TECHNICAL DESCRIPTION

The DS88L is a Luxom network unit with an on board controller for decentralised management of 20 outputs (8 transistor outputs and 3 add-on connections), 2 analogue inputs (0/10V) and 24 binary inputs.
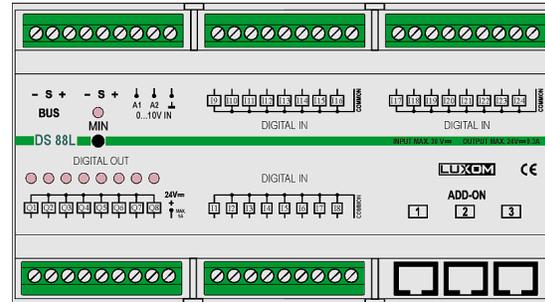
Pushbuttons, motion detectors, transistor signals and window or door contacts can be connected directly to this module via the 24 binary inputs.

The configuration of this module is done via the Luxom network and is stored on board in a non volatile memory.

After a power failure, every output can individually be set-up to stay OFF, to go ON, or to revert to the state before power failure. (status is stored on the module)
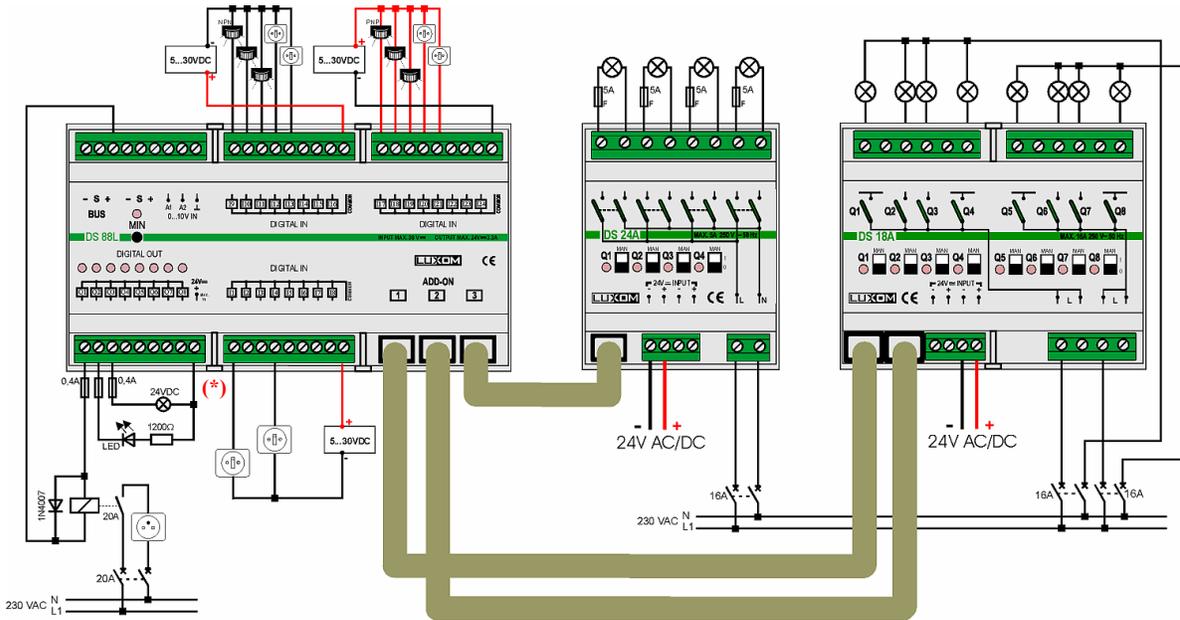
Application:
- decentralised control of lighting in houses and offices
- transformation of conventional latching relay installations
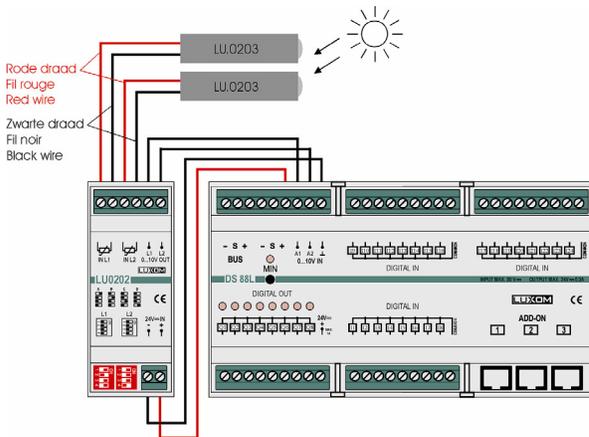- managing several rooms in hotels, hospitals,…

