

## FO converters - FL MC 2000T SM20 SC - 2891317

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FO converter with SC duplex fiber optic connection (1300 nm), for converting 100Base-TX to single mode fiberglass with a maximum FO segment length of 20 km. Auto MDI(X) function and comprehensive link diagnostics. DIN rail mountable with wide operating temperature range.



### Key Commercial Data

Packing unit	1 STK
Weight per Piece (excluding packing)	300.000 g
Custom tariff number	85176200
Country of origin	Taiwan

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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#### Dimensions

Width	28 mm
Height	110 mm
Depth	70 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 75 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Permissible humidity (operation)	5 % ... 95 % (non-condensing)
Permissible humidity (storage/transport)	5 % ... 95 % (non-condensing)
Altitude	4850 m
Degree of protection	IP20

#### General

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## Technical data

### General

Electrical isolation	VCC // FE // Ethernet
Latency	865 ns (Pass-through mode)
Test voltage data interface/power supply	500 V DC
Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Mounting position	On horizontal DIN rail NS 35 in acc. with EN 60715
Net weight	302.3 g
Housing material	Aluminum

### Power supply

Nominal supply voltage	24 V DC
Supply voltage range	12 V DC ... 48 V DC
Typical current consumption	110 mA (24 V DC)
Connection method	Plug-in screw terminal block (COMBICON), redundancy possible

### Serial interface

Interface 1	Ethernet interface, 10/100Base-T(X) in acc. with IEEE 802.3u
Connection method	RJ45 socket, shielded
Transmission medium	Copper
Transmission length	100 m (twisted pair, shielded)
Auto-negotiation modes	Auto
Link through	Link fault pass through
MDI-/MDI-X switchover	Auto-MDI(X)
Signal LEDs	LNK/ACT, 100
Serial transmission speed	10/100 Mbps

### Optical interface FO

Wavelength	1310 nm
Transmission length incl. 3 dB system reserve	20 km (fiberglass with F-G 9/125 0.36 dB/km)
Transmission medium	Single-mode fiberglass
Connection method	SC duplex

### Digital outputs

Output name	Relay output
Output description	Alarm output
Number of outputs	1
Contact type	N/C contact
Maximum switching voltage	≤ 250 V AC
Max. switching current	1 A

### Standards and Regulations

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## Technical data

### Standards and Regulations

Electromagnetic compatibility	Conformance with EMC Directive 2004/108/EC
Type of test	Vibration resistance in acc. with EN 60068-2-6/IEC 60068-2-6
Test result	5g, 150 Hz, Criterion 3
Type of test	Shock in acc. with EN 60068-2-27/IEC 60068-2-27
Test result	30g, 11 ms half-sine shock pulse
Shock	300 m/s <sup>2</sup> , 11 ms (IEC 60068-2)
Standards/regulations	EN 61000-4-2
	EN 61000-4-3
	EN 61000-4-4
Comments	Criterion A
Standards/regulations	EN 61000-4-5
	EN 55022
	EN 61000-4-6

## Classifications

### eCl@ss

eCl@ss 5.1	27230207
eCl@ss 6.0	27230207
eCl@ss 8.0	19179290
eCl@ss 9.0	19179290

### ETIM

ETIM 4.0	EC001099
ETIM 5.0	EC001467
ETIM 6.0	EC001467

### UNSPSC

UNSPSC 13.2	43222604
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## Approvals

### Approvals

Approvals

UL Listed / cUL Listed / cULus Listed


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### Approvals

Ex Approvals

UL Listed / cUL Listed / cULus Listed

#### Approval details

UL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cUL Listed		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 140324
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cULus Listed			
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### Accessories

Accessories

Patch cable

Patch cable - FL CAT5 PATCH 0,3 - 2832250



Patch cable, CAT5, assembled, 0.3 m

Patch cable - FL CAT5 PATCH 0,5 - 2832263



Patch cable, CAT5, assembled, 0.5 m

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### Accessories

Patch cable - FL CAT5 PATCH 1,0 - 2832276



Patch cable, CAT5, assembled, 1 m

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Patch cable - FL CAT5 PATCH 2,0 - 2832289



Patch cable, CAT5, assembled, 2 m

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Patch cable - FL CAT5 PATCH 3,0 - 2832292



Patch cable, CAT5, assembled, 3 m

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Patch cable - FL CAT5 PATCH 5,0 - 2832580



Patch cable, CAT5, assembled, 5 m

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Patch cable - FL CAT5 PATCH 7,5 - 2832616



Patch cable, CAT5, assembled, 7.5 m

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### Accessories

Patch cable - FL CAT5 PATCH 10,0 - 2832629



Patch cable, CAT5, assembled, 10 m

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### Safety locking

Security element - FL PATCH GUARD - 2891424



Lockable security element

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Key - FL PATCH GUARD KEY - 2891521



Key for lockable security element

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