CM 240 - 4port mini switch
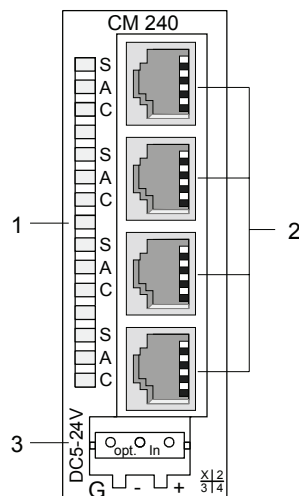
Ordering data   4port mini switch CM 240   240-1DA10

Attention: the 4port mini switch had the order no. 243-1DA10 before!

Overview   The 4port mini switch completes the System 200V network technology.

Auto-Negotiation, Speed-Auto-Sensing and the Auto-MDI/MDIX-Crossover for every port enable the module for "plug & play".

The module is provided with the needed operating voltage via the backplane bus. Alternatively you may supply the module via the front.

The status indication of the 4 ports happens via LEDs on the front side.

Properties
- 4 ports for 10 res. 100MBit/s,
- "plug and play" through Auto-MDI/MDIX-crossover for 100BASE-TX and 10BASE-T,
- Auto-Negotiation and Speed-Auto-Sensing
- for every port automatic switch between 10 and 100MBit/s res. half- and full-duplex operation
- LEDs for activity, speed and collision
- Supports IEEE 802.3, IEEE 802.3u and IEEE 802.3x
- Extra high performance up to 150m at UTP (unscreened twisted-pair cable)
- Back-pressure-based flow control at half-duplex operation
- Pause-frame-based flow control at full-duplex operation
- Store-and-forward switching mode
- Shared memory based switch

Front view CM 240

[1]   LED Status monitoring
[2]   twisted-pair Ports for Ethernet
[3]   Power supply external
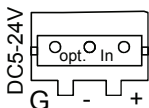
Components

LEDs

For every twisted-pair jack there are 3 LEDs at the front side. The LEDs have the following function:

Name	Color	Function	Description
S	green	Speed	on: 100MBit, off: 10MBit
A	yellow	Activity	on: physically connected, off: no physical connection blinking: shows bus activity
C	yellow	Collision	on: full-duplex operation active, off: half-duplex operation active blinking: Collision detected

Power supply

The power supply takes place via the backplane bus of the System 200V. You may also deploy the switch as stand-alone device. Here you have to provide it with external DC 5...24V.

The plug for connecting an external power supply is under a flap that you have to break out.

For connecting an external power supply there is a connection jack available from VIPA under the order number 970-0CM00.

Attention!

The power supply has to take place either internal via backplane bus or external. **A simultaneous supply must be avoided!**

Twisted-pair ports

The twisted-pair jacks are used to build-up a twisted-pair network in star topology. This allows you to connect up to 4 Ethernet components, where 1 connection has to be deployed as uplink port to the ongoing network. The uplink port is detected automatically.

Technical data

Order no.	240-1DA10
Type	CM 240, 4port Mini-Switch
Current consumption/power loss	
Current consumption from backplane bus	450 mA
Power loss	2 W
Status information, alarms, diagnostics	
Status display	yes
Interrupts	no
Process alarm	no
Diagnostic interrupt	no
Diagnostic functions	no
Diagnostics information read-out	none
Supply voltage display	none
Group error display	none
Channel error display	none
Functionality Sub-D interfaces	

Order no.	240-1DA10
Type	-
Type of interface	-
Connector	-
Electrically isolated	-
MPI	-
MP²I (MPI/RS232)	-
DP master	-
DP slave	-
Point-to-point interface	-
Point-to-point communication	
PtP communication	-
Interface isolated	✓
RS232 interface	-
RS422 interface	-
RS485 interface	-
Connector	RJ45
Transmission speed, min.	10 Mbit/s
Transmission speed, max.	100 Mbit/s
Cable length, max.	-
Point-to-point protocol	
ASCII protocol	-
STX/ETX protocol	-
3964(R) protocol	-
RK512 protocol	-
USS master protocol	-
Modbus master protocol	-
Modbus slave protocol	-
Special protocols	-
Datasizes	
Input bytes	-
Output bytes	-
Parameter bytes	-
Diagnostic bytes	-
Housing	
Material	PPE / PA 6.6
Mounting	Profile rail 35 mm
Mechanical data	
Dimensions (WxHxD)	25.4 x 76 x 78 mm
Weight	50 g
Environmental conditions	
Operating temperature	0 °C to 60 °C
Storage temperature	-25 °C to 70 °C
Certifications	
UL508 certification	yes