

AS-Interface Controller

Construction

The GEMÜ 4112 eControl AS-Interface Master has a modular design and is available with integrated Profibus-DP/ControlNet Gateway or as a Stand-alone Controller. The controller includes 1 or 2 AS-Interface masters. All versions possess a large full graphic LC display. The GEMÜ 4112 eControl is also suitable as a local control system due to its integrated PLC functionality.

Features

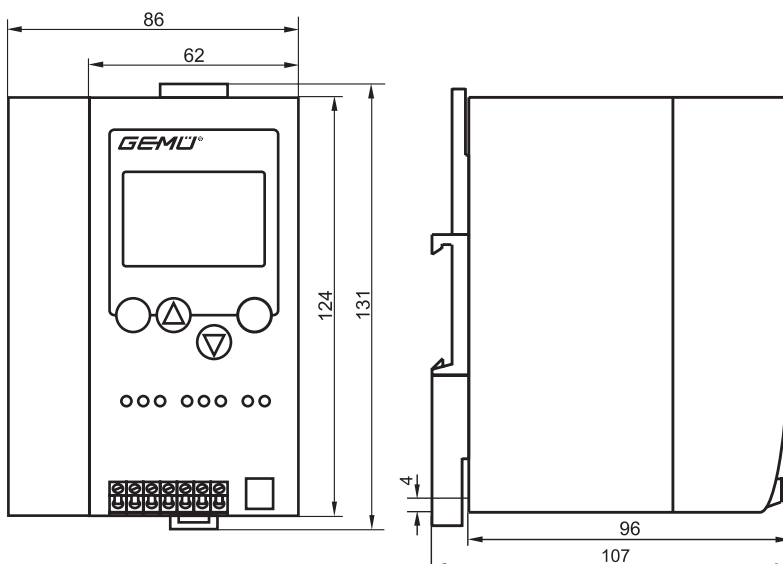
- Integrated PLC functionality
 - Programmable according to IEC 61131-3 (programmable in KOP, FUP, AWL, ST or SFC)
- Support of digital and analogue slave profiles
- Up to 124 slaves (Dual-Master version)
- Periphery fault detection
- Data transmission fault detection
- Max. cycle time 10 ms
- Cable length up to 100 m per master (Extension possible via GEMÜ 4175 AS-Interface extension plug)
- Indication of functions via LED's

Advantages

- Quick set-up due to easy start up
- Direct AS-Interface connection to
 - Profibus-DP or
 - ControlNet
- Integrated software functions / function blocks
- Serial RS 232C programming interface
- Fascia buttons
- Menu in 2 languages
- Simple scanning/browsing of access variables
- Redundant ControlNet operation



Dimensions [mm]



Technical data

Operating conditions

Ambient temperature	0°C to +60°C
Storage temperature	-20°C to +70°C
Max. permissible relative humidity	< 95

Electrical data

Power supply

Power supply	24V DC (20 ... 30V PELV)
Power consumption	< 15 VA
Current consumption	< 400 mA
Current consumption from AS-Interface	< 10 mA / Master

Inputs/outputs

Programming interface	RS 232 C 4800 ... 115200 baud 8 data bits, no start bit, 1 stop bit, no parity max. distance between controller and host 20 m galvanically separated for supply
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PLC memory

128 kwords
programmable according to IEC 61131-3

AS-Interface

Number of masters	1 or 2
AS-Interface profile	M1e according to version 2.1

Gateway

Profibus-DP	max. 12 MBaud
ControlNet	max. 5 MBaud

Electrical connection

Power supply	Screw terminals
AS-Interface	Screw terminals
Programming interface	RJ11 6-pin western socket
Profibus-DP	9-pin Sub-D plug
ControlNet	2 x BNC (50Ω), port A and B redundant; RJ45 socket Network Access Port (Diagnosis connection)

Special features

LED indication	
Display	Full graphic LC display 128 x 64 Pixel, 43 x 28 mm
Operation	4 fascia buttons
Software functions	For integrated function blocks please see more detailed separate literature.

General information

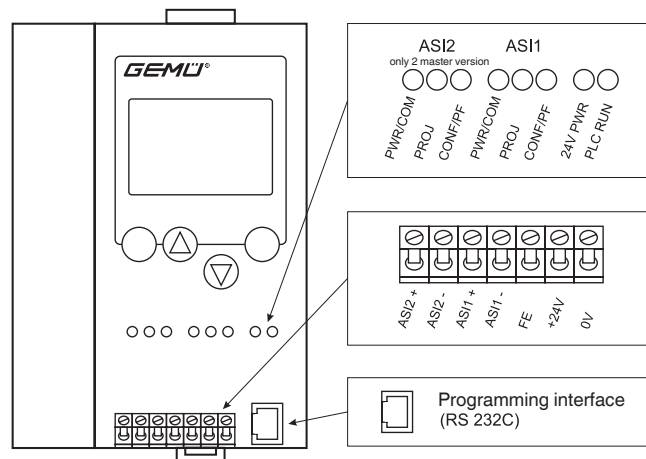
Protection class acc. to EN 60529	IP 20
Dimensions	Width 85.5 mm Height 123.6 mm Depth 106.3 mm
Mounting position	Optional
Mounting	35 mm DIN rail
Note	Do not mount near frequency converters

