

DBC905W

Signal Dimmer Controller



Specification Sheet

Controllers > DALI Controllers



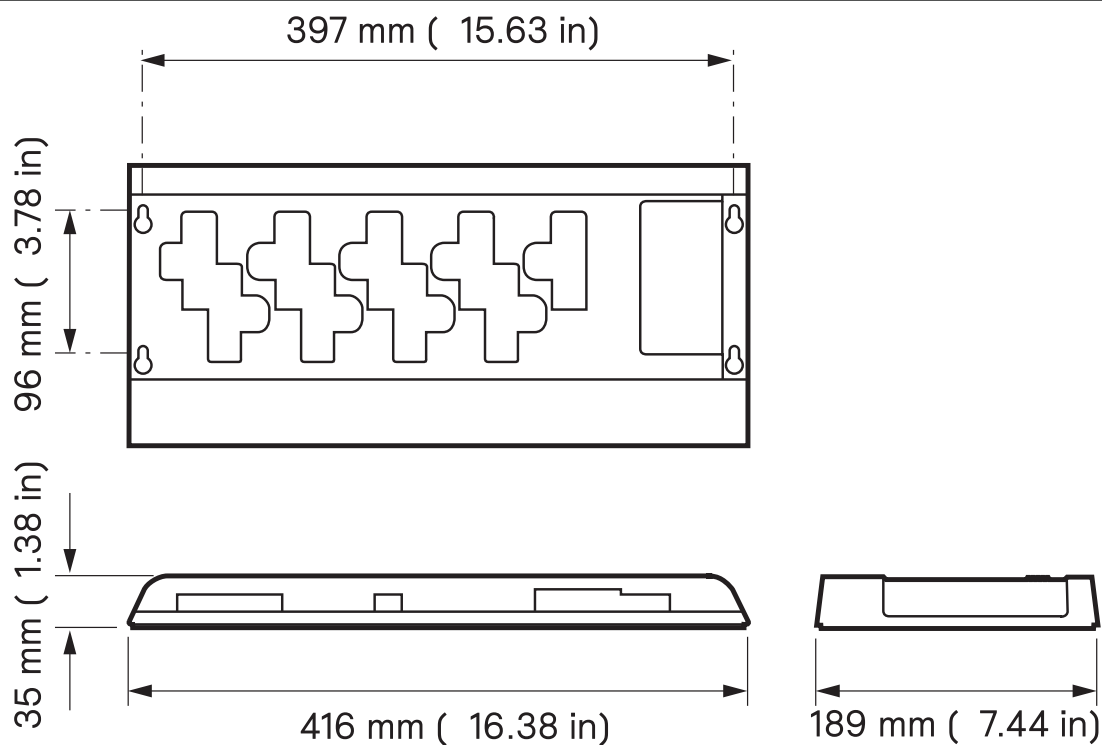
Easy-to-install controller with flexible mounting options

The Dynalite DBC905W is a nine-channel signal dimmer controller, designed for direct installation within ceiling cavities. The device incorporates structured wiring connectors to enable easy connection without the need for specialised tools.

Key Features

- **Multiple protocols supported** – Each control output supports DALI broadcast, DALI addressed, 1-10V, and DSI
- **Built-in energy savings** – Control signals can be programmed to operate in tandem with five internal switched outputs that automatically isolate the power circuit when all associated channels are at 0%. This eliminates standby power draw from inactive DALI drivers when lamps are turned off via DALI command.
- **No specialised tools required** – Wieland connectors use pluggable screw terminals for easy termination.
- **Inbuilt diagnostic functionality** – Includes lamp and driver failure, circuit run time tracking/lamp life, automated battery tests, and Device Online/Offline status indication.

