[19310]

Category: Automation systems

Digital output module
DIN rail mounting
8 digital outputs, 24 V DC / 0.5 A

DIGICONTROL ems 4.DA01B

Application

The ems 4.DA01B module enables the switching of 1…8 digital outputs (transistor outputs). Two of the outputs are each provided with a common status signal, which can be used, for example, to diagnose a short-circuit at the output. Each output on the DA01B module has special protection mechanisms:

- Short-circuit proof
- Overload protection
- Current limitation
- Thermal shutdown

A separate power supply is required for the load circuit. The individual LEDs for displaying the respective output status take the presence of the load circuit voltage into account. The corresponding LED is only displayed when the output is set if this voltage is present.

Technical features:

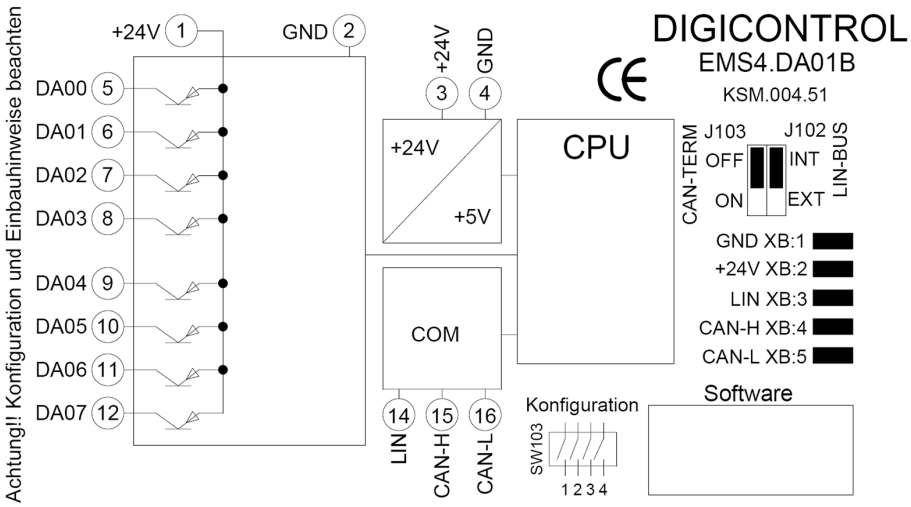
- 8 x 24 VDC transistor digital outputs
- LED status indicator for outputs
- Switching capacity Ia(max) = 0.5 A, short-circuit proof
- Diagnosis of the outputs (2 outputs each for short circuit)
- Direct control of the outputs via ems 4 input module

Article number: EMS4.DA01B

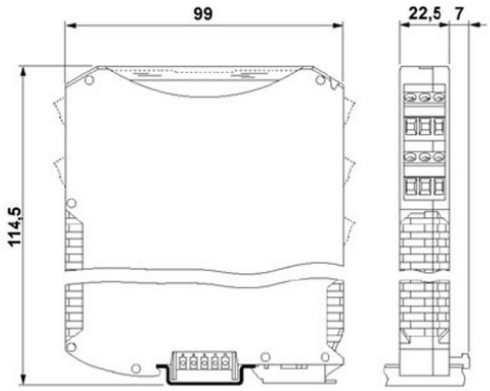
Specifications

Number of outputs	8
Status indicator for the outputs	1 x LED per output
Output signal	24 V DC, 0.5 A
Dimensions	22.5 x 100 x 115 mm
Connecting terminals	via screw terminals for wires up to 2.5mm²
EMC electromagnetic interference	EN 61000-6-4, EN 50081, (EN55022)
EMC interference immunity	EN 61000-6-2, EN 50082, (EN55024)
EMC burst	EN 61000-4-4
Housing	Plastic housing
Weight	130 g
DIN rail bus connector CAN / LIN	max. 30 mating cycles, contact load 1A
Storage temperature	-10...+70 °C
Power consumption	2 W power consumption during functional operation, 4 W with CAN bus activity
Humidity	up to 85% without condensation according to VDE 0160, EN 50178, Class 3K3
Installation positions	On vertical surfaces (wall mounting, terminals at top and bottom)
Standards	EN 50178 - Electronic equipment for use in power installations
Interfaces	1 x LIN
Protection type	IP 20
Service button	on device front
Power supply	24 V DC ±10 %
Module status display	via Duo-LED
System bus	CAN
Ambient temperature during operation	+5...+40 °C

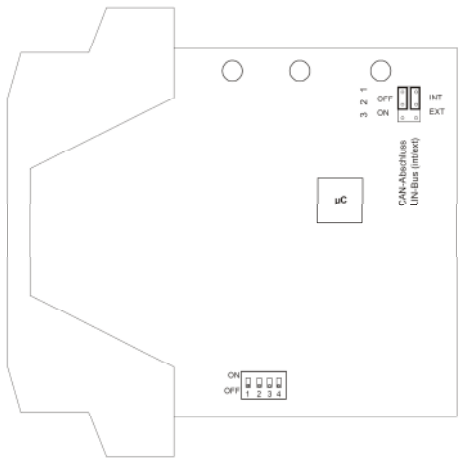
Module configuration, connection



Dimensions



Position of the jumpers / DIP switches



ems 4 - Module configuration

Each ems 4 module is assigned an individual module address by the webCADpro configuration tool.
By default the address for all modules is 0.
There are two ways of programming the address for the ems 4 modules.
This can be conducted by using:
1. The service button on the ems 4 modules
2. The serial number (programmed when the module is manufactured)

A detailed description can be found in the operating manual.

ems 4 - Installation instructions

- Also observe the installation instructions in the operating manual!
- The modules should never be dismantled when they are energised or installed in live systems!
- Subject to technical alterations

ems 4 - Module version identification

The type plate, which includes the device's serial number, can be found on the front right-hand side of of the ems 4 modules. The serial number is programmed when the module is manufactured. It can be used, for example, to programme the module address via the control unit (see the Configuration Tool section). The serial number and software version can also be viewed via the webCADpro configuration tool (see the MultiLink Manager section).

ems 4 - General module data

- Module widths (DIN rail mounting) in a 22.5 mm x n grid
- Standard: 22.5 mm, 45.0 mm, 67.5 mm, 90.0 mm
- Connection voltage: 24 VDC, ±10 %, must be connected separately every 10 modules
- Connection terminals pluggable up to 2.5mm²
- CAN system bus on 5-pin bus connector
- CAN bus connector can be mounted in a DIN rail module
- Bus terminal 1, 0 VDC system voltage
- Bus terminal 2, +24 VDC system voltage
- Bus terminal 3, LIN sub bus
- Bus terminal 4, CAN H signal
- Bus terminal 5, CAN L signal
- DUO LED for status display
- 4-pin DIP switch for CAN transfer speed
- Maximum 62 bus modules can be connected to the system bus (CAN) without a repeater
- Type information and connection diagram printed on the side
- Front plates: White background, black / blue inscription
- The housing colour is light grey (similar to RAL 7035)
- Each module has additional space (15 mm x 9 mm) for an equipment identification label

GFR - Gesellschaft für Regelungstechnik
und Energieeinsparung mbH

Kapellenweg 42
D-33415 **Verl**
phone: +49 (0) 5246 962-0
www.gfr.de / info.verl@gfr.de

Löbstedter Str. 101
D-07749 **Jena**
phone: +49 (0) 3641 4697-0
info.jena@gfr.de

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