CONCUFI & CONCUFI SMODE

Fiber optic module converter

- *EN54*
- *CE Approved according to CPD*
- *Single mode connection version or*
- *Multimode connection version*

Optic fiber converter **Concufi** is a module that can adapts to industrial environments and related with fire detection equipment.

It allows **galvanic isolation** or extend the dialog links **distance** between 2 devices.

Concufi meets the requirements of quality and operational safety of **SIL2** kind.

Concufi is suitable for **optical transmission** of information and integrates important patented innovations increasing the safety distance and **reliability** of long-distance transmission.

It can be used with SD3 Fire detection equipment such as **Héphaïs 1600** to **increase** the **length** of cabling for communication protocols such Loop network, Front panel, monitoring software and all communication working according to **RS232, RS422, RS485 protocol**.

Concufi exist in **Multimode** version, able to cover distances going up to 6 km and also in **Single mode** version with distance coverage up to 25km max

Main characteristics

- Perfect immunity to electromagnetic disturbance
- Distance up to 6 Km in Multimode
- Distance up to 25 Km in Single mode
- Speed from 9600 to 115200bds
- Power supply from 7V to 60Vdc
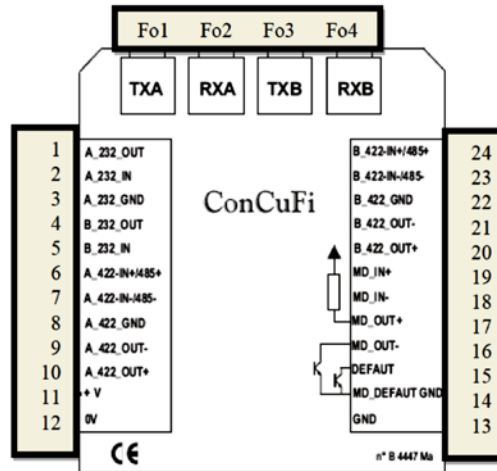- Hardware and software security (SIL2)
- Rail DIN installation (option)

Power supply	
Input voltage	7 V DC to 60 V DC (protected against polarity inversions and overvoltage)
Current consumption	Max = 35mA (24V)-80mA(10V)-20mA(60V) Maximum current on the most unfavorable cases (rates higher than 115200 bds)
Electrical interface	
Connectors for part A or B of Concufi	RS232 (Rx/Tx) RS422 (In+, In-, Out+, Out-) RS485 (InOut+, InOut-)
Fault output	Open collector type linked to the ground through DEFAUT-OUT (Vmax 50V Imax 4.5 mA)
Backup mode input	MD_INT+, MD_INT-, GND Connect according to the device connection diagram
Configuration	
Switch configuration	RS232 1 bit start, 8 data, 1 stop RS422 1 bit, 8 data, 1 stop RS485 1 bit start, 9 data, 1 stop Mode MIX : in mode MIX the part B can only be in RS232 or RS422 mode Speed:9600, 19200, 38400, 115200 bds (*)
Optic fiber	
Wave lenght	1300 nm
Type	Optic fiber MULTIMODE Duplex 50/125 µm or 62.5/125µm connection with connector ST Optic fiber Monomode Duplex 9/125*m connection with connector ST
Specificity	Multimode attenuation < from 0.5 to 1 db/km
Automatic detection of fiber fault	Optical attenuation detection max from 5 to 6 db
General specifications	
Operating temperature	0°C to 50°C
Storing temperature	-10°C to +60°C
Humidity	<93%
Dimensions	120mmx120mmx22mm

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Pin name	Pin num	ConCuFi part A or B	Type	Description
A_232_OUT	1	A	RS232	Output Tx RS232
A_232_IN	2	A		Input Rx RS232
A_232_GND	3	A/B	Ground RS	Common RS232
B_232_OUT	4	B	RS232	Output Tx RS232
B_232_IN	5	B		Input Rx RS232
A_422_IN+/485+	6	A	RS422 or RS485	Input IN+ RS422 or Input/output + RS485
A_422_IN-/485-	7	A		Input IN- RS422 or Input/output - RS485
A_422_GND	8	A	Ground RS	Common RS422 or RS485
B_422_OUT-	9	A	RS422	Output - RS422
B_422_OUT+	10	B		Output + RS422
+V	11	A/B	+ power supply	Power supply from 7 to 60 Volts
0V	12	A/B	- power supply	Power supply 0V
GND	13	A/B		Ground board
MD_DEFAUT_GND	14	A/B	Com. OC	Open collector Common DEFAUT and MD_OUT-
DEFAUT	15	A/B	OC	Open collector fault indication
MD_OUT-	16	A/B	OC	Backup mode Output--
MD_OUT+	17	A/B	Output	Backup mode Output +
MD_IN-	18	A/B	Input +	Backup mode Input -
MD_IN+	19	A/B	Input -	Backup mode Input +
B_422_OUT+	20	B	RS422	Output + RS422
B_422_OUT-	21	B		Output - RS422
B_422_GND	22	B	Ground RS	Common RS422 or RS485
A_422_IN-/485-	23	A	RS422 or RS485	Input IN- RS422 or Input/output - RS485
A_422_IN+/485+	24	A		Input IN+ RS422 or Input/output + RS485
RXA	Fo1	A/B	Optic fiber RX	In MIX mode : receives optical signals. For the outputs A, B and MD In standard mode: Receives the optical signals the output A
TXA	Fo2	A/B	Optic fiber TRX	MIX mode : Transmit Optic signal from A, backup mode Standard mode : Transmit optic signal from A, backup mode
RXB	Fo3	B	Optic fibber RX	Receives the optical signals the output B
TXB	Fo4	B	Optic fibber TRX	Transmit the optical signals coming from inputs A and backup mode

REFERENCE | DESCRITPION

CONCUFI SMODE   **CONVERTER MODULE RS422/RS232/RS485 to SINGLE MODE optic fiber max distance 25km, rail din enclosure, 7Vdc to 60Vdc power**

CONCUFI   **CONVERTER MODULE RS422/RS485/RS232 to MULTIMODE optic fiber max distance 6km, rail din enclosure, 7Vdc to 60Vdc power**