

L5103D Range 3 Channel Architectural Dimmers

C-Bus

CLIPSAL®

by Schneider Electric



The C-Bus L5103D range of Architectural dimmers are high powered 3 Channel dimmers designed for commercial applications such as theatres, ballrooms and function centres.

The dimmers are C-Bus controlled, high power, multi phase control units, compatible with a wide range of load types, including neon.

Dimming is achieved through phase control techniques creating a highly efficient range of dimmers.

Channel derating for use with electronic transformer loads is not required. Each channel is capable of supporting full load current.

The L5103D range of Architectural dimmers provides on-board MCB protection, thermal overload protection and also accommodates the RCD requirements as per AS/NZS3000:2007.

The dimmers contain modular output channel cards of various ratings, allowing customisation to suit site needs.

A maintained active output is provided on each channel for emergency lighting.

Each channel card has a bypass switch which permits direct local override of the lighting circuit.

In the event of an over-temperature condition, such as one caused by excessive load current being drawn, the dimmer channel reduces the output power as long as the condition exists.

The Architectural dimmer is designed and tested for a wide range of international markets with comprehensive EMC and electrical safety testing and is fully ROHS compliant.

- Soft start load turn-on protects lamp filaments.
- Voltage compensation to minimise load brightness variation if the AC supply voltage drifts.
- Filtering reduces supply voltage signalling effects.
- Linear output load power following input control.
- Universal dimming technology auto detects load type
- C-Bus network burden and system clock generator.
- After mains fail, dimmers return to previous or preset values.
- Local C-Bus override switches on front panel.
- Channel Status indicators on front control panel.
- On-board MCB and optional RCD protection.
- Mounting brackets included for ease of installation.
- Generous load and mains supply terminals.
- Emergency lighting output for each channel.
- Manual dimmer bypass switch on all channels.
- Fan-free operation, reduces maintenance requirements.
- Suitable for single or three phase track lighting applications with optional three phase MCBs and RCDs
- Support for 128 on board lighting scenes
- Full integration with DMX512
- Selectable pre defined dimming curves
- Three prioritised auxiliary inputs
- Standby generator input
- Cross fading scene functions
- Optional ballast control card DSI, DALI, 0-10V dc, Relay
- Over current and short circuit protection

clipsal.com/cis

CLIPSAL
C-Bus
Control and Management System

L5103D Range 3 Channel Architectural Dimmers

- Complies with Australian (AS/NZS CISPR 15:2002) and International standards for light dimmers as below.

Accreditations	C-Tick	CE
EMC	AS/NZS CISPR14-1 CISPR15	EMC Directive 2004/108/EC EN 60669-2-1 Clause 26.1, 26.2 EN 55014-1, 55015, 61000-3-2, 61000-3-3, 61000-3-5, 61000-3-11
Low Voltage		EN 60439-1, 60669-2-1
Electrical Safety	AS/NZS 3439-1 IEC 60669-2-1	IEC 60439-1, 60669-2-1
ROHS		2002/95/EC

Catalogue Numbers

3 Channel	Universal	Universal + RCD*
20 A	L5103D20UA	L5103D20UAR1
16 A	L5103D16UA	L5103D16UAR1
10 A	L5103D10UA	L5103D10UAR1
5 A	L5103D5UA	L5103D5UAR1

*RCD models include 1 x 4 pole RCCB

Ratings

Catalogue Number	Max. Load Current/Phase
L5103D20UA	20 A, 3 Phase
L5103D16UA	16 A, 3 Phase
L5103D10UA	10 A, 3 Phase
L5103D5UA	5 A, 3 Phase

Electrical Specification

Parameter	Description
Load terminal standby leakage current	< 10 mA
AC supply voltage	240/415 V AC
AC supply frequency	47 to 53 Hz
Number of input phases	1 or 2 Phase (3 Amp model) 3 Phase (other models)
Minimum load/channel	20 W for incandescent
Dimming technology	Dual MOSFET
Soft-start ramp time	0.5 sec
Load current rise time	200 µs
Power control range	1.5% to 95%
Standby AC supply current	90 mA base current
Short circuit withstand strength	6 kA*
Rated insulation voltage	500 V
Dielectric test voltage	2500 V

Dimensions

Catalogue	Weight (kg)	Dimensions W × H × D
L5103D20UA	11	455 × 451** × 164 mm
L5103D16UA	11	455 × 451** × 164 mm
L5103D10UA	9.5	455 × 289 × 164 mm
L5103D5UA	9.5	412 × 289 × 164 mm

** 16A and 20A models are supplied in a 6 channel chassis/enclosure

Clipsal Australia Pty Ltd

A member of Schneider Electric

Head Office

33-37 Port Wakefield Road,
Gepps Cross, South Australia 5094

CIS Technical Support Hotline:

Australia	1300 722 247
New Zealand	0800 888 219
Northern Asia	+852 2484 4157 (Hong Kong)
South Africa	011 314 5200
Southern Asia	+603 7665 3555 x236 or 242
United Kingdom	+44 870 608 8 608

Technical Support Email cis_support@clipsal.com.au

National Customer Care Enquiries:

1300 2025 25

National Customer Care Facsimile:

1300 2025 56

New Zealand
Schneider Electric (NZ) Ltd Tel +64 9 576 3403

Malaysia
Clipsal Integrated Systems (M) Sdn. Bhd. Tel +60 3 7665 3555

Singapore
Clipsal Integrated Systems Pte Ltd Tel +65 6415 3232/3233

China
Clipsal China Limited Tel +86 755 8237 5959

Greece
Schneider Electric AE Tel +30 69 4646 3200

Hong Kong
Clipsal Integrated Systems (HK) Limited Tel +852 2487 0261

India
Schneider Electric India Pvt Ltd Tel +91 11 5159 0000

Indonesia
PT Clipsal Graha Nusa Tel +62 21 630 6430

Korea
Clipsal Korea Co. Ltd Tel +82 549 5550

Pakistan
Clipsal Pakistan (Pvt) Ltd Tel +92 21 506 7278

Philippines
Clipsal Philippines Inc. Tel +632 683 0275-78

South Africa
Clipsal South Africa (Pty) Ltd Tel +27 11 314 5200

Taiwan
Clipsal (Taiwan) Co Ltd Tel +886 2 2558 3456

Thailand
Clipsal Thailand Ltd Tel +66 2 952 5338-42

United Arab Emirates
Clipsal Middle East Tel +971 6 5570 777

United Kingdom
Clipsal Integrated Systems
c/o Schneider Electric Tel +44 870 608 8 608

Vietnam
Clipsal - VTEC Tel +848 856 3002

You can find this datasheet and many others online in PDF format at:
clipsal.com

clipsal.com/cis

Clipsal Australia Pty Ltd reserves the right to change specifications, modify designs and discontinue items without incurring obligation and while every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© Clipsal Australia Pty Ltd
This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Clipsal Australia Pty Ltd. The identified trademarks and copyrights are the property of Clipsal Australia Pty Ltd unless otherwise noted.