

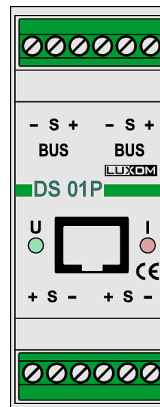
TECNICAL DESCRIPTION

The data transfer on the Luxom bus is based on the CSMA/CA protocol. This protocol guarantees a perfect data transfer at all times and facilitates use of the total capacity of the BUS, as opposed to nets that are based on the CSMA/CD protocol.

A bus termination is required for the efficient operation of the CSMA/CA protocol. Generally this termination is passive in the form of a resistor. However, Luxom has optimized this termination to an active one.

The output current of this device remains continuous and less sensitive to the number of modules connected.

This DS01P module delivers a bus current between 90 and 110mA on the signal wire.



TECHNICAL DATA

Product ID	-
BUS	Luxom 3-wire free topology network
Communication	CSMA/CA
Supply voltage	24 VDC
Power consumption	0.3VA
Installation	DIN-rail mounting
Number of bus connections	4
Terminal clamps BUS	2.5 mm ²
Terminal connector BUS	RJ45
Visualization	Control LEDs for BUS-voltage and current
Guarantee	3 years on exchange
Environment temperature	0° to 50°C
Protection level	IP 20
Dimensions LxWxH	36 x 90x 62 mm
Number of DIN-rail modules 18 mm	2

CONTROL

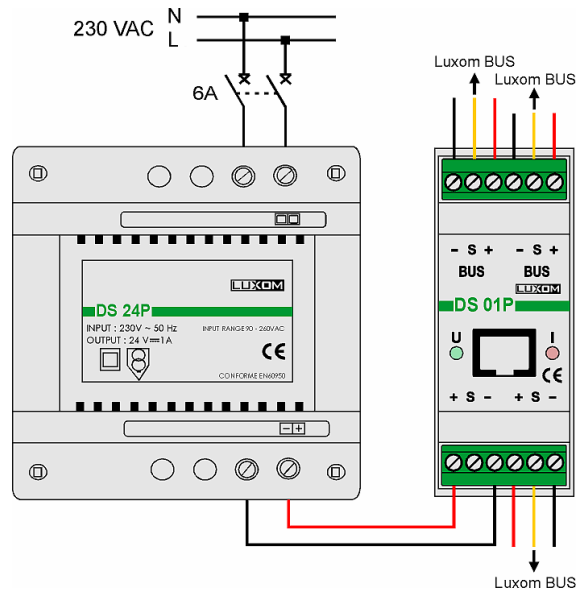
Via LED U and I:

The green LED U indicates whether the BUS voltage is present (24 VDC)
 The red LED I goes out when the S and – wires in the installation are short circuited.
 In normal operation they should both be on.

By measuring the current:

Measure the BUS current between the S and – connections and check that the bus current is between 70 and 110mA.

WIRING DIAGRAM



TROUBLESHOOTING GUIDE

The schedule below enables you to detect and correct certain problems. Should you require additional support, do not hesitate to contact a Luxom technician.

PROBLEM	CAUSE	ACTION
LED I is off	Short circuit between S and – wire	Locate short circuit by disconnecting various parts of the bus until LED I lights up
LED U and I are off	24 VDC absent	- Is 230V present on power supply? - Wiring between power supply and DS01P module done correctly? - Check the bus for any short circuit between + and – wire
LED U and I are on but you're unable to communicate with the bus.	Power between the S and – connection in the bus insufficient. <70mA (nominally 100mA)	Completely disconnect the bus from the DS01P and check whether the bus power comes to the required current. If so, there is an incorrect connection on the bus. Otherwise, the DS01P module may be defective
LED U and I are on, the 100mA is present, but unable to program	Prescribed number of modules and/or length of bus cable exceeded	Remove a number of modules from the bus or add a repeater to the installation
No 24VDC power present, without the DS01P being connected	The 230V mains voltage is not connected to the power supply	Connect the 230V mains voltage to the power supply.
No 24 VDC power present, even with 230 V mains voltage present	The power supply activated its electronic protection	Remove the mains voltage for 10 seconds from the power supply to enable the electronic protection to reset itself
LED U and I intensity fluctuates	There is insufficient load connected to the power supply	Connect a number of modules to the power supply to ensure sufficient power consumption
Some modules forming part of the installation cannot be programmed even with 24VDC/100mA present on the modules	The + and S wires are inverted before the module(s) that cannot be programmed	Check the bus wiring and correct if necessary.