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## ► Extract from the online catalog

Modular switch system, head station, can be expanded to 24 Ethernet ports



Order No.	2832328
Ord designation	FL SWITCH MM HS
EAN	4017918929091
Pack	1 Pcs.
Customs tariff	85176200
Weight/Piece	1.529 KG
Catalog page information	Page 211 (AX-2007)

## ► Technical data

### Interfaces

Interface	Ethernet
No. of ports	8 can be expanded to a maximum of 24 ports
Type of connection	8 ports via FL IF (interface) modules
Transmission physics	Copper
Transmission speed	10/100 MBit/s
Interface	Ethernet FO
No. of ports	8 can be expanded to a maximum of 24 ports
Type of connection	Via interface modules
Transmission physics	Multimode glass fiber

## FL SWITCH MM HS



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Transmission speed	100 MBit/s (full duplex)
Transmission length	Up to 10000 m (depending on the fiber used)
Transmission length	1300 nm
Interface	Serial (RS-232)
Type of connection	RS-232-C, 6-pos. MINI-DIN female connector (PS/2)

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**Function**

Basic functionality	Store and forward switch complies with IEEE 802.3 2 priority classes in acc. with IEEE 802.1 P TCP/IP protocol, BootP-capable, port-mirroring, integrated web server function, multicast filtering, IGMP snooping, VLAN, Rapid Spanning Tree (RSTP), Port Security, Profinet IO Device, DHCP Option 82 Relay Agent
Management	Integrated Management Agent, SNMP protocol (private MIB, MIB-2, RMON MIB, Bridge MIB), integrated Web server function
Supported browsers	Netscape Communicator versions 4.5 and up or Internet Explorer versions 5.5 and up
Redundancy	Spanning Tree 802.1d, Rapid Spanning Tree 802.1w, Fast Ring Detection
Status and diagnostics displays	Per Ethernet 2 status LEDs: LINK and switch-over Status Activity, 100, full-duplex, supply voltage $U_{s1}$ and $U_{s2}$ (redundant supply voltage) and FAIL, two-digit 7-segment display

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**Network extension parameters**

Cascading depth	Network, line and star structure: any
Maximum conductor length (Twisted Pair)	100 m

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**Supply voltage**

Supply voltage	24 V DC
Residual ripple	3.6 V <sub>pp</sub> (within the permitted voltage range)
Range of supply voltages	18.5 V DC ... 30.2 V DC
Typical current consumption	350 mA (Up to 3500 mA, depending on the configuration)

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**Mechanical tests**

Type of test	Shock test in acc. with IEC 60068-2-27
Test result	Operation: 25 g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Shock test in acc. with IEC 60068-2-27
Test result	Storage/Transport: 50 g, 11 ms duration, semi-sinusoidal shock impulse
Type of test	Vibration resistance in acc. with IEC 60068-2-6
Test result	Operation/Storage/Transport: 5 g, 150 Hz, Criterion 3
Type of test	Free fall in acc. with IEC 60068-2-32
Test result	1 m

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**Conformity with EMC directives**

Test standard	IEC 61000-4-2 (ESD)
Test result	Criterion B
Test standard	IEC 61000-4-3 (immunity to radiated interference)
Test result	Criterion A
Test standard	IEC 61000-4-4 (burst)
Test result	Criterion A
Test standard	IEC 61000-4-5 (surge)
Test result	Criterion B
Test standard	IEC 61000-4-6 (immunity to conducted interference)

## FL SWITCH MM HS



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Test result	Criterion A
Test standard	EN 55022 (emitted interference)
Test result	Class A

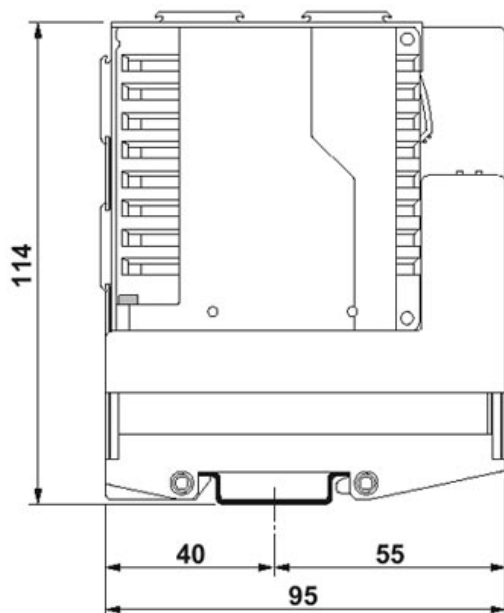
**General data**

Weight	1350 g
Width	214 mm
Height	95 mm
Depth	115 mm
Degree of protection	IP20
Ambient temperature (operation)	0 °C ... 55 °C (non-condensing)
Ambient temperature (storage/transport)	-20 °C ... 70 °C
Permissible humidity (operation)	10 % ... 95 % (non-condensing)
Housing material	Zinc die-cast, surface bronzed and nickel-plated
Electromagnetic compatibility	Conformance with EMC directive 89/336/EEC
Emitted interference	EN 61000-6-3/-4
Immunity to interference	EN 61000-6-2

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## ▸ Drawings

### Dimensioned drawing



The illustration shows the head station FL SWITCH MM HS with interface module

### Logo



## ► Accessories

Item	Designation	Description
<b>General</b>		
2832470	FL CB IF	Converter board for FL IF ... interface module
2832425	FL IF 2FX SC-D	FO media module for connecting 100Base-FX multimode glass fibers (1300 nm), connection direction downwards
2832412	FL IF 2FX SC-F	FO media module for connecting 100Base-FX multimode glass fibers (1300 nm), connection direction forwards
2832205	FL IF 2FX SM SC-D	FO interface module for connecting single mode (monomode) glass fibers (1300 nm) to the Factory Line Modular Managed Switch, output downwards
2884033	FL IF 2FX ST-D	Interface module
2832742	FL IF 2HCS 100-D	Interface module, 2 ports, 100 Mbit/s, full duplex, for the Modular Managed Switch System, exit downward
2832852	FL IF 2POF 10/100-D	Interface module, 2 ports, 10/100 Mbit/s, autonegotiation for the Modular Managed Switch System, exit downward
2832357	FL IF 2TX VS-RJ-D	Media module with two twisted pair ports for the modular managed switch system
2832344	FL IF 2TX VS-RJ-F	Media module with two twisted-pair ports for the modular managed switch system, output towards the front
2832483	FL IF MEM 2TX-D	Memory module, 2 port twisted pair module for saving the switch configuration
2832739	FL IF TX/HCS 100-D	Interface module, one port twisted pair, one port HCS, exit downward
2832807	FL IF TX/POF 10/100-D	Interface module, one port twisted pair, one port POF, exit downward
2832331	FL MXT	Expansion, 8 Ethernet ports

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## ► Address

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