PROTOCOL REPEATER

Protocol Repeater REP Sense Edition

The REP Protocol Repeater duplicates the INFO serial communication line. Maximum four Protocol Repeater REP Sense Editions can be connected to the Esmi Sense Fire Detection Panels; FDP221, FDP252 and FDP292 and FX-3Net System. It is also backward compatible with Esmi Sense FDP Sense Edition and FX-3Net systems.

Figure 1. Protocol Repeater REP Sense Edition control panel
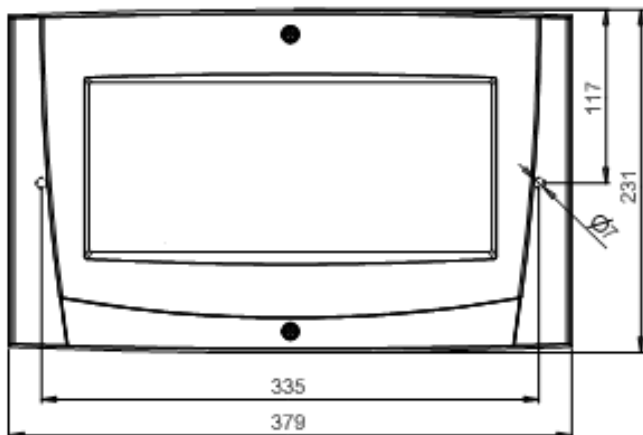
Mechanical installation

Figure 2. Protocol Repeater REP Sense Edition mechanical installation

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Technical data

Table 1. Protocol Repeater REP Sense Edition technical data

Product number	FFS00703848
Dimensions (W x H x D)	379 x 231 x 54 mm
Weight	2,1 kg
Colour	White
Operating Temperature	+5°C … +40°C
Humidity	max. RH 95%
Operating Voltage	19 …30 VDC
Standby current	50 mA
Serial communication ports	In: RS485 or RS232 Out: RS485
IP Rating	IP30

Schneider Electric Fire & Security Oy reserves the right to make modifications.

Product Codes

Product	**Code**	**Description**
REP	FFS00703848	Panel version, wall mounting
REPX-OB	FFS00703833	PCB version, card slot mounting

Electrical connections
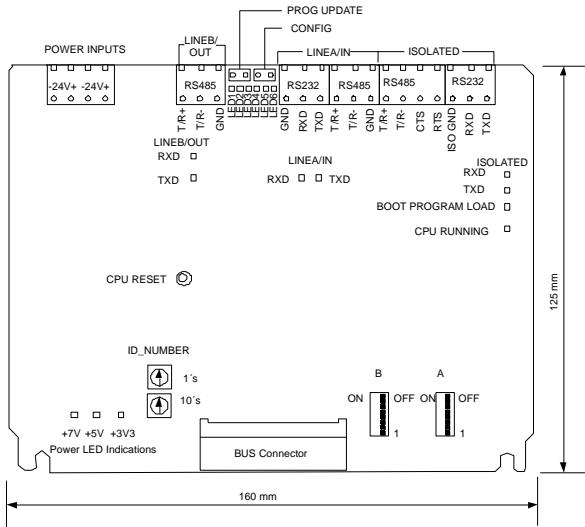
Settings and LED indications
A dip switch

A1	OFF	NA
	ON	NA
A2	OFF	NA
	ON	NA
A3	OFF	FDP-panel connection
	ON	ESA/MESA panel connection (message set F or older)
A4	OFF	Not in use
	ON	Not in use
A5	OFF	Not in use
	ON	Not in use
A6	OFF	Not in use
	ON	Not in use
A7	OFF	Not in use
	ON	Not in use
	OFF	Not in use
A8	OFF	Normal state
	ON	NA

