



DDBC120-DALI

DALI-2 Driver Controller

Full DALI-2 control with inbuilt DALI power supply and driver power management

The Philips Dynalite DDBC120-DALI is ideal for small-scale projects looking for a compact, all-in-one DALI control solution.

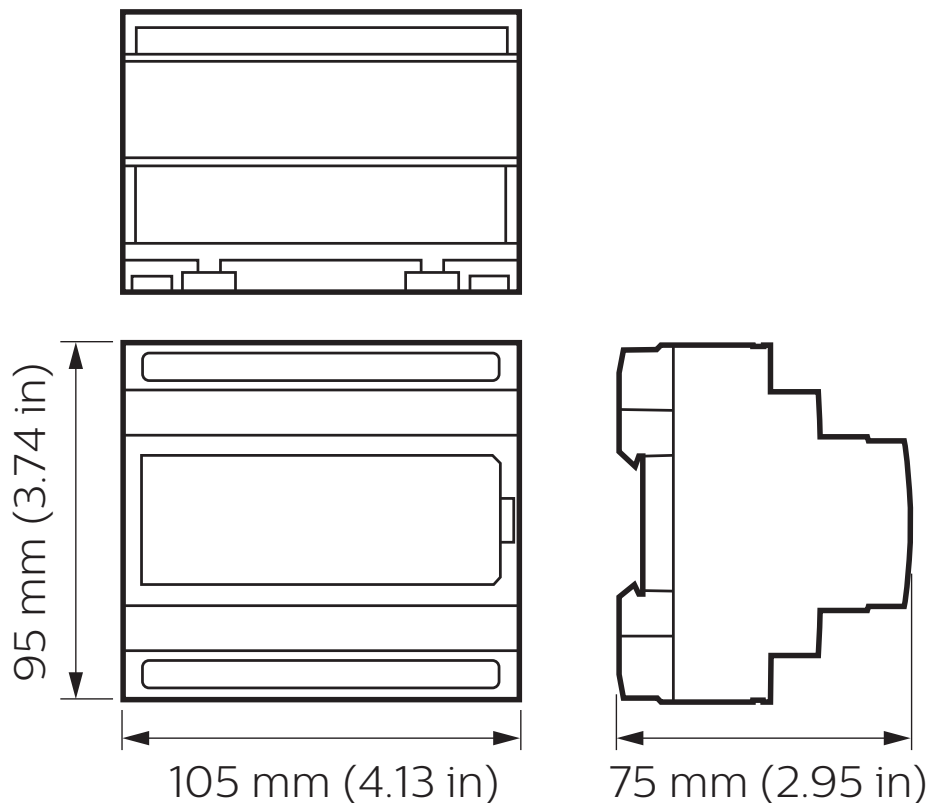
This controller operates seamlessly with all other Dynalite controllers, sensors, user interfaces and head-end software.

DDBC120-DALI

Enabling a full DALI universe including tunable white drivers, DALI sensors and user interfaces

- **Single-master solution** – Compatible with a range of DALI fittings and devices, including DALI fluorescent drivers, DALI electronic low voltage transformers, DALI LED fixtures, DALI emergency lighting fixtures and Philips Dynalite DALI sensors and user interfaces.
- **Compatible with DALI 209 drivers** – Provides control of tunable white luminaires.
- **DALI auto-enumeration** – Provides automatic enumeration of DALI drivers when powered on and enables self-repair of the network system if a DALI driver fails.
- **Fully scalable network solution** – Direct mapping from DALI to the DyNet network protocol eliminates DALI imposed limits, such as maximum group sizes.
- **Flexible mounting solution** – A DIN-rail mountable device, designed to be installed into the distribution board supplying power to the controlled lighting circuit.
- **DALI port protection** – DALI port is protected by a self-resettable fuse, preventing damage to devices if exposed to prolonged excessive current from multiple DALI power supplies or accidental shorting to mains. Once fault conditions have been corrected, the device resumes normal operation.
- **Dual functionality** – Leverage advantages of a true DALI network solution, whilst still allowing full function set of DyNet network control.
- **Driver standby power elimination** – Internal switched relay automatically isolates the power circuit when all drivers are dimmed to 0%.
- **Integral DALI bus power supply** – Removes the need for provision of a separate external power supply and reduces distribution board wiring complexity.
- **Driver management tools** – Includes lamp and driver status reporting, driver run time tracking, and emergency test reporting.
- **Onboard DALI test function** – Use the controller's service switch to set all connected lamps to full brightness, or flash on/off for a 5-minute test window, without the need for software or additional input devices.

Dimensions



Specifications

Due to continuous improvements and innovations, specifications may change without notice.



DDBC120-DALI
DALI Driver Controller

Electrical

Supply Type	Single-Phase
Supply Voltage	100-240 VAC
Supply Current	0.25 A
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	120 mA
Switched Outputs	1 x 20 A feed-through
DALI Protection	Electronic self-resettable fuse
IEC Overvoltage Category	III

Control

Serial Ports	1 x RS-485
Supported Protocols	DyNet DMX Rx
DMX Rx Channels	64
Control Channel Outputs	1 x DALI-2 (DALI-2 certified and DALI registered drivers only) (Supports DALI 207 & DALI 209 Tuneable White)
Dry Contact Inputs	1 (AUX)
User Input	1 x service switch 1 x switched output channel toggle
Indicators	1 x diagnostic LED
Diagnostic Functions*	Lamp failure reporting Driver failure reporting Driver runtime tracking Switched output runtime tracking Emergency test reporting Device online/offline status

* Philips Dynalite System Manager required for analyzing diagnostic data.
The availability of some diagnostics is dependent on driver type.

