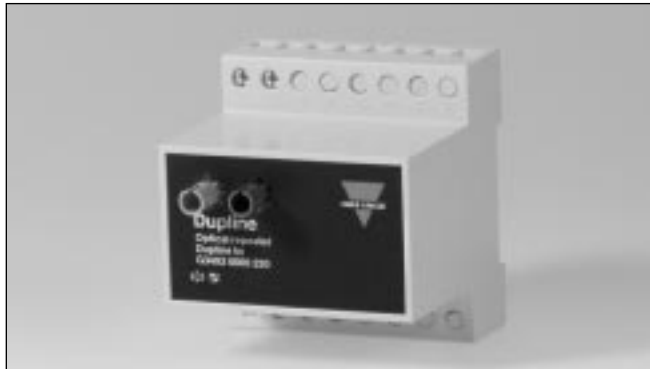


# Dupline®/Optical Fibre Converters

## Types G 3492 0000 and G 3493 0000



- Converts Dupline® for transmission on optical fibre
- Runs on optical multimode fibre pairs (50/125, 62.5/125)
- ST type connector
- Up to 5 km optical transmission distance with 62.5/125 fibre
- DIN-rail mounting
- LED-indications for supply and fibre connection
- AC power supply

### Product Description

The G34930000 converts the Dupline® signal for transmission on optical multimode fibre pairs (50/125, 62.5/125). The G34930000 always operates together with a G34920000, which converts

the signal back from optical to electrical representation via a built-in channel generator output stage. Up to 5 km optical transmission distance can be achieved.

### Ordering Key

**G 3493 0000 230**

Type: Dupline® \_\_\_\_\_  
 Function \_\_\_\_\_  
 Power supply \_\_\_\_\_

### Type Selection

Supply	Ordering no. Optical-to-Electrical Converter	Ordering no. Electrical-to-Optical Converter
115/230 VAC 24 VAC	G 3492 0000 230 G 3492 0000 024	G 3493 0000 230 G 3493 0000 024

### Supply Specifications

Power supply	AC-Types	Overvoltage cat. III (IEC 60664)
Rated operational voltage through term. 21 & 24 jumper term. 22 & 23 230 through term. 21 & 23 jumper term. 24 & 22 through term. 21 & 22 024		230 VAC ± 15% (IEC 60038)
Frequency		115 VAC ± 15% (IEC 60038) 24 VAC ± 15% (IEC 60038)
Rated operational power		45 to 65 Hz
Power dissipation		Typ. 3 W
Rated impulse withstand voltage	230 V 115 V 024 V	≤ 4 W
Dielectric voltage		4 kV 2.5 kV 800 V
Supply - Dupline®		≥ 4 kVAC (rms)

