

LSS



PowerDim

The LSS *PowerDim* is a mobile, decentralized dimmer with up to six Dim/NonDim and six NonDim circuits with an electrical power spectrum of 3kVA or 5kVA and an optional power switch. The dimmer can optionally be controlled with Ethernet or DMX and support fully RDM. The LSS *PowerDim* has a switchable base load, adjustable fade-in / fade-out times and dimming values, 8/16-bit control, 13 internal dimmer curves and an electric bypass circuit for the dimmer circuits at full load. Each phase is monitored for current and can be automatically switched off if there is an overload. The LSS *PowerDim* is installed in an anodised aluminium extrusion profile, whose unique thermal conductivity allows for fan less convection cooling. The dimmer can be equipped with all standard plug connectors.

Leistungsspezifikationen:

- Up to 6 Dim/NonDim circuits
- Up to 6 NonDim circuits
- 3kVA / 5 kVA electric power per circuit
- Power conversion 3kVA / 5kVA via DMX-address, under full load and without removing connector
- Bypass circuit for reducing the power dissipation of the dimmer circuits at maximum load
- 8Bit / 16Bit control
- Internal switchable base load
- 13 internal dimmer curves
- Adjustable fade-in / fade-out times
- Internal current measurement (single phase / sum) incl. Voltage & frequency monitoring, automatic switch-off adjustable
- Control via Ethernet or DMX
- Control unit includes Ethernet / DMX node, remote configurable
- Useable as RDM proxy
- Housed in anodised aluminium extrusion profile
- Fanless cooling via housing

Technical Specifications:

PowerDim Processor

Generals

Display	Text display with 20x4 characters and white background lighting
Indication	3 LEDs: 1x Power Supply, 1x Error, 1x Network
Diagnosis Indication	Rotary display of various device parameters during operation
Monitoring display	Various displays of events, settings and data traffic and merging
Controlling	8-Bit/16-Bit, manually adjustable
Circuit monitoring	Overload protection with single phase monitoring, manual adjustment of the max. Load per phase and max. Total load
Behaviour at over temperature	- Warning and shutdown - Thresholds manually adjustable
Operation	Local: Menu control with encoder and menu display Remote: Configuration via ConfigCore

Interfaces

DMX	DMX-Out: 2x 5pin XLR DMX-In: 1x 5pin XLR, HTP DMX-THRU: 1x 5pin XLR (ISOLATED according to ANSI E1.11 A1)
Ethernet	1x RJ45 10/100 Mbit/s, Range and duplex mode manually adjustable
Supported network protocols	sACN, RDM, Art-Net, AVAB-IPX, AVAB-UDP, Shownet

Dimmer

Operating modes	- Phase fired dimmer for all light bulbs, halogen lamps and conventional transformers - Switchover for electronic ballasts with manually adjustable switching points - "Always-On" at direct rated power
Dimmer curves	- Setting individually or „one for all“ - switchable base load - 8Bit/16Bit control - 13 dimmer curves - Adjustable fade-in/fade-out times - Adjustable min. and max. dim values - Off, Hold and adjustable backup-level for lost data receiving

PowerDim

Relays

Switching Voltage	max. 440V AC	
Switching Current	AC3-Operation ($\cos\varphi=0,45$) According to DIN EN 60 947-4-1	16A/230V AC
	AC1-Operation ($\cos\varphi=0,8$) According to DIN EN 60947-4-1	16/20A/230V AC
	Fluorescent lamp load According to DIN EN 60669-1	16/20A/250V AC (220 μ F)
Switching Capacity	Minimum switching capacity	100mA/12V AC 100mA/24V AC 7mA/24V AC
	Maximum switching capacity	13kVA
Lifetime	Mechanical:	$>10^6$
	Electrical (DIN IEC 60947-4-1):	
	AC1 (240V/ $\cos\varphi=0,8$): AC3 (240V/ $\cos\varphi=0,45$)	$>10^5$ $> 3 \times 10^4$

Connectors electrical supply

Depending on the performance data, the feed is via Harting connectors 400V/35A or 400V/63A.

Connectors Load

- Connector 3-pin + Ground (230 – 400V/10A) for heat resistors in fluorescent lamps
- Connector 4-pin + Ground (230 – 400V/10A) for heat resistors in fluorescent lamps
- MultiCore Connector 6-pin + Ground (400 – 690V/35A) for 3x5kVA
- MultiCore Connector 16-pin +Ground (250V/16A) for 3x3kVA
- CEE 7/x (230V/16A) 2-pin + Ground (253V/16A) for 3kVA
- ILuCon DBS 2-pin + Ground (230V/16A) for 3kVA
- ILuCon DBS 2-pin + Ground (230V/26A) for 5kVA

The type, size and number of connections for the supply of headlamps can be adapted to specific projects. However, they are subject to the legal requirements and the physical conditions.

Device current protection

All load connections are fused with MCB or RCBO.

Electrical characteristics

Loss of the dimmable circuits at 100% output and rated load	5kVA: <65W 2,5kVA <35W
Rise-time	180µs
Minimum load	Not necessary

General

EMV-Standards	EN 55022, class B, FCC part 15, level B
Electrical supply	400V/50Hz
Current consumption	Max. 50A per phase
Operation temperature	0° - 60°C
RoHS	Conform
Material	Aluminium
Design	Duct
Installation position	Horizontal or vertical
Colour	Black anodised
Dimensions	(L x H x D mm) 1604 x 145 x 250 single device The <i>PowerDim</i> is adjustable to longer lengths.
Weight	Depending on size and assembly, single device 47kg

Order numbers

Number	Description
L02011-11	6x 3kVA Dim/NonDim on CEE7/x, Supply 400V/32A
L02011-12	6x 3kVA Dim/NonDim on CEE7/x and parallel MultiCore, Supply 400V/32A
L02011-13	6x 3kVA Dim/NonDim on MultiCore, Supply 400V/32A
L02011-14	6x 3kVA Dim/NonDim & 6x 3kVA NonDim on CEE7/x, Supply 400V/32A
L02011-15	6x 3kVA Dim/NonDim & 6x 3kVA NonDim on CEE7/x and MultiCore, Supply 400V/32A
L02011-16	6x 3kVA Dim/NonDim & 6x 3kVA NonDim on MultiCore, Supply 400V/32A
L02011-17	6x 3kVA Dim/NonDim & 6x 3kVA NonDim on Terminal bus, Supply 400V/32A
L02011-18	6x 3kVA Dim/NonDim & 6x 3kVA NonDim auf on CEE7/x and heat resitors in fluorescent lamps, Supply 400V/32A
L02011-31	6x 5kVA Dim/NonDim on DBS, Supply 400V/63A
L02011-32	6x 5kVA Dim/NonDim on DBS and parallel MuliCore, Supply 400V/63A
L02011-51	6x 3kVA / 5kVA Dim/NonDim & 6x 3kVA NonDim on DBS/CEE7/x, switchable, Supply 400V/63A
L02011-52	6x 3kVA / 5kVA Dim/NonDim & 6x 3kVA NonDim on DBS/CEE7/x and parallel MultiCore, switchable, Supply 400V/63A