



DDBC516FR

Signal Dimmer Controller

Flexible control of 1-10 V and DALI drivers

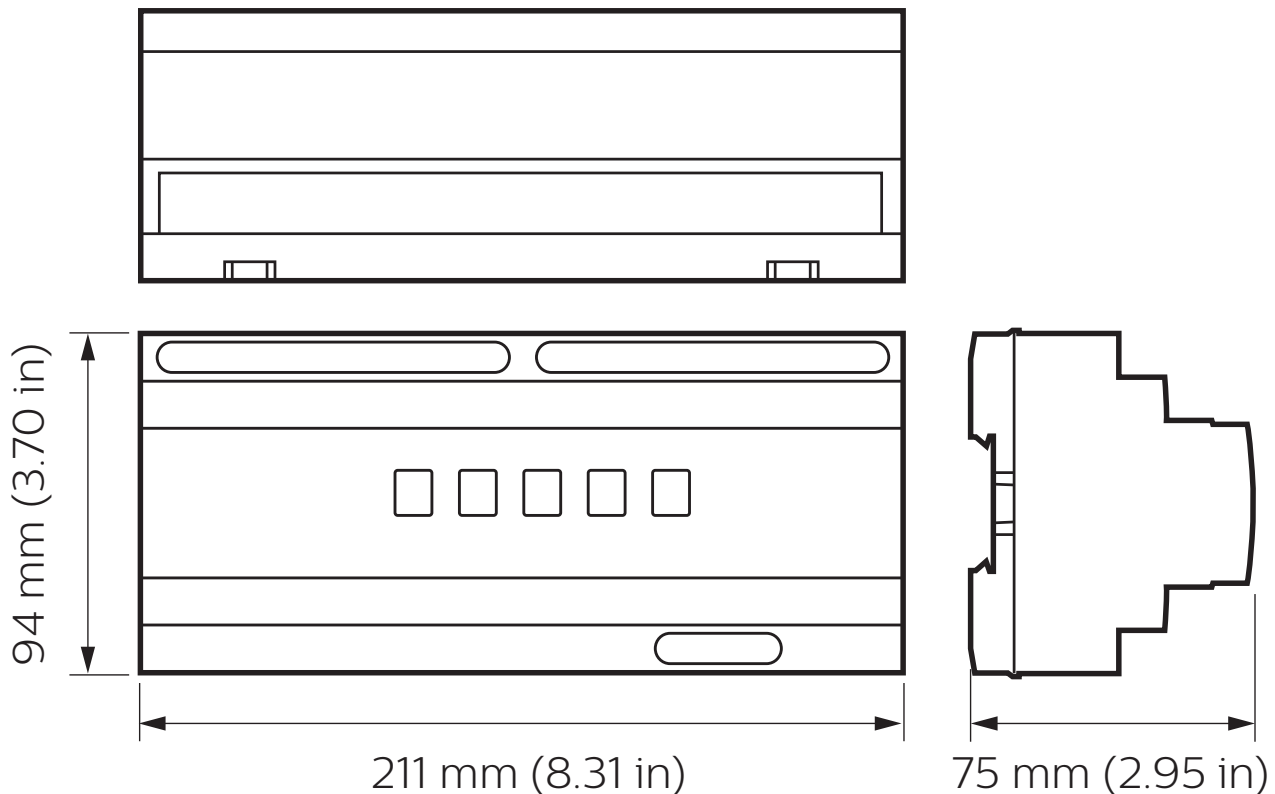
The Philips Dynalite DDBC516FR is a five-channel device for controlling DALI drivers. Each control output is selectable to DALI broadcast, DALI addressed, 1-10 V or DSI.

DDBC516FR

Flexible control of 1-10 V and DALI drivers

- **Multiple protocols supported** – Each of the five control outputs supports DALI broadcast (maximum ten DALI loads/channel), DALI addressed (maximum ten DALI loads/channel), 1-10 V (maximum 10 mA sink or source/channel) or DSI (maximum five DSI loads/channel).
- **Built-in energy savings** – Control signals can be programmed to operate in tandem with five internal switched outputs, which will automatically isolate the power circuit when all associated channels are at 0%. This is a useful feature as DALI drivers still draw significant power when lamps are turned off via a DALI command.
- **Integral DALI bus power supply** – Removes the need for an additional external device.
- **Flexible mounting solution** – A DIN-rail mountable device, designed to be installed into the distribution board supplying power to the controlled circuit.
- **Inbuilt diagnostic functionality** – Features lamp and driver failure reporting, driver run time tracking for each driver and the switched output, as well as Device Online/Offline status indication.

Dimensions



Specifications

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



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Electrical

Supply Type	Single-Phase
Supply Voltage	100-240 VAC
Supply Current	0.15 A
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	120 mA
Switched Outputs	5 x 16 A feed-through
Output Channel Ratings	(See Page 4)
Maximum CH-CH Voltage	300 VAC (UL) 400 VAC (CE)
Maximum CH-XX-CH Voltage*	480 VAC
XX = unpopulated channel (2x terminals) for isolation	
IEC Overvoltage Category	III

Control

Serial Ports	1 x RS-485
Supported Protocols	DyNet
Control Channel Outputs	5 (DALI Broadcast, DALI Addressed, DSI or 1-10 V)
Dry Contact Inputs	1 (AUX)
User Input	1 x service switch 5 x channel override
Indicators	1 x diagnostic LED 5 x channel status LED
Diagnostic Functions**	Lamp failure reporting Driver failure reporting Driver runtime tracking Device online/offline status

* Refer to Installation Instructions for correct terminations for phase separation.

