

DBC905W

Signal Dimmer Controller



Specification Sheet

Controllers > DALI Controllers



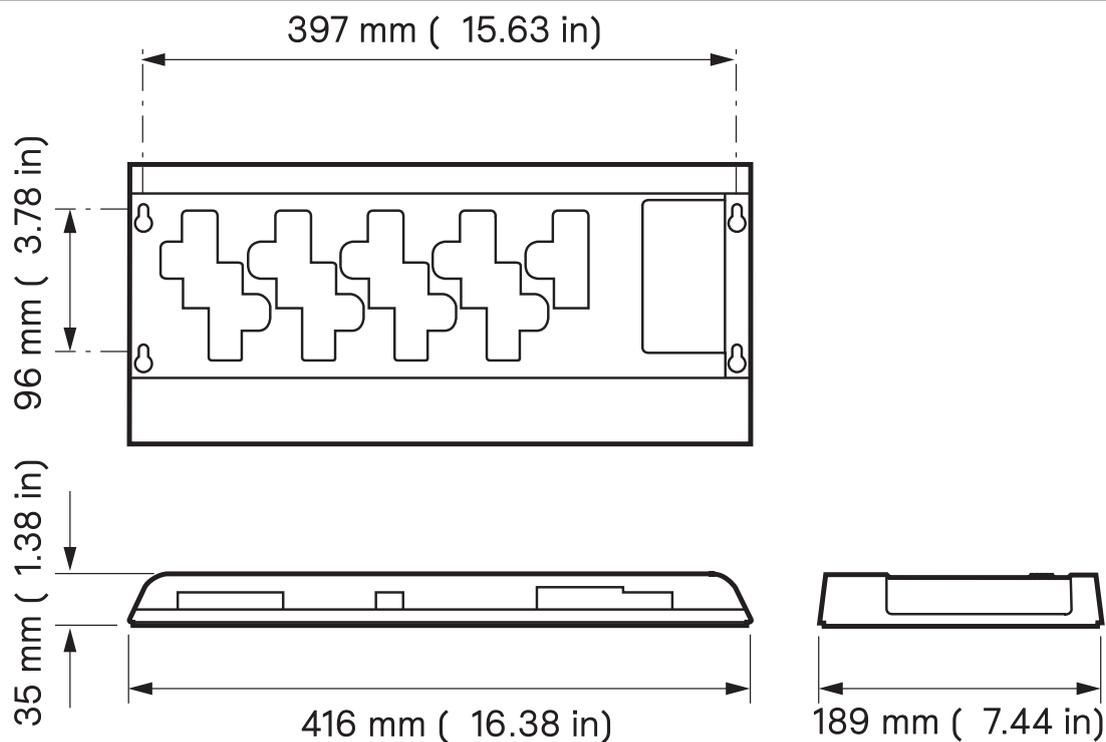
Easy-to-install controller with flexible mounting options

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
Switched 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 mm ² (#22-12 AWG)
Input Terminals	4 x 3-way pluggable screw terminal
Input Terminal Conductor Size	≤2.5 mm ² (#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	

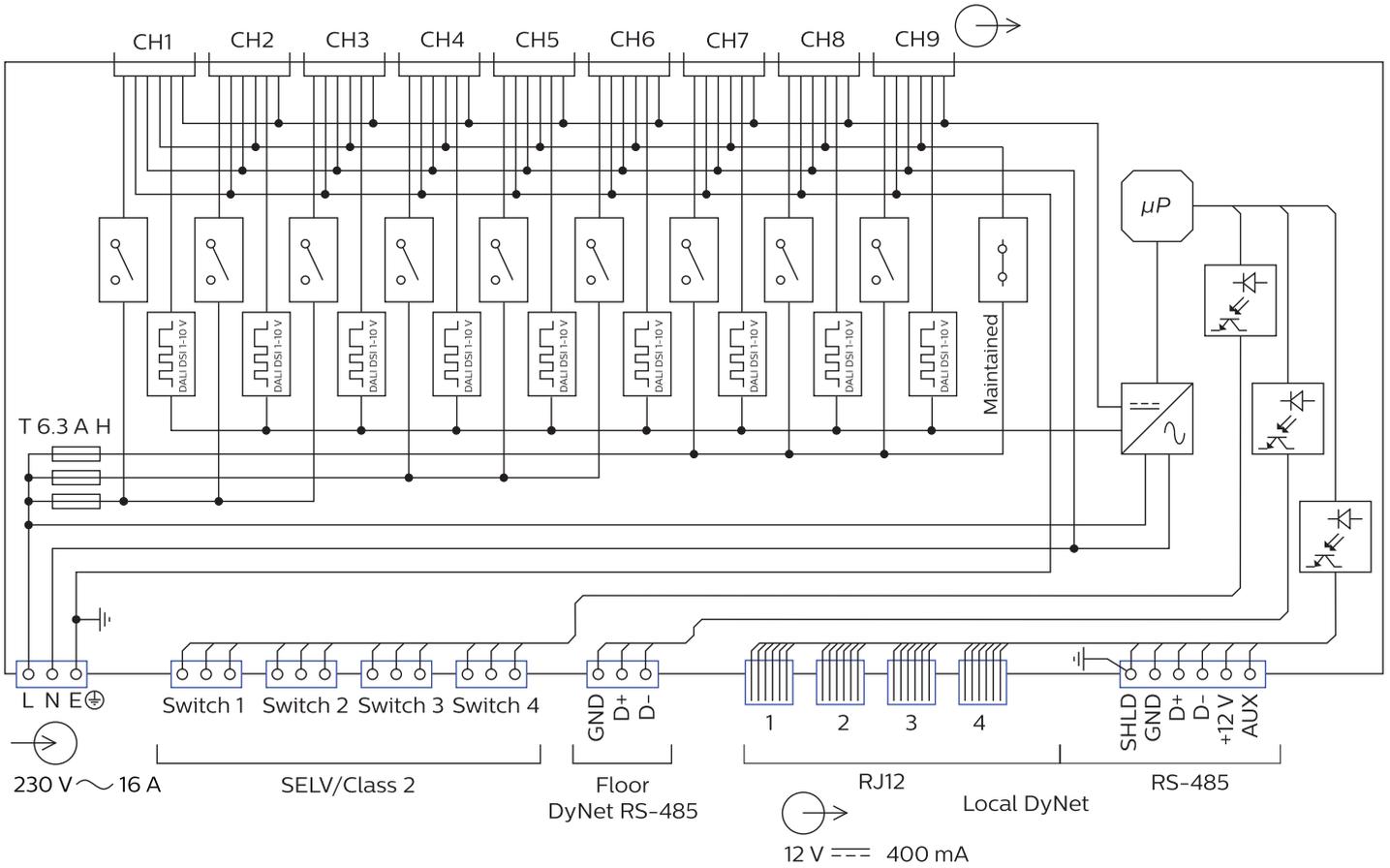
Control Channel Ratings

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