TECHNICAL DATA	
Product ID	202
Supply voltage	24 VDC
Power consumption	2 VA
Installation	DIN-rail mounting
Number of bus connections	2
Connection BUS	2.5 mm² - removable

FUNCTIONAL DATA OUTPUTS Q1-Q8	
Transistor output	8 x NPN, open collector
Maximal voltage/current	30 VDC / 0.5A
Protection against short circuits	No (0.4T fuse foreseen per port)
Connection	2.5 mm² - removable

FUNCTIONAL DATA OUTPUTS Q9-Q20	
Transistor output	10V / 2mA

FUNCTIONAL DATA BINARY INPUTS I1 – I24	
Inputs	8 + 8 + 8
Signal type	For dry contacts or NPN and PNP signals
Type of port	Binary
Input impedance	6 kOhm
Nominal input voltage/current	24 VDC / 4 mA (min. 5VDC-0.7mA …. max. 30VDC-5mA)
Common connection (for ports I1...I8, I9...I16, I17...I24)	Zero tension
Connection	2.5 mm² - removable
Separation between BUS and ports	Yes, optical (>4kV)
Maximum distance between port and sensor	100 meters @ 24 VDC (with shielded cable)
Warranty	3 years on exchange (excluding relays and connectors)
Operational temperature	0 - 50° C
Protection level	IP 20
Dimensions LxWxH	160 x 90 x 62 mm
Number of DIN-rail modules 18 mm	9 (without add-on modules)

WIRING DIAGRAM BINARY INPUTS & OUTPUTS

(*) The 24VDC common output is filtered and is not suited for driving coils. For these types of load use the BUS connection!

WIRING DIAGRAM ANALOGUE INPUTS A1-A2

FUNCTIONAL DATA	
Inputs	2 x analogue 0-10V
Resolution	8 bit
Max. distance between input and sensor	50 meters (with shielded cable)

For more connection diagrams we refer to the 'Wiring diagrams.pdf' file.

ON BOARD SOFTWARE FEATURES

Output - Toggle	4 different actions can be programmed on every input : All binary inputs have 'normal', 'short', 'long' and 'push twice' functionality.	Input – Send °C or % with contact closure
Output - ON	Input - Toggle with contact closure	Send actions based on a measured 0-10V signal
Output - OFF	Input - Set with contact closure	Input - Switch between Set and Clear with every contact closure
Output - ON after a delay(*)	Input - Clear with contact closure	'On switch' time counter on every output
Output - OFF after a delay	Input - Normally Open contact	'On' time counter on every output.
Output - ON for a time(*)	Input - Normally Closed contact	Every counter has an alarm level that can be set-up
Output - OFF for a time	Input - Normally Open Contact with repeat every 1…2550sec	All counters can be reset with one command
Output - blink (Alarm mode)	Input - Normally Closed Contact with repeat every 1…2550sec	10x 4 channel (trigger sensitive) And/Or gate to set freely
Lock output	Input - For toggle switch	Day/Night energy saving mode on every output

(*)The delays and times can be configured from 0.05 sec to 170 hours for all kinds of applications. Multiple modes on the same outputs are easy to set-up.