



# DDBC120-DALI

MultiMaster DALI Driver Controller

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

The Philips Dynalite DDBC120-DALI delivers cost-effective DALI control through provision of a full universe of 64 DALI drivers.

This DALI-2 certified device communicates seamlessly with Philips Dynalite DALI sensors and user interfaces, as well as controlling both standard DALI and DALI 209 tunable white luminaires.

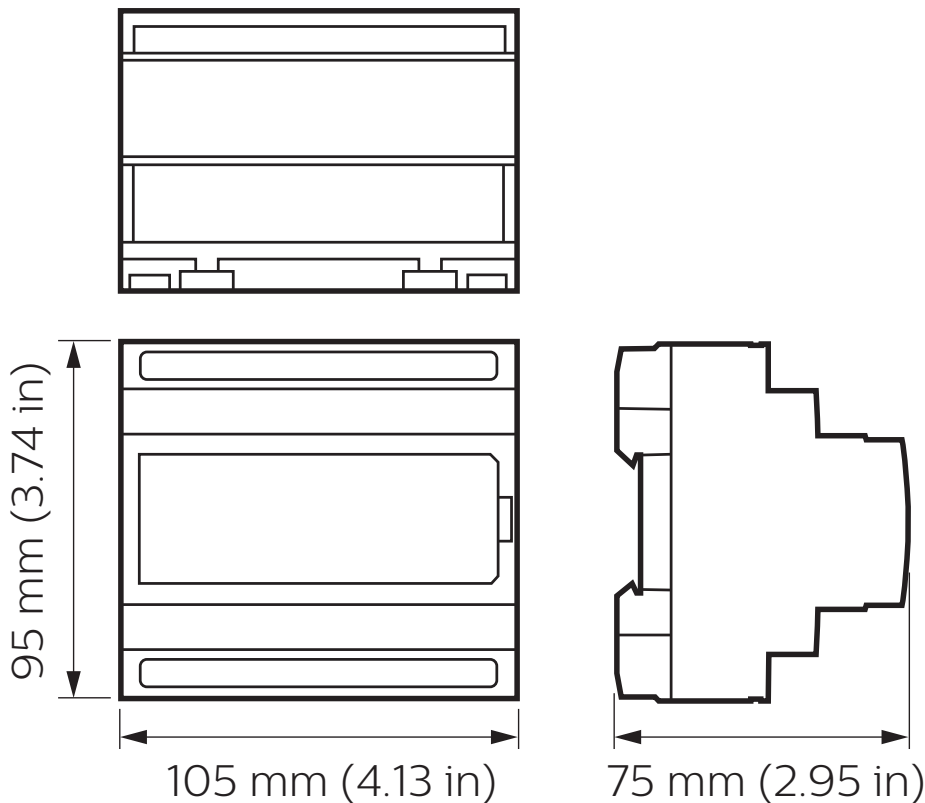
# DDBC120-DALI

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 multi-master DALI sensors and user interfaces.
- **Compatible with DALI 209 drivers** – Provides control of tunable white luminaires.
- **DALI auto-enumeration** – Provides automatic enumeration of DALI ballasts 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.
- **Dual functionality** – Leverage advantages of a true DALI network solution, whilst still allowing full function set of DyNet network control.
- **Built-in energy savings** – Control signals can be programmed to operate in tandem with the internal relay, which will automatically isolate the power circuit when all associated channels are at 0%.
- **Integral DALI bus power supply** – Removes the need for provision of a separate external power supply and reduces distribution board wiring complexity.
- **Inbuilt diagnostic functionality** – Features lamp and driver failure reporting, driver run time tracking for each driver, emergency test reporting and Device Online/Offline status indication.

---

## Dimensions



# Specifications

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



## DDBC120-DALI MultiMaster 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
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 MultiMaster (DALI-2 certified and DALI registered drivers only) (Supports DALI 207 & DALI 209 Tunable White)
Dry Contact Inputs	1 (AUX)
User Input	1 x service switch
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 <sup>2</sup> (#12 AWG) (max)
Supply Terminals	3 x screw terminal Line, Neutral, Earth
Supply Terminal Conductor Size	5 mm <sup>2</sup> (#10 AWG) (max)
Control Terminals	1 x 2-way screw terminal
Control Terminal Conductor Size	5 mm <sup>2</sup> (#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 <sup>2</sup> (#10 AWG) (max)

### Environment

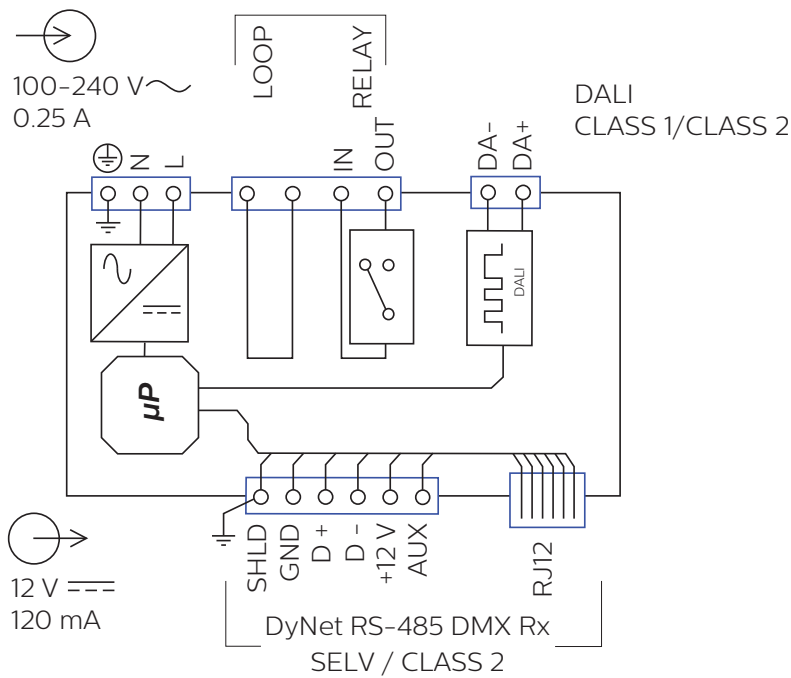
Operating Temperature	-20° to 50°C ambient (-4° to 122°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

### Compliance

Certification	DALI-2, CE, RCM, UL/cUL, FCC, ICES, IEC62386, RoHS
---------------	--



## 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

## MultiMaster Device Count

Maximum number of sensors/switches on the DALI bus	Maximum number of drivers on the DALI bus
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 Ballast	16 A, 277 VAC	20 A, 240 VAC
Inrush Current	500 A	

## Ordering Code

### Product

DDBC120-DALI

### Philips 12NC

913703685109



© 2020 Signify Holding. All rights reserved. Specifications are subject to change without notice. No representation or warranty as to the accuracy or completeness of the information included herein is given and any liability for any action in reliance thereon is disclaimed. Philips and the Philips Shield Emblem are registered trademarks of Koninklijke Philips N.V. All other trademarks are owned by Signify Holding or their respective owners.