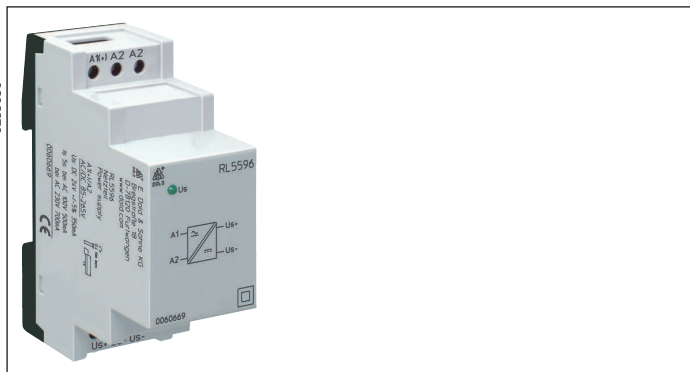
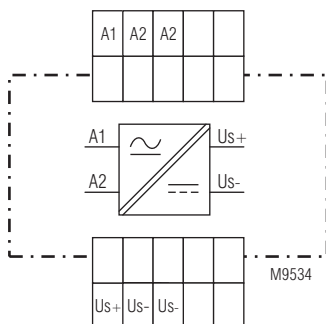


## Switched Power Supply RL 5596



- Space saving in industrial cabinets because compact construction type
- Universal use with wide voltage range
- High efficiency
- According to IEC/EN 60 950, EN 61 558
- Protection class II, according to EN 61 558-1
- Secondary voltage DC 24 V up to 350 mA
- Short circuit protection and overload protection
- Width: 35 mm

### Circuit Diagram



### Connection Terminals

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

### Approvals and Markings



### Application

For DC-voltage 24 V

### Function

The switched power supply provides a controlled DC voltage of 24 V  $\pm$  5 %.

### Indication

LED green: on when secondary voltage connected

### Notes

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

<b>Primary voltage:</b>	AC/DC 85 ... 265 V The terminal A2 is double. Internally these terminals are connected in parallel.
<b>Voltage range</b>	
AC:	85 ... 265 V
DC:	85 ... 300 V
<b>Primary current at nominal voltage <math>U_N</math>:</b>	
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
<b>Efficiency:</b>	approx. 80 %
<b>Secondary voltage:</b>	DC 24 V $\pm$ 5 % The terminal $U_s$ is double. Internally these terminals are connected in parallel. 350 mA continuously
<b>Secondary current:</b>	
<b>Short time current, 5 s</b>	
at AC 100 V:	max. 500 mA
at AC 230 V:	max. 700 mA
<b>Residual ripple at max. load:</b>	0.1 %
<b>Current limiting:</b>	electronic short circuit protection and overload protection

## Technical Data

### 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:** < 2.000 m

#### Clearance and creepage distance

rated impulse voltage /

pollution degree: 6 kV / 2 IEC 60 664-1

#### EMC

electrostatic discharge (ESD): 8 kV (air) IEC/EN 61 000-4-2

HF irradiation:

80 MHz ... 2.7 GHz: 10 V / m IEC/EN 61 000-4-3

Fast transients: 4 kV IEC/EN 61 000-4-4

surge voltage

between

wires for power supply: 1 kV IEC/EN 61 000-4-5

HF-wire guided: 10 V IEC/EN 61 000-4-6

Interference suppression: Limit value class B EN 55 011

Emitted interference: EN 61 000-6-3

#### Degree of protection:

Housing: IP 40 IEC/EN 60 529

Terminals: IP 20 IEC/EN 60 529

#### Enclosure:

thermoplastic with VO behaviour

according to UL Subjekt 94

#### Vibration resistance:

amplitude 0,35 mm

frequency 10 ... 55 Hz, IEC/EN 60 068-2-6

20 / 060 / 04 IEC/EN 60 068-1

EN 50 005

#### Terminal designation:

EN 50 005

#### Wire connection

DIN 46 228-1/-2/-3/-4

Cross section: 0.34 ... 2.5 mm<sup>2</sup> (AWG 22 - 14) solid

or

0.34 ... 2.5 mm<sup>2</sup> (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 60 999-1

**Mounting:** DIN-rail IEC/EN 60 715

**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

RL 5596 --- 50 / 60 Hz

