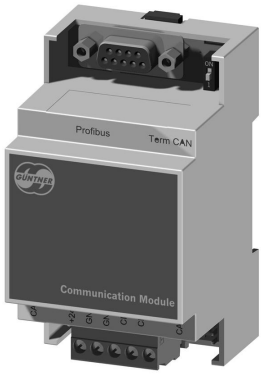
Data sheet GCM PROF xxx Rail.1
Communications module Profibus



ERP no.: 5204543	GCM PROF GMM Rail.1
ERP no.: 5206140	GCM PROF GHMspray Rail.1

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Contents

1 GCM PROF xxx Rail.1

1.1 Functional description

The GCM PROF xxx Rail.1 module is used to connect a Güntner control unit to a Profibus network. Depending on the selected mode of operation, you can read out individual parameters from the control unit via the communication module or modify parameters from outside.

The following different Profibus modules are available:

GCM PROF GMM Rail.1	Profibus module for Güntner Motor Management (GMM EC, GMM sincon, GMM step and GMM phase-cut)
GCM PROF GHMspray Rail.1	Profibus module for Güntner Hydro Management GHM spray

You will find a precise description of the individual parameters and programming details in the relevant interface specification.

The bus connection uses a standard 9-pin SUB-D connector (TB1). Make sure that the SUB-D connector is correctly terminated. Only the connectors at the beginning and end of the bus may have termination activated. Connectors in the middle of the bus may not be terminated because incorrect termination can give rise to transmission errors. Please also note the instructions in the description of the SUB-D connector.

The shielding of the bus cable must be contacted inside the switch cabinet. The bus cable must not be used for potential equalization. A separate cable must be laid for that.

If the GCM PROF xxx Rail.1 is installed directly adjacent to a Güntner controller, the supplied ribbon cable can be used to connect the module to the controller. In this case the module will no longer need an external power supply.

For firmware updates there is a service connector inside the casing. This is intended only for use by personnel with appropriate Güntner training.

The module comes with automatic data rate detection and can be operated at rates up to 12 Mbps.

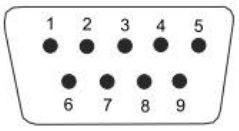
1.2 Connections

In addition to the Profibus connection a proprietary CAN bus connection is also available. Only equipment approved by Güntner may be connected to the CAN bus.

	Upper row of connections	
	Name	**Description**
TB1	Profibus	Profibus with connection
	Term CAN	DIP switch for CAN bus termination (120Ω)

	Lower row of connections	
	Name	**Description**
	CAN	CAN bus plug including power supply
TB2	+24V	Voltage +24V
	GND	Ground
	GND	Ground
	CH	CAN high signal
	CL	CAN low signal
	CAN	CAN bus plug including power supply

The bus connection uses a standard 9-pin SUB-D connector (TB1).



Pin assignment of Profibus connector:

Pin	Signal	Description	Assignment on unit
1	Shielding	Potential equalisation	Not assigned
2	M24	Earth 24V voltage supply	Not assigned
3	RxD/TxD-P	Data wire B	Assigned
4	GNTR-P	Repeater control signal	Not assigned
5	DGND	Earth for data signals and VP	Assigned
6	VP	Voltage supply +5V	Assigned
7	P24	+24V voltage supply	Not assigned
8	RxD/TxD-N	Data wire A	Assigned
9	DNTR-N	Repeater control signal	Not assigned

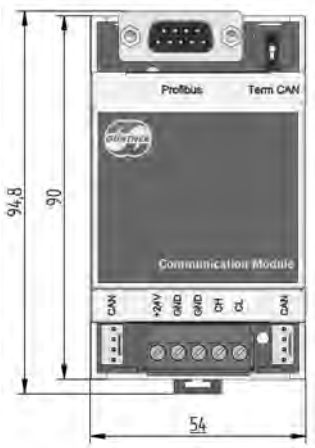
1.3 Electrical properties of

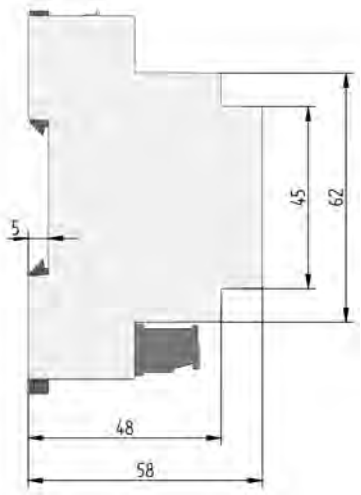
	Min	Type	Max	Unit
Power supply DC	20	24	30	V
Current consumption		90	135	mA
Profibus interface				
Transmission rate		1.5	12	Mbit/s
Galvanic separation			1000	V(rms)
CAN interface				
Termination		120		Ω
Galvanic separation	-	-	-	
Data rate		125		Kbit/s
Dielectric strength CH/CL	-24		+24	V

1.4 Installation / Operating conditions

- The module is designed for mounting on a top-hat rail.
- The shielding of bus lines must be earthed.
- Suitable shielding and routing measures must be taken to ensure that mains cables and motor cables do not give rise to any interference in signal and control lines.
- Bus cables must be connected via shielded cables.
- Ambient temperature: -20°C .. +70°C
- Storage temperature: 0°C .. +50°C, dry
- Protection rating: IP 20
- The unit complies with the EMC standards EN61000-6-2 and EN61000-6-4.
It is **not** suitable for use in a domestic environment.

1.5 Dimensions / Weight





All values in mm

Weight:
ca. 115g