** 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)	94 x 211 x 75 mm (3.70 x 8.31 x 2.95 in)
Packed Weight	0.8 kg (1.76 lb)
Construction	Polycarbonate DIN rail enclosure (12 unit)
Serial Ports	2 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	5 x 2-way screw terminal DA-, DA+
Control Terminal Conductor Size	2.5 mm ² (#12 AWG) (max)
Output Terminals	5 x 2-way screw terminal IN, OUT
Output Terminal Conductor Size	5 mm ² (#10 AWG) (max)

Environment***

Operating Temperature	0° to 40°C ambient (32° to 104°F)
Storage/Transport Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	0 to 90% non-condensing
IEC Pollution Degree	II

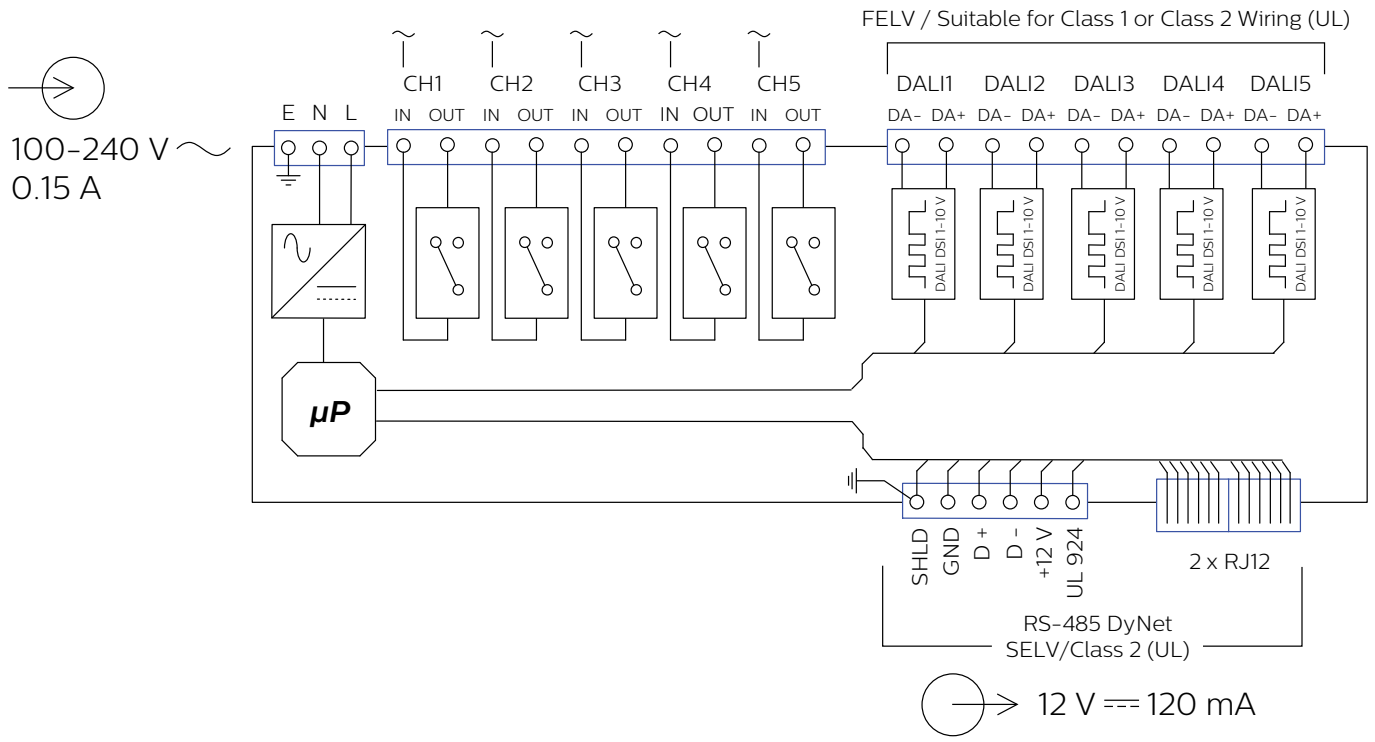
Compliance

Certification	CE, RCM, UL, FCC, ICES, UKCA, RoHS
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*** For indoor installation only



Electrical



Output Channel Ratings

Load Type	Maximum Rating per Output	
	CH1-CH5	
General Use	16 A, 277 VAC	
Incandescent		
Standard Driver		
Electronic Driver		
Motor	16 FLA (1 HP), 120 VAC 14.5 FLA (2½ HP), 240 VAC 14.1 FLA (3 HP), 277 VAC	
Pilot Duty	6 A, 120 VAC 3 A, 240 VAC 2.6 A, 277 VAC	
Inrush Current	500 A	
Total Device Load	≤ 80 A	

Control Channel Ratings

DALI/DSI	Channel	Device
Guaranteed Current	20 mA	
Maximum Current	250 mA	
Maximum Drivers	10	50
Insulation	Basic	
1-10 V		
Current	sink 10 mA source 10 mA	

Ordering Code

Product	Philips 12NC
DDBC516FR	913703031509



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