X1171A

EXOline to hlEXOline converter

RS485 EXOline to hlEXOline converter for communication over long distances or unshielded signal cables

- **Communication over long cable distances**
- **Communication over lower quality cabling**
- **Galvanically insulated communication**

- **Can handle many units along the same cable**
- **Easy to use, easy to connect**

This product is for use together with Regin brand products that communicate via EXOline, such as EXOcompact and Corrigo, in order to enable enhanced communication.

Applications

The X1171A line amplifier is a specialized line driver/ receiver constructed to allow communication along long, permanent lines. The converter can be used for two different running modes, hlEXOline and EXOloop. The running mode is set based on the external wiring.

When in a current loop (EXOloop), all devices are connected to the X1171A via an external X1801 connection unit. The connection unit maintains power in the loop, regardless of whether the X1171A is disconnected or not. Together with the power-on procedure, this enables stable communication over extremely long distances. Communication via poor quality cables is also improved, e.g. if an unshielded cable is used.

The X1801 is no longer manufactured and is sold only while still in stock. However, the same function offered by the unit can also be recieved through use of jumpers and external resistors. Contact Regin for more information.

The line amplifier is equipped with a RS232 port. It can be used to communicate with controllers connected to the X1171A on the EXOline loop. The X1801 adapter has a separate RS232 port, enabling easy PC connection if testing the controllers is required. Please note that normal communication will be interrupted while the testing computer is connected.

Wiring

Wiring the X1171A into a hlEXOline network is done according to the picture on p. 2. The end points should be terminated using 100 Ohm 2W capacitors. All units must be set to "Slave" mode for communication via hlEXOline. This setting is made by way of a switch on the circuit board.

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THE CHALLENGER IN BUILDING AUTOMATION

EXO controller Power 24V

13 14 15 16   1 2 3

B A N E   G0- G+ E

EXOline   Switch=S

hlEXOline

X1171A   Rx- Rx+ Tx- Tx+

100 Ohm 2W   12 11 10 9

A   B

Inside cabinet

Connections

TxD RxD M P   CL Tx+ 9 Tx- 10 Rx+ 11 Rx- 12   B 13 A 14 N 15 E 16 EXOline

Regin

24V 1 – G0 2 + G 3 ⏚ 4 Gnd 5 Gnd 6 Enb 7 Rx 8 Tx RS232

Port	Designation	Terminal	Description
24V	+G	2	+24V DC alt. AC
	-G0	1	0V alt AC
	⏚	3	Ground
EXOline	B	13	Communication RS485, B
	A	14	Communication RS485, A
	N	15	Communication RS485, N
	E	16	Communication RS485, E
hlEXOline hlEXOloop / CL	Tx+	9	Communication High level, Send +
	Tx-	10	Communication Low level, Send -
	Rx+	11	Communication High level, Receive +
	Rx-	12	Communication Low level, Receive +
RS232	GND	4	Communikation RS232, Ground
	GND	5	Communication RS232, Ground
	Enb	6	Communication RS232, Select -
	Rx	7	Communication RS232, Receive
	Tx	8	Communication RS232, Send

Technical data

Supply voltage	24 V±10 %, ~/=
Power consumption, exkluding load	100 mA
Connections	terminals, lift type
Dimensions (LxBxH)	150 x 100 x 58 mm

Line driver (EXOloop/hlEXOline)

Max communication speed	40 kbps

EXOline port

Max. cable length	30 m

Service port via X1801

Elektrical specification	RS232
Max. cable length	3 m

CE   This product confirms to the demands set by the EMC- och LVD European hamonized standards. It carries the CE mark.