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B dip switch

B1	OFF	"EXT" isolated line faults monitored
	ON	"EXT" isolated line faults not monitored
B2	OFF	"EXT" isolated line not in use
	ON	"EXT" isolated line in use
B3	OFF	OUT "B" port not in use
	ON	OUT "B" port in use
B4	OFF	"EXT" isolated port baud rate. See table below.
	ON	"EXT" isolated port baud rate. See table below.
B5	OFF	"EXT" isolated port baud rate. See table below.
	ON	"EXT" isolated port baud rate. See table below.
B6	OFF	IN "A" port baud rate 1200
	ON	IN "A" port baud rate 9600
B7	OFF	OUT "B" port baud rate 1200
	ON	OUT "B" port baud rate 9600
B8	OFF	To be "OFF"! Only for service purposes.
	ON	To be "OFF"! Only for service purposes.

"EXT" isolated port baud rate

B4	B5	"EXT" port baud rate
OFF	OFF	1200
ON	OFF	2400
OFF	ON	4800
ON	ON	9600

LED indications in normal use

LED 1	Continuous	NA
	Blinking (1s)	NA
LED 2	Blinking quickly (10 ms)	NA
	Continuous	NA
LED 3	Blinking (1s)	NA
	Blinking slowly (4s)	NA
LED 4	Continuous	Power supply input 1 or 2 fault
	Blinking	NA
LED 5	Continuous	IN "A" line fault
	Blinking	IN "A" HW fault
LED 6	Continuous	OUT "B" line fault
	Blinking	OUT "B" HW fault

Note! In system fault all LED indications are continuous.

LED indications in start up condition (10 seconds)

LED 1	Continuous	Display HW installed
	OFF	Display HW not installed
LED 2	Continuous	Isolated port installed
	OFF	Isolated port not installed
LED 3	Continuous	NA
	OFF	NA
LED 4	Continuous	NA
	OFF	NA
LED 5	Continuous	NA
	OFF	NA
LED 6	Continuous	MCOX HW installed

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	OFF	MCOX HW not installed

System principle
Jumpers for service purposes

Jumper	ON	OFF
Program update	Program update	Normal use
Configuration	NA	NA

SW update

The unit is set to software update state by setting "prog update" jumper ON and restarting the unit (by pressing the CPU reset button). The sw update can be done with PC loader tool via incoming RS232 serial port. During the software update of the REPX unit the communication line to the FDP panel (RS485) must be disconnected. INFO protocol must be configured / enabled on the used port on fire panel (rs485 or rs23).
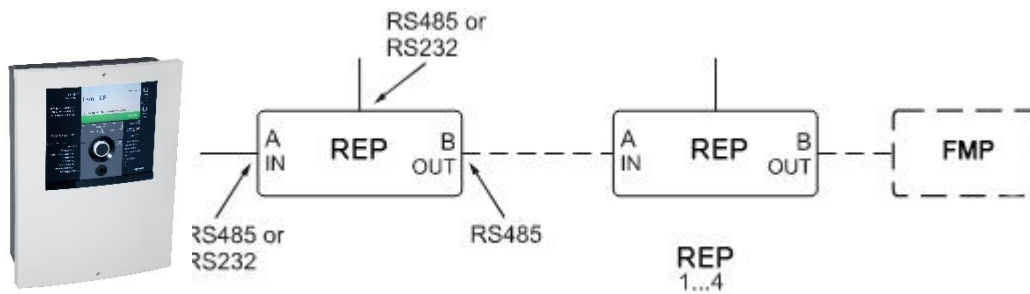
Note!	The maximum number of REP (REPX-OB) units connected to one FDP- panel is 4.
	The maximum number of REP, REPX-OB, FMP, DAP, MCO, MCOX-OB, ZLPX, ZLPX-IC Sense edition units connected to one FDP- panel is 16.
	The RS232 setting is used for the software update.
	The INFO-line in the REP (REPX-OB) unit must be disconnected during the REP (REPX-OB) software update.

Note!	The maximum RS485 cable length between 2 devices is 1000 m.
	The maximum RS232 cable length is 10 m.

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