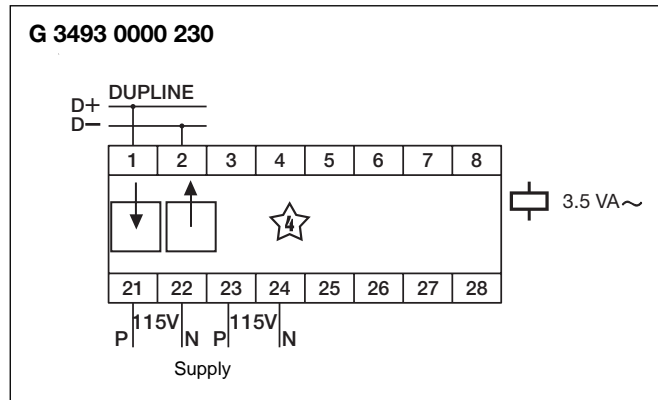
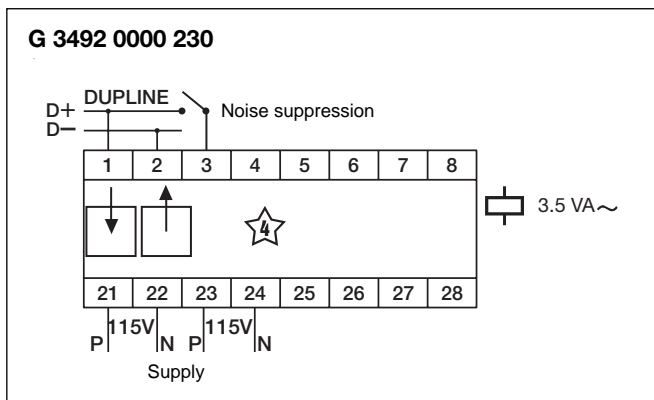
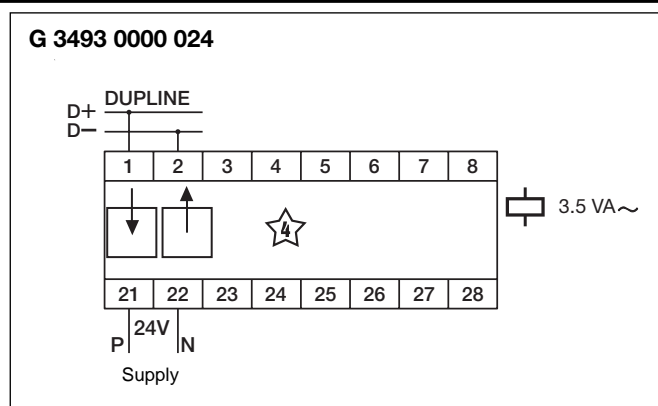
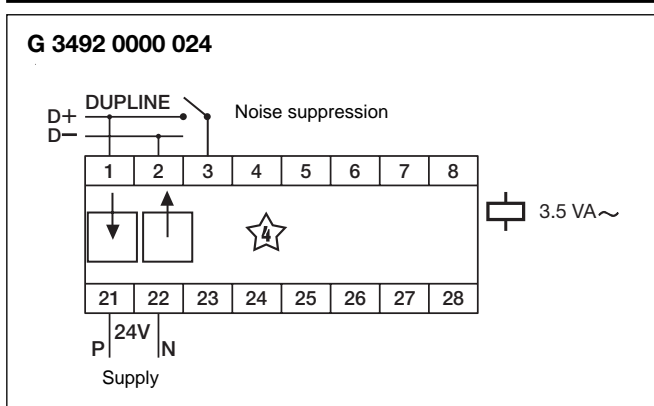
### Input/Output Specifications

Optical Interface	
Optical fibre type	Multimode Glass fibre
Dimensions	50/125 or 62.5/125
Connectors	ST plugs
Optical power budget @ 25°C	15dB (62.5/125 µm fibre) 10.5dB (50/125 µm fibre)
Transmission distance	Up to 5 km (62.5/125 fibre)
<b>Output (G 3492 0000 only)</b>	Secondary Dupline®
Number of outputs	1
Output voltage	8.2 VDC
Current	≤ 40 mA
Short-circuit protection	≤ 60 s
Sequence time	Follows primary Dupline®

## General Specifications

<b>Power ON delay</b>	< 1.5 s	<b>Humidity (non-condensing)</b>	20 to 80% RH
<b>Indication for</b>		<b>Mechanical resistance</b>	
Supply ON	LED, green	Shock	15 G (11 ms)
Dupline® carrier	LED, yellow	Vibration	2 G (6 to 55 Hz)
Optical communication	LED, yellow	<b>Dimensions</b>	
<b>Environment</b>		<b>Material</b>	
Degree of protection	IP 20	(see "Technical Information")	H4-housing
Pollution degree	3 (IEC 60664)	<b>Weight</b>	250 g
Operating temperature	0° to +50°C (+32° to +122°F)		
Storage temperature	-20° to +85°C (-4° to +185°F)		

## Wiring Diagrams



## Mode of Operation

The Dupline® Optical Converters enable the use of glass fibre as transmission media on one or more sections of a Dupline® Fieldbus network. The possibility to freely combine electrical and optical media makes it easier to adapt the Dupline® Field-

bus to the system requirements. Optical Fibres can be useful when Dupline® signals have to be transmitted outdoors in geographical areas with frequent thunderstorms, or in case of sections with heavy noise induction.

The G 3493 0000 converts the Dupline® signal from electrical to optical level, while the G 3492 0000 with built-in channel generator converts the carrier signal back from optical to electrical level (secondary Dupline®). Up to 5 km distance can be achieved

on the glass fibre, which can have the dimensions 50/125 or 62.5/125. Two optical fibres are required for connecting the two Optical Converter Units.

## Application

