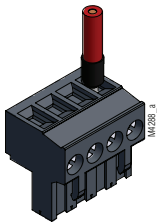


SAFEMASTER PRO Configurable Safety System Bus Extender UG 6918



Pluggable Terminal Block



Terminal block
with screw terminals
(PS / plug in screw)

Advantages of SAFEMASTER PRO

- For safety applications up to PLe, Cat. 4 and SIL 3
- Less wiring because of configuration software SAFEMASTER PRO Designer
- Easy planning because of Drag & Drop via graphic configuration software
- Time and cost saving installation
- Reduced wiring and space saving in cabinets
- Flexible extension with safety input and output modules
- Easy extendable via BUS-Rail
- Comprehensive fault localisation and diagnostic
- Memory card as option for simple maintenance
- Compact design: Base- and extension modules with only 22.5 mm width

Features

- Allows to devide the SAFEMASTER PRO System into serval remote groups
- Allows safe, remote I/Os
- Devides the system into 6 I/O groupes
- Distance between groupes 50 m
- Reduced wiring
- With pluggable terminal blocks for easy exchange of devices

More system components for SAFEMASTER PRO

- Input /Output module UG 6916.10
- Input module UG 6913.08, UG 6913.12 and UG 6913.16
- Output module OSSD UG 6912.02 and UG 6912.04
- Output module Relay with 1 e.g. 2 safety relay outputs for volt free contact multiplication of the OSSDs UG 6912.14 and UG 6912.28
- Field bus modules for diagnostic-connetction on field bus systems UG 6952 (PROFIBUS DP), UG 6951 (CANopen), UG 6954 (PROFINET)

Approvals and Marking



¹⁾ pending

Additional Information About This Topic

- A short description of SAFEMASTER PRO can be found in system overview SAFEMASTER PRO.
- Information about the single modules of SAFEMASTER PRO can be found in the separate data sheets.

Function

The UG 6918 is an expansion module which allows the connection of the control unit UG 6910.10 with other slave modules placed at great distances < 50m).

Through the use of a shielded cable (with RS485 compatible double twisted pair shielded cable) two BusExtender modules UG 6918 placed at the desired distance can be linked together. Each BusExtender module UG 6918 has two independent connection channels; the connection of two BusExtender modules UG 6918 can be performed by wiring a channel of your choice.

Terminal	SIGNAL		TYPE	DESCRIPTION	OPERATION
1	24VDC		-	24V DC power supply	-
2			-	-	-
3	Shield CH2		-	-	-
4	0VDC		-	0V DC power supply	-
5			-	-	-
6			-	-	-
7	Shield CH1		-	-	-
8			-	-	-
9	CH 2 - A	1 st twisted pair of conductors	-	Be sure to connect corresponding terminals to corresponding channels of the remote UG6918 CH 1 <-> CH 1 or CH 2 <-> CH 2 A <-> A B <-> B C <-> C D <-> D Shield <-> Shield	-
10	CH 2 - B		-		-
11	CH 2 - C	2 nd twisted pair of conductors	-		-
12	CH 2 - D		-		-
13	CH 1 - A	1 st twisted pair of conductors	-		-
14	CH 1 - B		-		-
15	CH 1 - C	2 nd twisted pair of conductors	-		-
16	CH 1 - D		-		-

Indications



DESCRIPTION	LED			
	ON GREEN	RUN GREEN	IN FAIL RED	EXT FAIL RED
Power ON - initial TEST	ON	ON	ON	ON
Normal operation	ON	OFF > flashes > ON	OFF Operation OK	OFF Operation OK

Indication at start-up and test mode

Fault diagnostics

DESCRIPTION	LED				Abhilfe
	ON GREEN	RUN GREEN	IN FAIL RED	EXT FAIL RED	
Internal fault detected (not recoverable, Restart the system)	ON	OFF flashes	Follows UG 6911.10 error codification	OFF	
Fault detected on terminal connection (recoverable)	ON	OFF	Off	OFF	

Troubleshooting UG 6918

Technical Data

Nominal voltage: DC 24V ± 20%
Nominal consumption: max. 3 W

General Data**Connection to**

Control unit: proprietary 5-pole bus (DOLD IN-RAIL-BUS)
 Field bus module: The possible fieldbus module present in the system can only be placed to control unit UG 6911.10

Nominal operating mode: Continuous operation

Temperature range

Operation temperature: -10 ... + 55 °C

Storage temperature: -20 ... + 85 °C

Relative humidit: 10 % ... 95 %

Degree of protection:

Housing: IP 40 IEC/EN 60 529

Terminals: IP 20 IEC/EN 60 529

Terminal designation: EN 50 005

Plug in with screw terminals

max. cross section for connection: 1 x 0.25 ... 2.5 mm² solid or stranded ferruled (isolated) or 2 x 0.25 ... 1.0 mm² solid or stranded ferruled (isolated)

