# 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	<b>G 3440 5543 024</b>
Type: Dupline®	
H4-housing ———	
Transceiver —	
No. of channels —	
Input/output type ———	
Power supply	

## **Type Selection**

Sı	upply			
			_	
2	24 VAC		_	

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

AC version:
Open loop voltage
Short-circuit current
Operating time for signal "1"
Operating time for signal "0"
Contact resistance
Cable length
Dielectric voltage
Inputs - Dupline®

4 contacts or NPN transistors

24 VDC < 8 mA

 $\leq$  1 pulse train + 30 ms  $\leq$  1 pulse train + 30 ms

 $\leq 100~\Omega \\ \leq 25~m$ 

 $\geq$  200 VAC (rms)

## **Output Specifications**

Output		2 SPST relays
Isolated in groups of		2 x 1
Contact ratings (AgC	dO)	μ (micro gap)
Resistive loads	AC 1	≤ 5 A/250 VAC (1250 VA)
	DC 1	≤ 0.25 A/250 VDC (62 W)
	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)
Response time		1 pulse train



# **Supply Specifications**

Power supply AC types Rated operational voltage through term. 21 & 22 230

> 115 024

Frequency Voltage interruption Rated operational power Power dissipation Rated impulse withstand voltage

115 024

Dielectric voltage Supply - Dupline® Supply - Inputs Supply - Outputs

230 VAC ± 15% (IEC 60038) 115 VAC ± 15% (IEC 60038) 24 VAC ± 15%

Overvoltage cat. III (IEC 60664)

45 to 65 Hz ≤ 40 ms Typ. 4 VA ≤ 8 W

4 kV 2.5 kV 800 V

≥ 4 kVAC (rms)

≥ 4 kVAC (rms) ≥ 4 kVAC (rms)

## **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	
Dupline® carrier	LED, yellow	
Output	LED, red (one per output)	
Input activated	LED, red	
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**

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 address code 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.

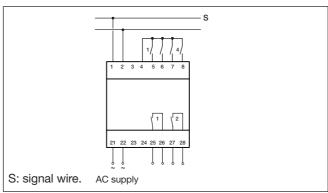
#### Output/input connections

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

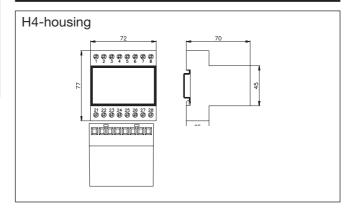
G 3440 5543
Input 1
Input 2
Input 3
Input 4
Output 1
Output 2
Not used
Not used

### **Wiring Diagrams**

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



## **Dimensions (mm)**





# **Operation Diagram**

Shown with channels 1 - 2	transmitting and channels 3 - 4	4 receiving	
Power supply			
Dupline® carrier			
Input 2 (term. 4 &6)			
Transm. on chan. coded to	input 2		
Transmission on channel of	coded for output 2		
Output 2 (term. 27 & 28)			

## **Accessories**

DIN-rail

FMD 411

For further information, see "Accessories".