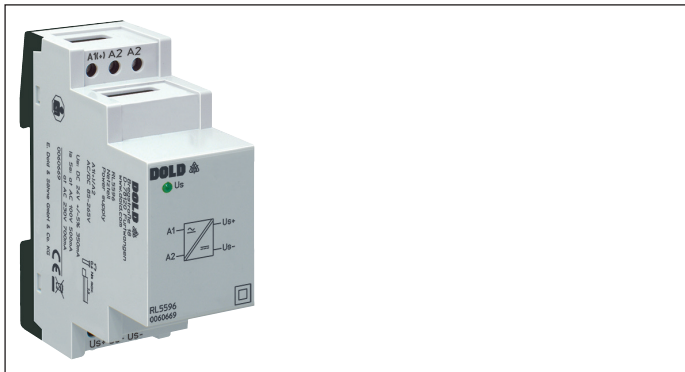


Switched Power Supply RL 5596

Translation
of the original instructions



Your advantages

- Space saving in industrial cabinets because compact construction type
- Universal use with wide voltage range
- High efficiency

Features

- According to IEC/EN 62368, EN 61558
- Protection class II, according to EN 61558-1
- Secondary voltage DC 24 V up to 350 mA
- Short circuit protection and overload protection
- Width: 35 mm

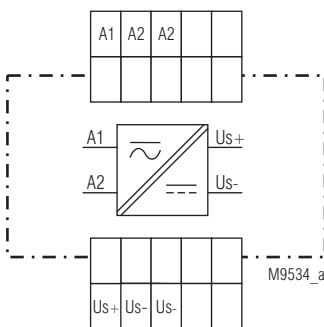
Product Description

The DC 24 V switching power supply RL 5596 is suitable for supplying a wide range of loads. Due to its top-hat mounting and compact design with a width of 35 mm, it is mainly used in control cabinets.

Approvals and Markings



Circuit Diagram



Application

For DC-voltage 24 V

Function

The switched power supply provides a controlled DC voltage of 24 V ± 5 %.

Indication

LED green: On when secondary voltage connected

Connection Terminals

Terminal designation	Signal description
A1, A2	Auxiliary voltage AC or DC
Us+, Us-	Secondary voltage DC 24 V

Notes



Connection or installation may only be carried out by a qualified electrician in a de-energised or de-energised state.

The installation must be carried out in accordance with EN 62368-1. A disconnecting device (e.g. circuit breaker) must be provided in the entire installation, which can be used to disconnect the power supply unit from the power supply.

With large capacitive load the power supply detects short circuit on power up. If the secondary voltage of 24 V is not reached within 64 ms the power supply switches off. After 2 sec a new attempt is started.

Technical Data

Primary voltage:	AC/DC 85 ... 265 V The terminal A2 is double. Internally these terminals are connected in parallel.
Voltage range	
AC:	85 ... 265 V
DC:	85 ... 300 V
Nominal frequency:	50 / 60 Hz
Primary current at nominal voltage U_N:	
No-load operation at AC 230 V:	6 mA
At DC 230 V:	2 mA
At AC 110 V:	8 mA
At DC 110 V:	4 mA
Efficiency:	Approx. 80 %
Nominal output voltage:	DC 24 V \pm 5 % The terminal U_S is double. Internally these terminals are connected in parallel.
Rated output current:	350 mA continuously
Short time current, 5 s	
at AC 100 V:	Max. 500 mA
At AC 230 V:	Max. 700 mA
Residual ripple at max. load:	0.1 %
Current limiting:	Electronic short circuit protection and overload protection

General Data

Nominal operating mode:	Continuous operation
Temperature range:	
Operation secondary voltage	
350 mA:	- 20 ... + 50 °C (mounted with distance)
250 mA:	- 20 ... + 60 °C (mounted with distance)
350 mA:	- 20 ... + 60 °C (mounted without distance)
Storage:	- 25 ... + 70 °C
Altitude:	\leq 2000 m
Clearance and creepage distance	
Rated impulse voltage / pollution degree	
A1/A2 to U_{S+} / U_{S-} :	6 kV / 2 IEC 60664-1
Overvoltage category:	III
EMC	
Electrostatic discharge (ESD):	8 kV (air) IEC/EN 61000-4-2
HF irradiation	
80 MHz ... 2.7 GHz:	10 V / m IEC/EN 61000-4-3
Fast transients:	4 kV IEC/EN 61000-4-4
Surge voltage between	
wires for power supply:	1 kV IEC/EN 61000-4-5
HF-wire guided:	10 V IEC/EN 61000-4-6
Interference suppression:	Limit value class B EN 55011
Emitted interference:	EN 61000-6-3
Degree of protection:	
Housing:	IP 40 IEC/EN 60529
Terminals:	IP 20 IEC/EN 60529
Enclosure:	Thermoplastic with VO behaviour according to UL Subjekt 94
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz, IEC/EN 60068-2-6
Climate resistance:	20 / 060 / 04 IEC/EN 60068-1
Terminal designation:	EN 50005
Wire connection	DIN 46228-1/-2/-3/-4
Cross section:	0.34 ... 2.5 mm ² (AWG 22 - 14) solid or 0.34 ... 2.5 mm ² (AWG 22 - 14) stranded wire with and without ferrules
Strip length:	7 mm
Wire fixing:	Captive slotted screw M 2.5
Fixing torque:	0.5 Nm max. IEC/EN 60999-1
Mounting:	DIN-rail IEC/EN 60715
Weight:	85 g

Dimensions

Width x height x depth: 35 x 90 x 71 mm

Standard Type

RL 5596 AC/DC 85 ... 265 V	50 / 60 Hz
Article number:	0060669
• Secondary voltage:	DC 24 V
• Primary nominal voltage U_N :	AC/DC 85 ... 265 V
• Width:	35 mm

Ordering Example

