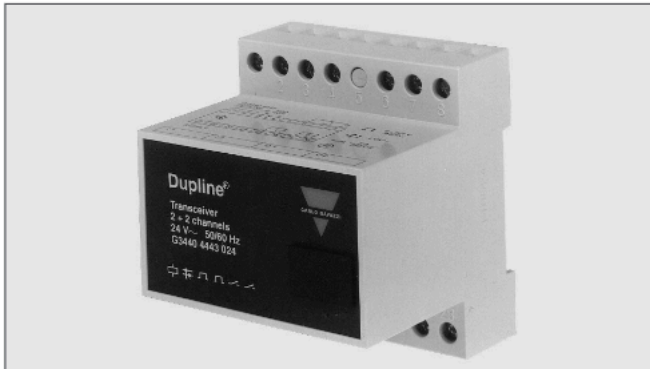


# Transceiver for Digital Signals Type G 3440 5543



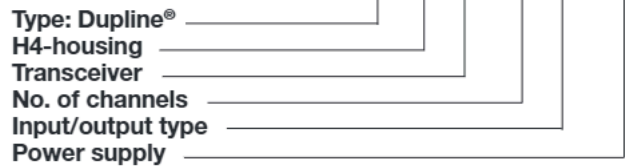
- 6-channel monostable transceiver
- 4 opto-isolated contact inputs
- 2 SPST relay outputs
- Load 2 x 5 A/250 VAC
- H4-housing
- For mounting on DIN-rail (EN 50022)
- LED-indications for supply, Dupline® carrier, input ON and outputs
- AC or DC power supply
- Channel coding by GAP 1605

## Product Description

Dupline® transceiver with 4 contact inputs and 2 SPST relay outputs.

## Ordering Key

**G 3440 5543 024**



## Type Selection

### Supply

24 VAC  
115 VAC  
230 VAC

### Ordering no.

6 channels  
4 x contact input  
2 x SPST relay outputs

G 3440 5543 024  
G 3440 5543 115  
G 3440 5543 230

## Input Specifications

Inputs	4 contacts or NPN transistors
AC version:	
Open loop voltage	24 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	
Inputs - Dupline®	≥ 200 VAC (rms)

## Output Specifications

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

## Supply Specifications

<b>Power supply AC types</b>	Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. 21 & 22	230
115	230 VAC ± 15% (IEC 60038)
024	115 VAC ± 15% (IEC 60038) 24 VAC ± 15%
Frequency	45 to 65 Hz
Voltage interruption	≤ 40 ms
Rated operational power	Typ. 4 VA
Power dissipation	≤ 8 W
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)
Supply - Outputs	≥ 4 kVAC (rms)

## General Specifications

<b>Power ON delay</b>	Typ. 2 s
<b>Power OFF delay</b>	≤ 1 s
<b>Output OFF delay</b> upon loss of Dupline® carrier	≤ 20 ms
<b>Indication for</b>	
Supply ON	LED, green
Dupline® carrier	LED, yellow
Output	LED, red (one per output)
Input activated	LED, red
<b>Environment</b>	
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)
<b>Humidity (non-condensing)</b>	20 to 80%
<b>Mechanical resistance</b>	
Shock	15 G (11 ms)
Vibration	2 G (6 to 55 Hz)
<b>Dimensions</b>	
<b>Material</b> (see Technical information)	H4-Housing
<b>Weight</b>	250 g

## Mode of Operation

Each input and each output may be coded individually by means of the code programmer GAP 1605. For the general procedure of coding, please refer to the respective data sheet. In order to allocate a code address to the inputs/outputs of the G 3440 5543, it is necessary to set the GAP 1605 in single channel addressing mode.

When a contact is used to short-circuit terminals 4 and 5 (input 1), the transmitter transmits on the channel coded for input 1.

When an NPN open collector transmitter between terminals 4 and 8 (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.

The table below shows the relation between the inputs/outputs of the G 3440 5543 and the In/Out-markings on the GAP 1605.

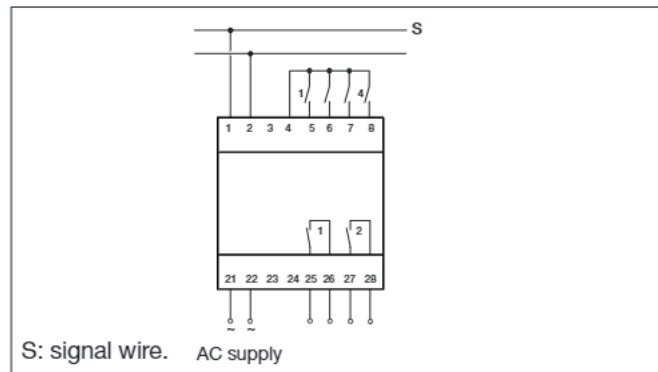
### Output/input connections

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

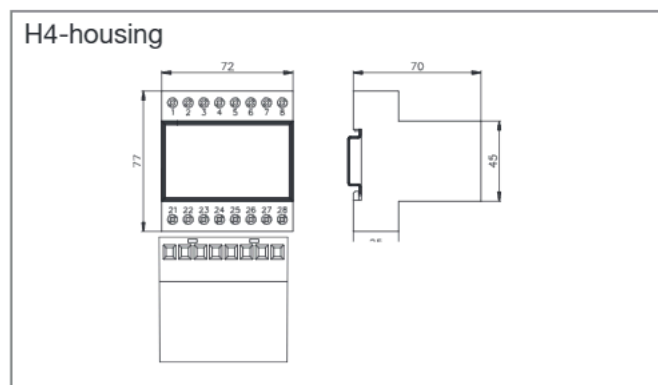
GAP 1605	G 3440 5543
In/out 1	Input 1
In/out 2	Input 2
In/out 3	Input 3
In/out 4	Input 4
In/out 5	Output 1
In/out 6	Output 2
In/out 7	Not used
In/out 8	Not used

## Wiring Diagrams

### G 3440 5543 024/115/230 AC supply



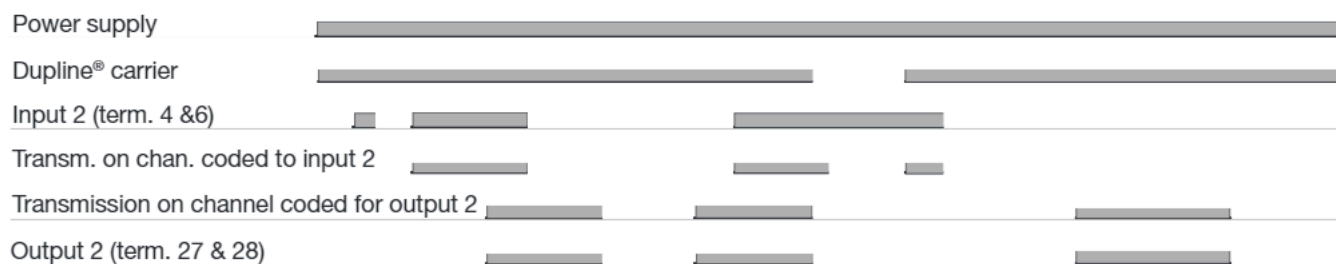
## Dimensions (mm)



## Operation Diagram

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Shown with channels 1 - 2 transmitting and channels 3 - 4 receiving



## Accessories

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DIN-rail FMD 411

For further information, see "Accessories".