



DDBC516FR

Signal Dimmer Controller

Flexible control of 1-10 V and DALI drivers

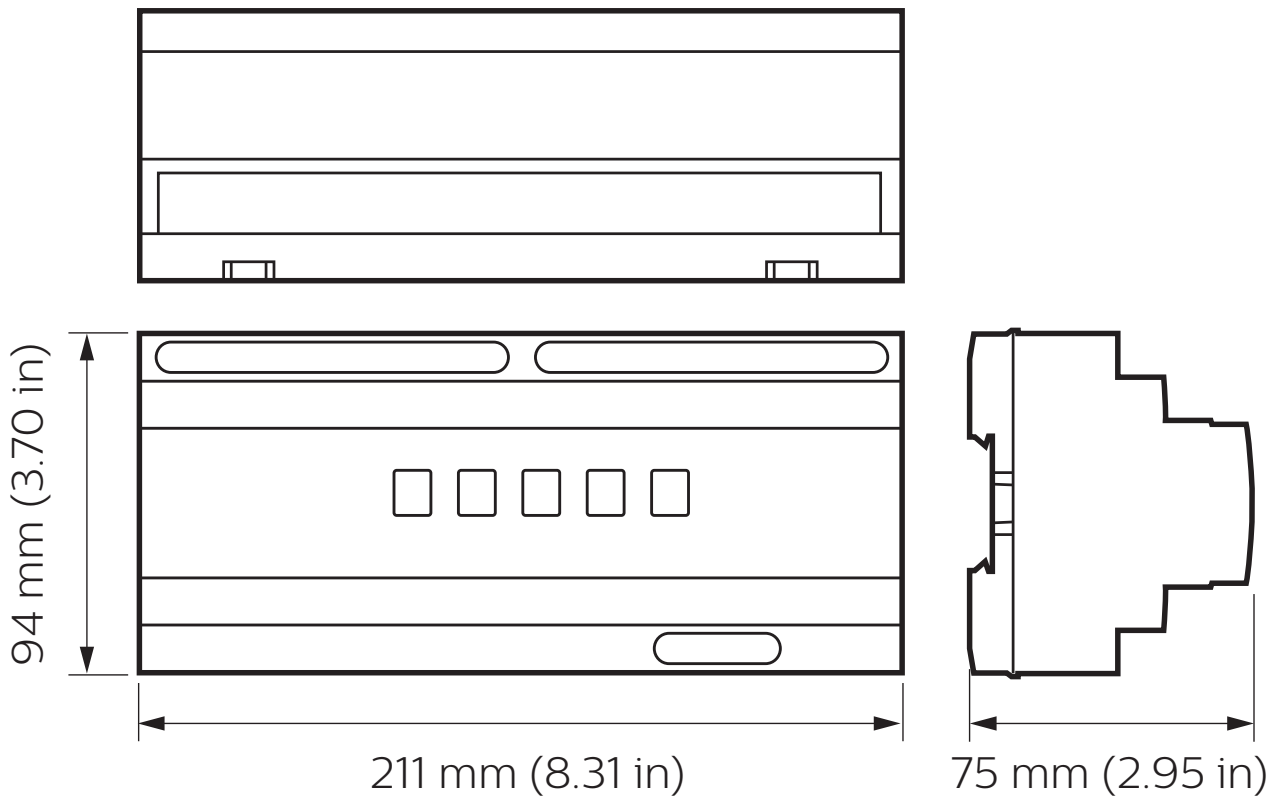
The Philips Dynalite DDBC516FR is a five-channel device for controlling DALI drivers. Each control output is selectable to DALI broadcast, DALI addressed, 1-10 V or DSI.

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.



DDBC516FR
Signal Dimmer Controller

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 | 200 mA |
| Switched Outputs | 5 x 16 A feed-through |
| Maximum CH-CH Voltage | 400 VAC |
| IEC Overvoltage Category | III |

Control

| | |
|-------------------------|---|
| Serial Ports | 1 x RS-485 |
| Supported Protocols | DyNet DMX Rx |
| DMX Rx Channels | 5 |
| 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 |

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 |

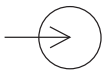
Compliance

| | |
|---------------|---------------|
| Certification | CE, RCM, RoHS |
|---------------|---------------|

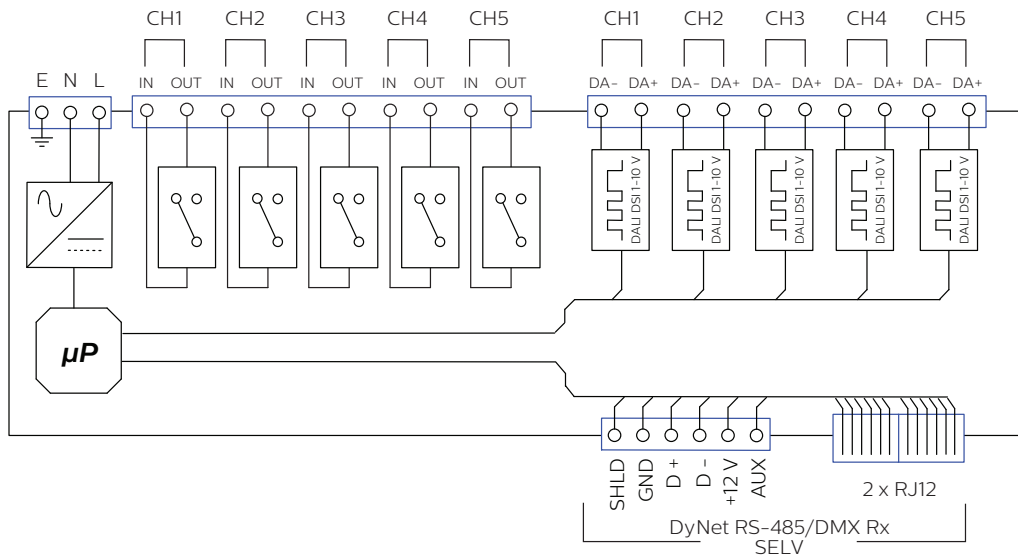
* Philips Dynalite System Manager required for analyzing diagnostic data. The availability of some diagnostics is dependent on driver type.



Electrical



100-240 V ~ 0.15 A



12 V = 200 mA

Control Channel Ratings

| DALI/DSI | Channel | Device |
|--------------------|----------------------------|--------|
| Output Voltage | 15 VDC | |
| Guaranteed Current | 20 mA | |
| Maximum Current | 250 mA | |
| Maximum Drivers | 10 | 50 |
| Insulation | Basic | |
| 1-10 V | Channel | |
| Current | sink 10 mA source 10 mA | |

Output Channel Ratings

| Load Type | Maximum Rating per Output CH1-CH5 |
|--------------------|--------------------------------------|
| Electronic Ballast | 16 A, 240 VAC |
| Inrush Current | 500 A |

Ordering Code

Product

DDBC516FR

Philips 12NC

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