

Technical data sheet

Dimmer switch



Identification

Type	DS-0012 DC 24V
Part-No.	810012

Product version

Datasheet version	01
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Use/Application/Properties

Description	Dimmer switch for automatically switching the interior lighting on and off for rail vehicles. If the switching threshold "light" is exceeded the supply voltage is switched on output pin 5. If the switching threshold "dark" is undercut the output switch is locked.
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Technical data

Rated voltage U_N	DC 24 V
Voltage range	DC 16.8 V – 30 V
Current consumption of electronics	<10 mA
Protection device	Polarity reversal protection Overvoltage protection

Input

Measurement input	Photo resistor (LDR) Switching threshold "OFF" (dark) 220 Lux (factory setting) Switching threshold "ON" (light) 270 Lux (factory setting)
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Supply module electronic

Current consumption of electronics	<10 mA
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Output

Output voltage	Nominal voltage U_N - 1,5 V
Output current	max. 0.5 A

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Protection device output	Short-circuit protection Overvoltage protection
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General

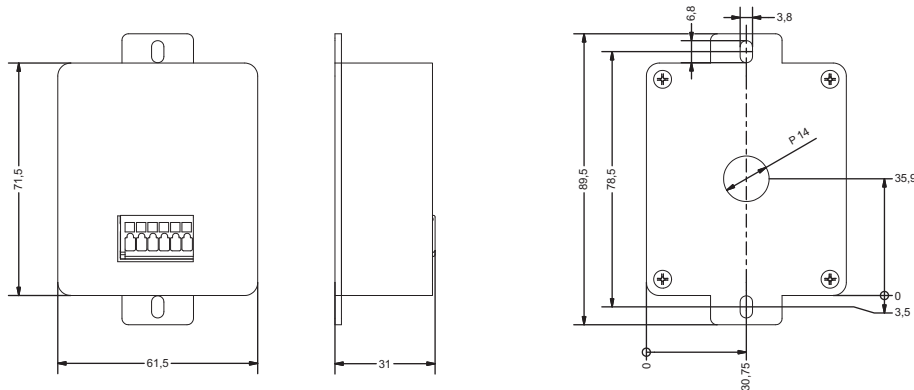
Connection type	Spring terminal: single stranded 0.08 – 1.5 mm ² , fine stranded 0.08 – 1.5 mm ² Stripping length: 6 – 7 mm Screwdriver: 3.5 × 0.5 mm
Housing material	ABS
Mounting	Screw mounting by means of two mounting links
Protection class	IP20
Rated insulation voltage	50 V
Degree of pollution	PD2
Over voltage category	OV2
Operation temperature range	-25 °C ... +70 °C (+85 °C 10 min)
Storage temperature range	-25 °C ... +85 °C
Dimensions (w × h × d)	61.5 mm × 89.5 mm × 31.0 mm
Weight/unit	0.06 kg

Standards/Certifications

Standards

EN 45545-2:2013+A1:2015: Railway applications – Fire protection on railway vehicles – Part 2: Requirements for fire behaviour of materials and components
EN 50121-3-2:2016: Railway applications – Electromagnetic compatibility – Part 3-2: Rolling stock – Apparatus
EN 50124-1:2017: Railway applications – Insulation coordination – Part 1: Basic requirements – Clearances and creepage distances for all electrical and electronic equipment
EN 50155:2007: Railway applications – Rolling stock – Electronic equipment
EN 50155:2017: Railway applications – Rolling stock – Electronic equipment (testing according chapter 13.3 table 12)
EN 61373:1999: Railway applications – Rolling stock equipment – Shock and vibration tests
EN 61373:2010: Railway applications – Rolling stock equipment – Shock and vibration tests

Dimensions



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Circuit diagram