Insulation of wires or sleeve length: 7 mm

Wire fixing: captive slotted screw M3

Tightening torque: 0.5 ... 0.6 Nm

Max. cable length: 50 m

Wire: 2 twisted and shielded pairs of conductors 120 Ω

Nominal impedance: < 42 pf / m

Nominal capacitance: < 95 mΩ / m

Resistance: DIN-Rail IEC/EN 60 715

Mounting: approx. 180 g

Dimension

Width x height x depth: 22.5 x 109 x 120.3 mm

Standard Type

UG 6918 Bus extender

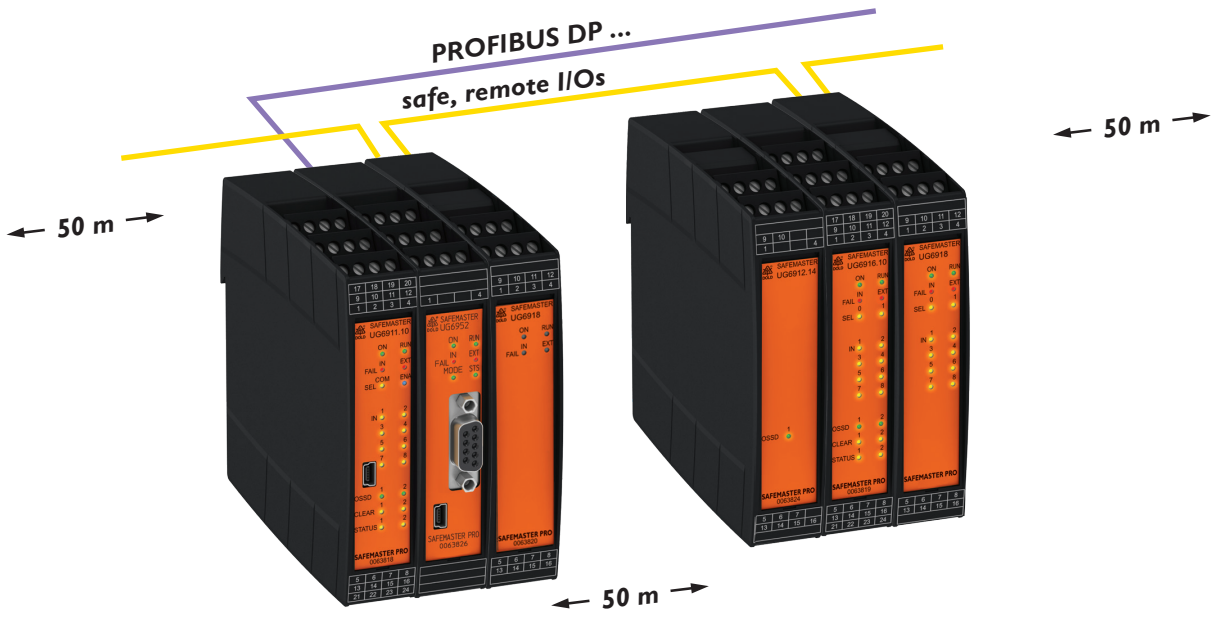
Article number: 0064866

• Nominal voltage: DC 24 V

• Width: 22.5 mm

System Components for SAFEMASTER PRO and Accessories

TYPE	DESCRIPTION	Article number
UG 6911.10	Control unit (8 inputs / 2 dual-channel OSSDs with SAFEMASTER PRO DESIGNER Software)	0063818
UG 6916.10	Input / Output module (8 inputs / 2 dual-channel OSSDs)	0063819
UG 6913.08	Input module (8 inputs)	0063820
UG 6913.12	Input module (12 inputs)	0064865
UG 6913.16	Input module (16 inputs)	0063821
UG 6912.02	Output module OSSD (2 dual-channel OSSD)	0063822
UG 6912.04	Output module OSSD (4 dual-channel OSSD)	0063823
UG 6912.14	Output module Relay (1 safety relay output)	0063824
UG 6912.28	Output module Relay (2 safety relay outputs)	0063825
UG 6918	Bus Extender	0064866
UG 6951	Fieldbus module (CANopen)	0063828
UG 6952	Fieldbus module (Profibus DP)	0063826
UG 6954	Fieldbus module (PROFINET)	0064861
OA 6911	Memory chip (external memory)	0063829
OA 6920	USB-cable for PC connection	0064160
BU 6921	Mounting kit IN-RAIL-Bus 250 mm for DIN-rail 7.5 mm	0064244
BU 6922	Mounting kit IN-RAIL-Bus 250 mm for DIN-rail 15 mm	0064245



The SAFEMASTER PRO-system can be divided in up to 6 locally separated module groups.
The reaction time of the complete systems does not change when using Bus Extender Modules UG 6918.