Physical

Dimensions (H x W x D)	95 x 105 x 75 mm (3.74 x 4.13 x 2.95 in)
Packed Weight	0.45 kg (0.99 lb)
Construction	Polycarbonate DIN rail enclosure (6 unit)
Serial Ports	1 x RJ12 1 x 6-way pluggable screw terminal
Serial Port Conductor Size	2.5 mm ² (#12 AWG) (max)
Supply Terminals	3 x screw terminal Line, Neutral, Earth
Supply Terminal Conductor Size	5 mm ² (#10 AWG) (max)
Control Terminals	1 x 2-way screw terminal
Control Terminal Conductor Size	5 mm ² (#10 AWG) (max)
Relay/Loop Terminals	4 x screw terminal Loop IN, Loop OUT, Relay IN, Relay OUT
Relay/Loop Terminal Conductor Size	5 mm ² (#10 AWG) (max)

Environment**

Operating Temperature	-20° to 50°C ambient (-4° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

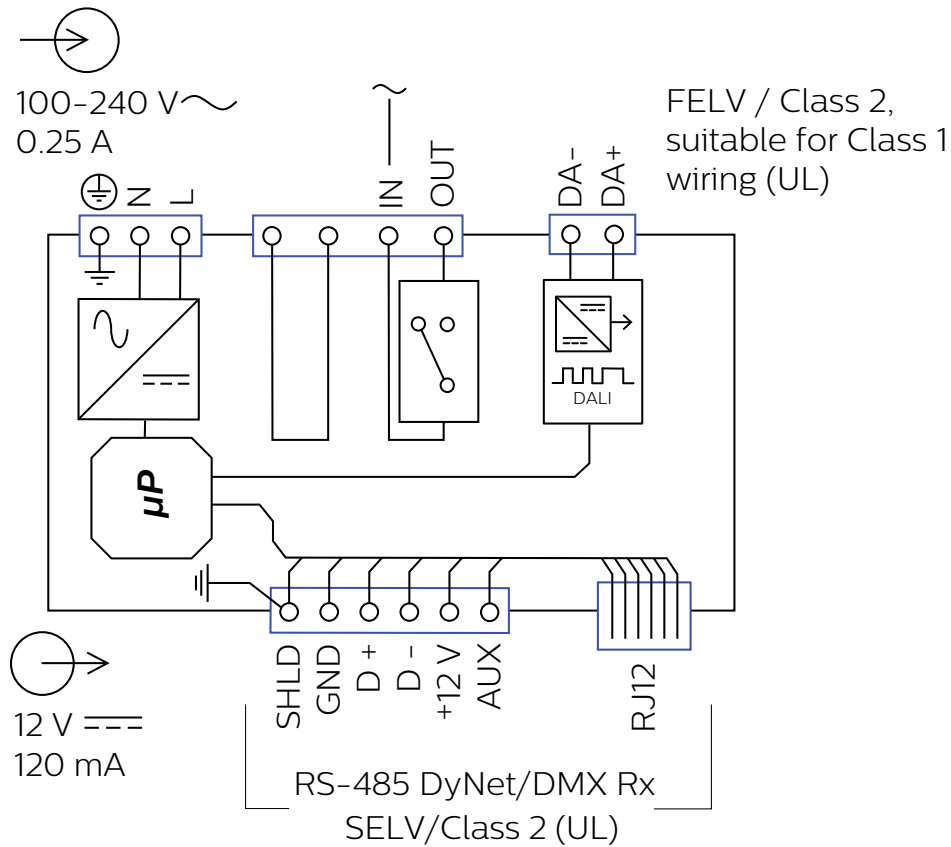
Compliance

Certification	CE, RCM, UL/cUL, FCC, ICES, UKCA, RoHS DALI-2 IEC62386
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** For indoor installation only



Electrical



Control Channel Ratings

DALI	Channel
Output Voltage	16 VDC
Guaranteed Current	220 mA
Maximum Current	250 mA
Maximum Drivers	64
Insulation	Basic

Auto restart on DALI output overload or short circuit

DALI Device Count

The table below shows the maximum number of DALI drivers and Dyalite DALI devices that can be connected to the DALI bus at the same time.

These devices include Dyalite's range of DALI occupancy sensors and the DPMI940-D dry contact interface.

Dyalite DALI Devices	DALI Drivers
10	64
11	59
12	54
13	49
14	44
15	39
16	34

Output Channel Ratings

Load Type	Maximum Rating per Output	
	UL/cUL	CE
Electronic Driver	16 A, 277 VAC	20 A, 240 VAC
Inrush Current	500 A	

Ordering Code

Product

DDBC120-DALI

Philips 12NC

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