TECHNICAL DESCRIPTION

The DS20C is a Luxom network unit with an on board controller for decentralised management of up to 12 dimmers or 12 relays.

The module is equipped with:
- 12 voltage-controlled 0-10V outputs
- 5 binary inputs
- 2 analogue 0-10V inputs

The 12 outputs are divided over 3 add-on connectors. Every connector can be set-up to control:
- a 4 channel add-on relay module
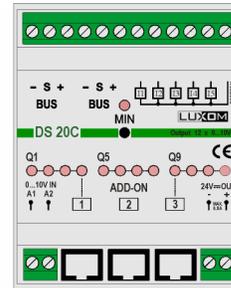- a 4 channel add-on dimmer.

If you require controlling only 4 or 8 dimmers, the remaining port(s) can be used to turn on/off lights, fans, power-outlets…

Every output is equipped with a LED for status feedback.

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)

The on-board software features are very powerful and easy to use.

TECHNICAL DATA	
Product ID	220
Supply voltage	24 VDC
Power consumption	Max. 1.9VA
Installation	DIN-rail mounting
Number of bus connections	2
Connection BUS	2.5 mm²

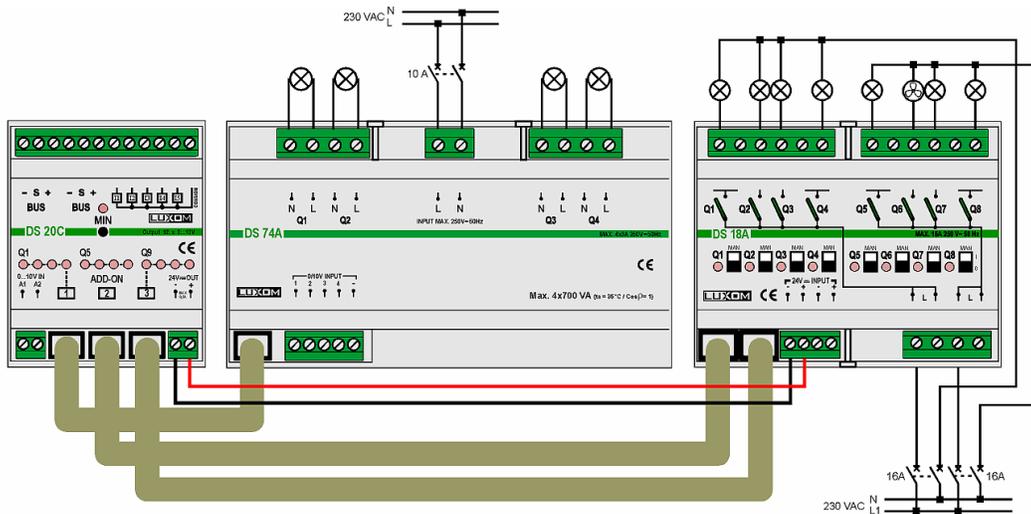| FUNCTIONAL DATA CHANNEL Q1 – Q12	
Output	12 x 0-10V / 1mA – voltage driven
Resolution	8 bit (39 mV/step)
"Rise time" and "Fall time"	0sec…127sec...127min
Start voltage and maximum voltage	Configurable between 0 and 10V

FUNCTIONAL DATA BINARY INPUTS	
Input	5 x binary
Signal type	For dry contacts or NPN and PNP signals
Voltage range	5…30 VDC
Maximum distance between input and contact	100 metres @ 24 VDC with shielded cable

FUNCTIONAL DATA ANALOGUE INPUTS	
Input	2 x analogue 0-10V
Resolution	8 bit
Maximum distance between input and sensor	50 metres with shielded cable

Warranty	3 years on exchange (excluding relays and connectors)
Operational temperature	0° to 50° C
Protection level	IP 20
Dimensions LxWxH	72 x 90 x 62 mm
Number of DIN-rail modules 18 mm	4 (without add-on modules)

Note: If you want to control the light level of HF fluorescent lamps equipped with a 1/10V electronic ballast you can use add-on module **DS44A**.

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

ON BOARD SOFTWARE FEATURES

Output Toggle	Turn scene on with activation delay and duration time(*)	Turn light scenes on and off with the 0-10V analogue input
Output ON - 100%	Turn scene off with activation delay and duration time(*)	Send actions based on a measured 0-10V signal
Output OFF - 0%	Turn light scene on/off with motion detector or contact	Compare local & remote 0-10V signals with each other
Set output to xx%	Store light scene with push button	Create day/night switches with different light levels (***)
Set output to xx% in xx sec/min	Go to previous light scene	Daylight dependable light control is easy to set-up
Output memory (**)	Increment/decrement light scene in 1%...50% steps	Use the and-or gate in the 0-10V inputs to add conditions
Lock output	Increment/decrement light scene with wrap around	Control any light scene with the local binary input
Lock multiple outputs for xx time (*)	Activate light scene with interval mode (for alarm)	Use a binary input to connect a door or window contact

- In total 28 light scenes (moods) are available. This allows multiple combinations on the same outputs. If more light scenes are required, they can be generated from another device on the Luxom network or via RS232 or TCP/IP.
- Outputs on the same or on a different module can be set-up to trigger each other.
- The inputs on this device are able to control any Luxom device on the Luxom network.

(*) activation delay and duration time can be set-up from 0.05 sec to 170 hours
(**) output reverts to its previous light level when toggled on
(***) by using a 0-10V light sensor