



PolyGard®2

# Connector Module BC-06 and Repeater Module REP-06 for DGC-06 System

**Bus Connector Module BC-06 to protect the fieldbus against overload, over-voltage and reverse polarity with terminals for the direct connection of the fieldbus cable. The termination resistance for the return line is already included.**

Repeater Module with protective functions as described for the BC-06 Module, 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 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 VAC / 24 VDC) is available for the field version in order to increase the supply voltage in the field.



REP-06 Module

## APPLICATION

The BC-06 Connector Module is used in the DGC-06 system as fieldbus protection module. One BC Module is obligatory per system.

The Repeater is used in the DGC-06 system as a protection module, too. But in addition it is employed as signal repeater in case of inadmissible fieldbus cable lengths. Up to 4 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. (repeater)
- Suitable for rail mounting
- Option: Housing for field installation (repeater)
- Option: Power supply unit 230 V AC / 24 V DC, 4.5 A, installed in the housing of the field device (repeater).





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## Modules BC-06 and REP-06 for DGC-06 System

### 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
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#### Environmental 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 <sup>2</sup> (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.)

#### Physical (repeater housing for field inst.)

Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP 55
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.)

#### Physical (housing incl. power supply unit / field installation)

Enclosure	Plastic housing ABS
Colour	RAL 7035
Protection class	IP 55
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 50/60Hz
Secondary	24 V DC, 4.5 A max., overload and short-circuit proof

<b>Guidelines</b>	EMC – Directive 2014/30/EU
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<b>Warranty</b>	2 years on device
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# Modules BC-06 and REP-06 for DGC-06 System

## ORDER INFORMATION

### BC-06 Connector Module

DGC-BC-06-000

### REP-06 Repeater Module

DGC-REP-XX-XXX

#### OPTIONS

- 1X0 Housing / field installation
- X10 Field installation incl. power supply unit  
230 V AC / 24 V DC 4,5A

#### MODE

- 06 MSR\_DGC06\_Bus
- XD MSR\_D\_Bus

## EXAMPLE

Repeater for DGC-06 system, field installation

Order number: DGC-REP-06-100

## WIRING CONFIGURATION