Dimensions



Specifications

Electrical	
Supply Type	Single-Phase
Supply Voltage	230 VAC
Supply Current	16 A
DyNet DC Output Voltage	12 VDC
DyNet DC Output Current	400 mA
Relay Outputs	9 x 5 A resistive
Electrical Protection	3 x 6.3 A replaceable HRC fuses (CH1-3, CH4-6, CH7-9+MO)
IEC Overvoltage Category	III
Control	
Communication Ports	2 x RS-485
Supported Protocols	DyNet
Control Channel Outputs	9 (DALI Addressed/Broadcast, DSI, 1-10 V)
Control Inputs	4 x voltage-free SPDT switch inputs (momentary or latch)
Dry Contact Inputs	1 (AUX)
User Controls	1 x service override switch (All channels to 100%)
Indicators	1 x diagnostic LED
Diagnostic Functions	Lamp failure
	Driver failure
	Circuit run time tracking/lamp life
	Automated battery tests
	Device online/offline status
Physical	
Dimensions	189 x 416 x 35 mm (7.44 x 16.38 x 1.38 in)
Packed Weight	2.0 kg (4.41 lb)
Construction	Moulded ABS plastic
Serial Ports	4 x RJ12 1 x 6-way pluggable screw terminal 1 x 3-way pluggable screw terminal
Serial Port Conductor Size	0.3-2.5 mm² (#22-12 AWG)
Input Terminals	4 x 3-way pluggable screw terminal
Input Terminal Conductor Size	≤2.5 mm² (#12+ AWG)
Output Terminals	9 x Wieland connector
Supply Terminals	1 x 3-way Wieland connector
Environment	
Operating Temperature	0° to 50°C ambient (32° to 122°F)
Storage Temperature	-25° to 70°C ambient (-13° to 158°F)
Relative Humidity	≤95% non-condensing
IEC Pollution Degree	II
Installation Note	For indoor installation only
Compliance	
Certifications	CE, RCM, UKCA, RoHS



Output Channel Ratings

Load Type		CH1-CH9
General Use		5 A, 230 VAC
Electronic Driver		2 A, 230 VAC
Inrush Current		100 A
Load Type		Maintained Output
General Use		5 A, 230 VAC
Maximum Group Load		
CH1-CH3		Continuous Current: 5 A Inrush Current: 100 A
CH4-CH6		Continuous Current: 5 A Inrush Current: 100 A
CH7-CH9 + Maintained		Continuous Current: 5 A Inrush Current: 100 A
Total Device Load		
≤ 15 A		