Materials

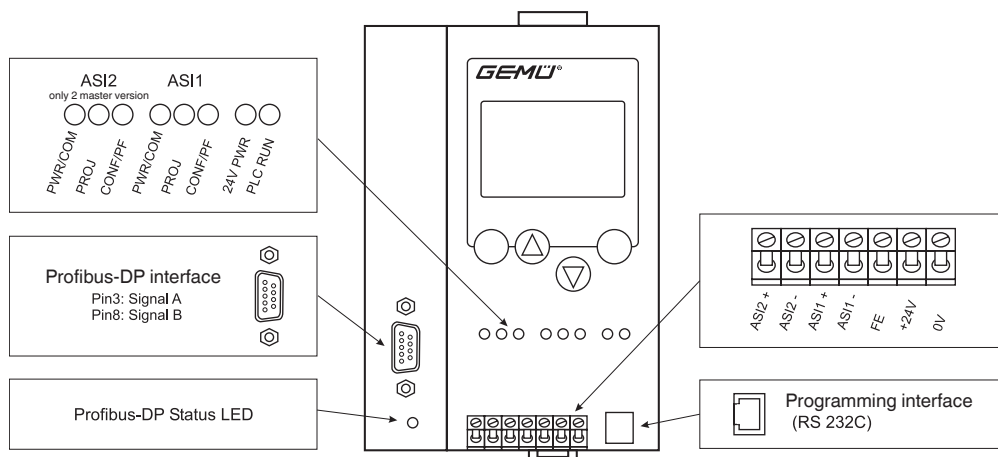
Housing	Aluminium
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LED indication and connection assignment

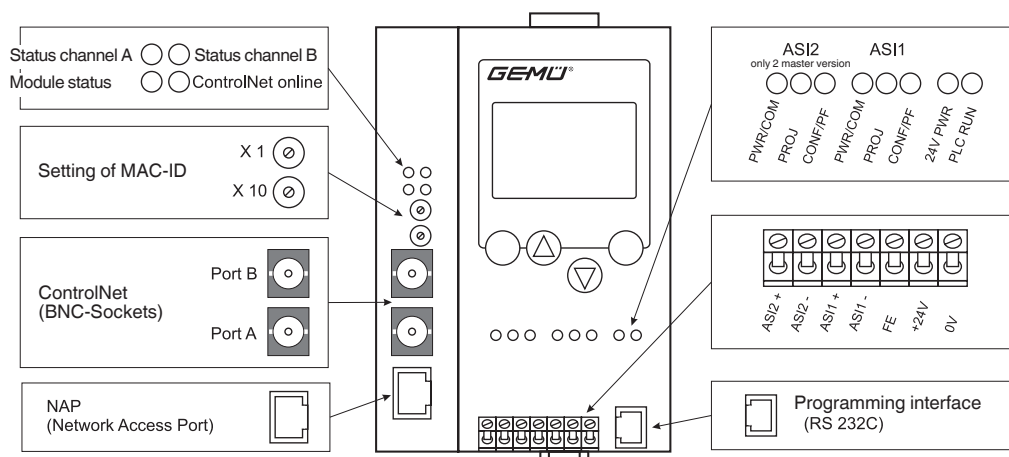
Stand-alone version



Profibus-DP Gateway version



ControlNet Gateway version



Order data

Field bus system	Code
AS-Interface	A3

Accessory	Code
Accessory	Z

Housing material	Code
Aluminium (for DIN rail mounting)	01

Number of channels	Code
1 channel controller	01
2 channel controller	02

Interface	Code
RS 232 (Stand-alone)	01
RS 232 and Profibus-DP (Gateway)	03
RS 232 and ControlNet (Gateway)	05

Version	Code
Transmission of 5 analogue in/out addresses per cycle	04
Transmission of 10 analogue in/out addresses per cycle	14
Transmission of 20 analogue in/out addresses per cycle	24
Transmission of 30 analogue in/out addresses per cycle	34

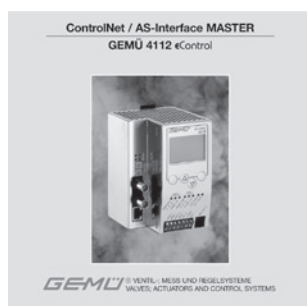
Voltage/Frequency	Code
24V DC	C1

Order example	4112	A3	Z	01	01	01	04	C1
Type	4112							
Field bus system (code)		A3						
Accessory (code)			Z					
Housing material (code)				01				
Number of channels (code)					01			
Interface (code)						01		
Version (code)							04	
Voltage/Frequency (code)								C1

Accessories



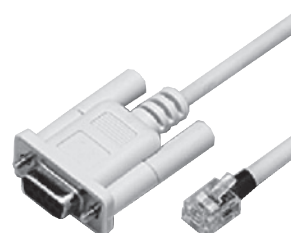
GEMÜ 4130
Power supply unit
AS-Interface / 24V DC



GEMÜ 4140
AS-Interface
programming software



GEMÜ 4170
AS-Interface
flat cable



GEMÜ 4112 S01
AS-Interface controller
programming cable

For further products please see our Product Range catalogue and Price List.
Contact GEMÜ.

GEMÜ® VALVES, MEASUREMENT
AND CONTROL SYSTEMS

