EXP FLEX 2M V3 — MODBUS Expansion Module

Features:

- **EXP FLEX 2M V3 is an independent / expansion module used with RS485 Communication**
- **Any Flexys I/O card can be configured (one card per module)**
- **Up to 7 numbers of EXP FLEX 2M V3 devices can be connected to a Master Device**
- **RS485 Slave IN & OUT separate terminals (For easy loop & wiring)**

Electrical Specification

Supply voltage	24V DC ±10%
Power consumption	2.5W
Reverse polarity protection	Yes
Isolation	No (Between power circuit and communication circuit)

Functional Specifications

Response time	100ms to 2 sec based on number of EXP FLEX 2M V3 devices configured + I / O card type

DIP Switch Selection

Slave ID	DIP Switch			
	1	2	3	4
NA		OFF	OFF	OFF
1		OFF	OFF	ON
2		OFF	ON	OFF
3	X	OFF	ON	ON
4		ON	OFF	OFF
5		ON	OFF	ON
6		ON	ON	OFF
7		ON	ON	ON
Baud Rate				
19200	OFF	X	X	X
115200	ON	X	X	X

LED Display

LED Display	LED Color	Indication
Power LED (PWR)	Green	Always On when device is powered
Receive LED (Rx)	Green	Blinks when EXP FLEX 2M V3 device receives RS485 command from master
Transmit LED (Tx)	Red	Blinks when EXP FLEX 2M V3 device transmits RS485 response to master
Error LED (Err)	Red	On - When I / O card is not connected
		Flashing - 2 sec ON, 0.3 sec OFF - when I/O card is mismatched [1]
		Flashing - 0.3 sec ON, 0.3 sec OFF - when No Master communication is received for 6 secs
		OFF - successful operation

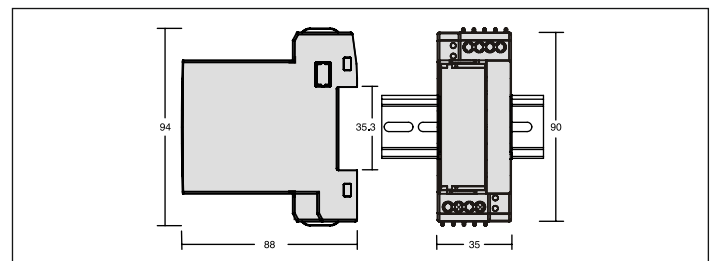[1] : When configured I/O card in SELPRO / FLEX2MCOM software is different from connected I / O card EXP FLEX 2M V3

Communication

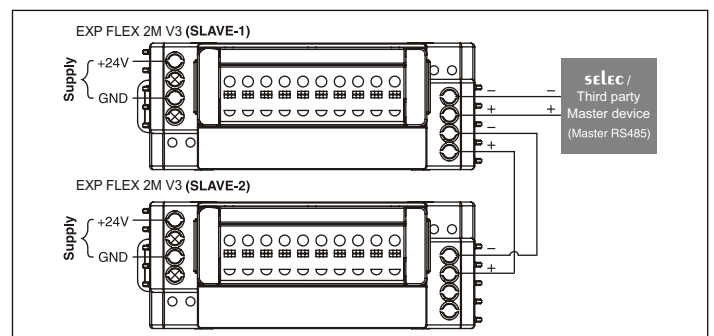|	
Communication Port	RS485 Slave
Communication Protocol	MODBUS RTU
Baud Rate	19200 and 115200 (user configurable) (Default + 19200)
Fixed Settings	Parity = None (N), Stop bits = 1, Data length = 8

Environmental Specifications

Temperature	Operating : 0 to 50 ^{o}C Storage : -20 to 60 ^{o}C
Humidity (non-condensing)	10% to 95% RH

Dimensions (in mm)

Terminal Connection