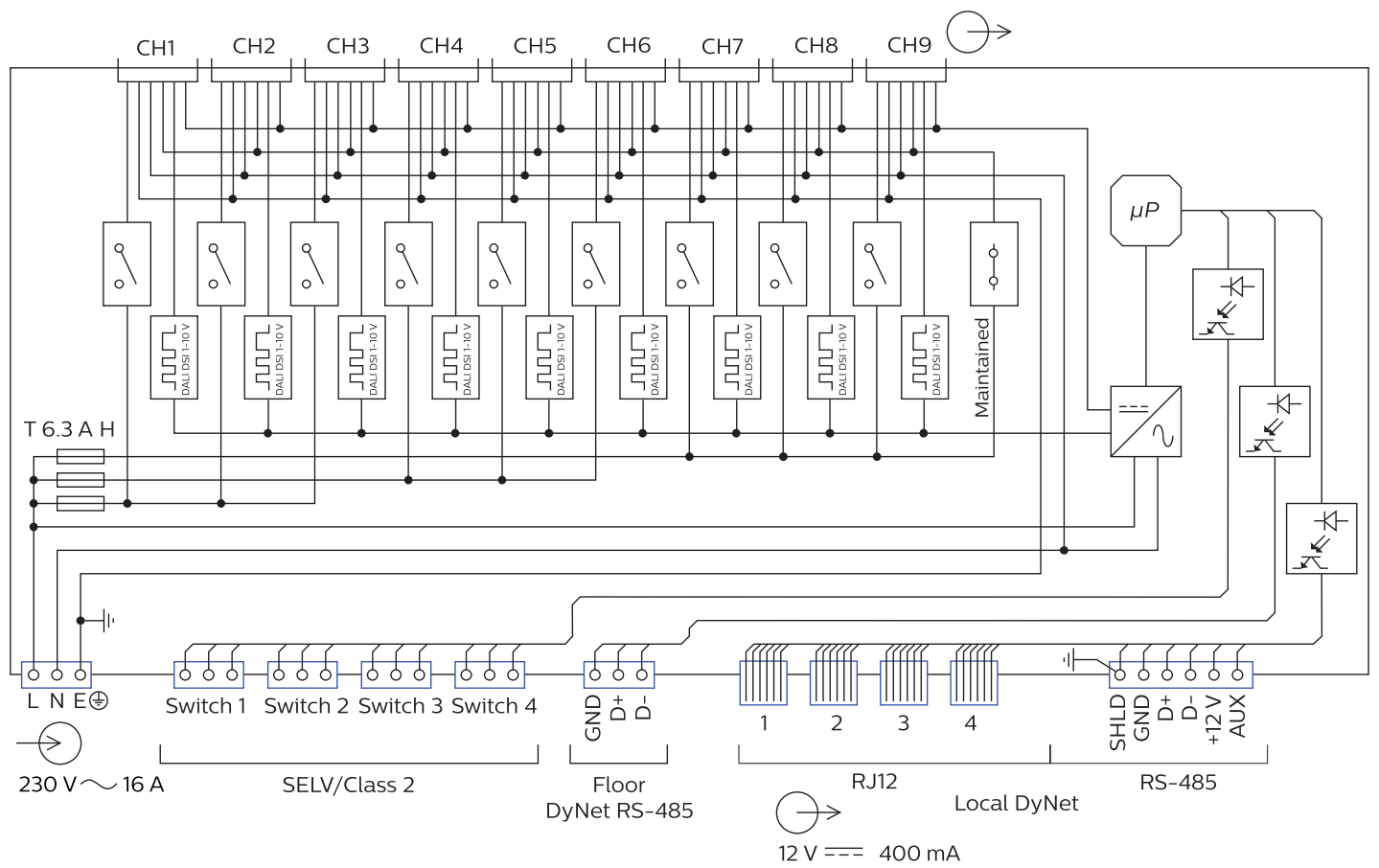
Control Channel Ratings

DALI/DSI	
Output Voltage	12.5 VDC
Guaranteed Current	15 mA
Maximum Current	250 mA
Maximum Drivers/Channel	5
Maximum Drivers/Device	45
Insulation	Basic
1-10 V	
Current (Sink)	10 mA
Current (Source)	10 mA

Compatible Serial Connectors

Terminals	Vendor - Model	Part Number	
		Standard	Strain Relief
Local DyNet RS-485	Wieland - Wiecon 8113 (Box 50)	25.320.3653.0	25.320.8653.0
Local DyNet RS-485	Phoenix Contact - Combicon MSTB 2 (box 50)	1754520 (5/6-ST)	n/a
Local DyNet RS-485	PTR	AK950/6-5-0-GREEN	AK950/6L-5.0-GREEN
Switch 1-4 Floor DyNet RS-485	Wieland - Wiecon 8113 (Box 50)	25.320.3353.0	25.320.8353.0
Switch 1-4 Floor DyNet RS-485	Phoenix Contact - Combicon MSTB 2 (box 50)	1754465 (5/3-ST)	1776168 (5/3-STZ-5,08)
Switch 1-4 Floor DyNet RS-485	PTR	AK950/3-5.0-GREEN	AK950/3L-5.0-GREEN

Electrical Drawing



Ordering Codes

Product	12NC
DBC905W	913703040009

Policies and Notices

Specific Data Notice

This Specific Data Notice applies to the Controllers as specified in this product specification sheet (the "**Controller**") that is part of or works with a Professional System offered by Signify for use in the European Union and supplements and/or corrects the Generic Data Notice For Professional Systems and Services that can be found at <https://www.signify.com/global/resources/policies-announcements> (the "**Generic Data Notice**") by providing additional and/or more specific details specific to this Controller.

Terms starting with a capital in this Specific Data Notice will have the meaning as attributed thereto in the Generic Data Notice, unless explicitly defined otherwise in this document.

When used in a Signify professional lighting system in combination with a Dynalite Gateway with either the Dynalite Switch App, Dynalite System Builder, Dynalite System Manager, or Dynalite Cloud, the Controller can generate the Data as specified below:

- Operational Data: Lighting control commands based on the configured control logic in the product via the DyNet network
- Sensor Data: This product does not generate any sensor data.

The type and volume and format of Data that is generated depends on the actual devices connected to the Controller, the product and/or software configuration. For further details on data generation capabilities of such devices, please check the product specification sheets of such devices.

The Data generated in this combination is communicated via the network to the gateway and is stored on the gateway. If configured to do so, the gateway can forward the Data to Dynalite Cloud or to Dynalite System Manager. For applicable retention period and means of access to Data that is Readily Available Data, please refer to the Dynalite Cloud software specification sheet. Data cannot be accessed directly from the Controller. Data can be accessed from the Gateway using Dynalite System Builder or directly from any of the APIs of the Gateway. The Gateway will persist the Data for 28 days on a rolling basis.

This Specific Data Notice may be changed by Signify from time to time. The current version of this notice will apply and can be obtained at request via the point of contact as indicated in paragraph 7 of the Generic Data Notice.