

LSS



PowerDim RM

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 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 / NonDim switch, a bypass switch at 100% load, an adjustable 8-bit / 16-bit control, and 13 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 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.

Technical Specifications:

Generals

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| Mechanical construction | 3U ready-to-use device for 19" rack systems |
| Operation | Local: Menu control with encoder and menu display Remote: Configuration via ConfigCore |
| 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 |
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| Order number | L02015 |

Dimmer

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| 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 | <ul style="list-style-type: none"> - Global or single circuit setting - Switchable base load - Bypass circuit at 100% load - 8Bit / 16Bit control - 13 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 |

Interfaces

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| DMX | Front: DMX-Out: 2x 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

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| 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

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

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

Cooling

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

Electrical characteristics

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| Power loss dimmable circuits | 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 |