

Technical Datasheet



PolyGard® 2

Repeater Module for DGC-06 System DGC-REP-06

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Specifications subject to change without notice.
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■ Made
■ in Germany

DESCRIPTION

The Repeater Module DGC-REP-06 is used for protecting the fieldbus against overload, over-voltage and reverse polarity and for dividing a bus segment into two segments.

The repeater module with protective functions is designed for dividing a bus segment into two segments in line topology in case of inadmissible cable length (> 900 m, 2700 ft.) or more than 128 nodes (bus subscribers). The fieldbus cable can be connected directly via terminals. The termination resistance for the return line is already included.

The repeater can be mounted in the central unit as well as in the field. The field version device is delivered with a separate housing.

A power supply unit (230 V AC / 24 V DC) is available for the field version in order to increase the supply voltage in the field.

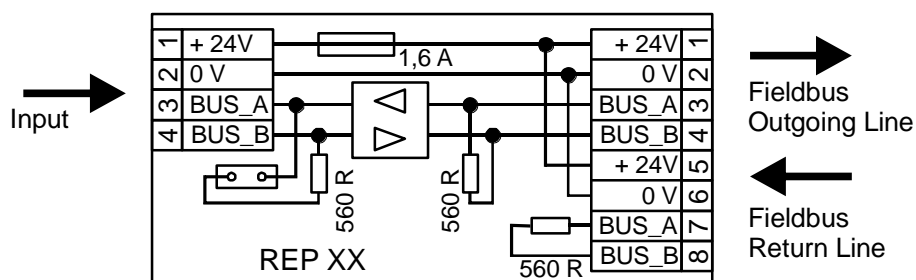
APPLICATION

The Repeater is used in the DGC-06 system as a protection module, and in addition it is employed as signal repeater in case of inadmissible fieldbus cable lengths. Up to four repeaters are allowed per system.

FEATURES

- Protection of the field-bus inputs against over-voltage and reverse polarity
- Overload protection of the fieldbus cable
- Termination resistance for fieldbus return line
- Four terminals each for outgoing and return lines of the fieldbus cable
- Automatic adaptation of the baud rate
- Supply voltage 24 V DC
- Signal amplification for cable lengths > 900 m / 2700 ft.
- Suitable for rail mounting
- Option: Housing for field installation
- Option: Power supply unit 230 V AC / 24 V DC, 4.5 A, installed in the housing of the field device

ELECTRICAL CONNECTION



SPECIFICATIONS

ELECTRICAL	
Power supply	24 V DC (16 V DC to 30 V DC)
Power consumption	0,7 W, 30 mA
Fieldbus current	Max. 1,0 A
Over-voltage protection	Max. 35 V
Reverse polarity protection	Max. 30 V
REPEATER	
Signal repeater bi-directional	Max. 900 m / 2700 ft. segment length
AMBIENT CONDITIONS	
Humidity	15–95 % RH non condensing
Working temperature	-10 °C to +70 °C (14 °F to 158 °F)
Storage temperature	0 °C to +50 °C (32 °F to 122 °F)
PHYSICAL	
Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP 40
Weight	0.1 kg (0.2 lbs.)
Installation	Top hat rail installation
Connection	Spring type: 0.5 to 1.5 mm ² (AWG 22 to 16)
Dimensions (W x H x D)	36 x 86 x 56 mm (1.4 x 3.4 x 2.2 in.)
REGULATIONS	
Directives	EMC Directive 2014/30/EU
Warranty	2 years on device
OPTIONS	
REPEATER HOUSING FOR FIELD INSTALLATION	
Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP55
Weight	0.5 kg (1.1 lbs.)
Installation	Wall / ceiling installation
Dimensions (W x H x D)	112 x 152 x 76 mm (4.4 x 6.0 x 3.0 in.)
REPEATER HOUSING FOR FIELD INSTALLATION INCL. POWER SUPPLY UNIT	
Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP55
Weight	1.5 kg (3.2 lbs.)
Installation	Wall / ceiling installation
Dimensions (W x H x D)	200 x 250 x 100 mm (7.9 x 9.8 x 3.9 in.)
POWER SUPPLY UNIT FOR FIELD INSTALLATION	
Power supply	110/230 V AC 50/60 Hz
Secondary	24 V DC, 4.5 A max., overload and short-circuit proof

All specifications were collected under optimal test conditions.

We confirm compliance with the minimum requirements of the applicable standard.

ORDERING INFORMATION

DGC-REP-	XX-	XX0		
		1X0	Housing / Field installation	
		X10	Field installation incl. power unit 230 V AC / 24 V DC 4,5A	Options
06	MSR_DGC06_Bus			
XD	MSR_D_Bus			Mode

EXAMPLE

Repeater for DGC-06 system, field installation

Ordering number: DGC-REP-06-100