LSS

PowerDim RM 2

19‘‘ Thyristor dimmer with 12x 3 kVA, switchable electronic base load, cooling management, and protection according to DIN EN 61009-1

The LSS PowerDim RM 2 is a compact 19‘‘/3U phase control dimmer for installation in rack systems and flight cases. The dimmer has 12 power circuits á 3 kVA with RCBO individual circuit protection and shutdown even if there is no neutral conductor. The dimmer fulfills DIN EN 61009-1 (VDE 0664-20) for the protection of people against indirect contact. Each circuit has a Dim / Non-Dim switch, a bypass switch at 100% load, an adjustable 8-bit / 16-bit control, and 16 dimmer curves. For the connection of lights with low loads (e.g. fluorescent tubes, LEDs, etc.), the device is equipped with a switchable electronic base load. The use of high-quality chokes significantly prevents lamp clinking and electrical interference. Each circuit is current-monitored and can be prioritized in the control.

The LSS PowerDim RM 2 is designed for continuous use. A sophisticated temperature and cooling management with temperature monitoring and fan control enable permanent and quiet cooling of the device. The dimmer can be controlled either via DMX or Ethernet (sACN, Art-Net, etc.). The control unit is equipped with an Ethernet / DMX network node with an RDM proxy function.

Licht-, Steuer- und Schaltanlagenbau GmbH • Sonnenstraße 5 • D-04600 Altenburg/Germany
Phone: +49 3447 835500 • Fax: +49 3447 8355099 • mail@lss-lighting.de • www.lss-lighting.de

Technical Specifications:

Generals

Mechanical construction	3U ready-to-use device for 19'' rack systems
Operation	Local: Menu control with encoder and menu display Remote: Configuration via ConfigStudio
RDM	RDM notification of all settings and measured values
Display	Text display with 20x4 characters and white background lighting
Ambient temperature	0 °C – 40 °C
Operating temperature	0 °C – 45 °C
RoHS Approval	Compliant
IP Class / Appliance classes	IP 20 / Class I
Color	Body: Aluminum, powder-coated, black matt structured Front panel: Aluminum, powder-coated, cobalt blue matt structured
Dimensions (H x W x D)	483 x 133 x 441 mm (19''/3U)
Weight	Ca. 25,5 kg
Scoop of delivery	1x Dimmer device inclusive connection cable (1.5 m) and connector 32A CEE 5-pin
Order number	**L02020**

Dimmer

Operating modes	Dimmer: Phase control dimmer for all ohmic/inductive loads occurring in practical operation NonDim: Switching with adjustable switching point (e.g. electronic ballasts from Fluorescent lamps and other loads)
Dimmer	- Global or single circuit setting - Switchable base load - Bypass circuit at 100% load - 8Bit / 16Bit control - 16 dimmer curves - Adjustable fade-in and fade-out times - Adjustable minimum and maximum dimming values - In case of failure, Off, Hold, and adjustable backup values

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Interfaces

DMX	Front:	DMX-Out:	2x 5 pin XLR
		DMX-In:	1x 5 pin XLR
		DMX-THRU:	1x 5 pin XLR
	Back:	DMX-In:	1x 5 pin XLR
		DMX-THRU:	1x 5 pin XLR
	(Galvanically isolated according to ANSI E1.11 A1)		
Ethernet back	1x RJ45 10/100 Mbit/s, Range and duplex mode manually adjustable		
Network protocols	Art-Net, AVAB-IPX, AVAB-UDP, ShowNet, sACN		

Device protection

Protection of the power circuits	Per circuit:	1x RCBO C16 A, 30 mA, 1P + N, independent of mains voltage
RCBO certifications	DIN EN 61009-1 (VDE 0664-20):2016-10 DIN EN 61009-2-1 (VDE 0664 Teil 21):1999-12 DIN EN 62019 (VDE 0640):2015-07 DIN V VDE V 0664-220:2010-07 DIN EN 62423 (VDE 0664-40):2013-08	
Current Control	Overload protection with individual phase monitoring, manual setting of the maximum load per phase with adjustable switch-off thresholds and maximum total load with adjustable total switch-off threshold, and prioritization of individual circuits	

Connections

Back side	2x multicore connectors 16-pin + PE (250 V / 16 A) for six dimmed power circuits each

Power Supply

Voltage/Current	400 V / 32 A, CEE 5-pin
EMC standards	EN 55022, class B, FCC part 15, level B

Cooling

Cooler	Temperature controlled (max. 30 dBA)
Temperature control	- Adjustable warning and switch-off threshold - Automatic switch-off

Electrical characteristics

Power loss dimmable circles	Max. 30 W per power circuit by 100% power output and nominal load
Rise time	180 µs
Minimum load	0 VA (not necessary), for current control 150 W