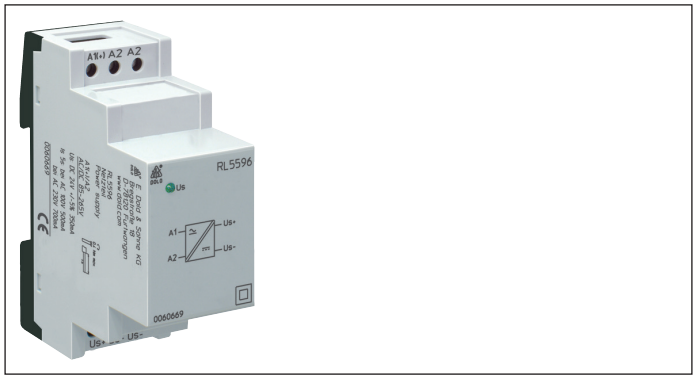
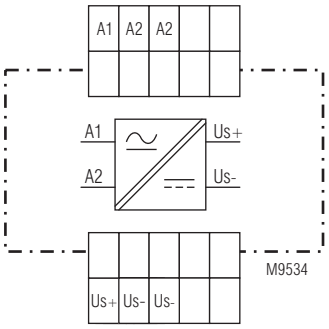
Switched Power Supply
RL 5596

0255030



- 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	Auxiliarx voltage AC or DC
Us+, Us-	Secondary voltage DC 24 V

Approvals and Markings

CE

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

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 attemt 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

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 %

Secondary voltage: DC 24 V ± 5 %
The terminal U_{S-} is double. Internally these terminals are connected in parallel.

Secondary 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: electonic 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
Dregee 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
Climate resistance:	20 / 060 / 04	IEC/EN 60 068-1
Terminal designation:	EN 50 005	
Wire connection		DIN 46 228-1/-2/-3/-4
Cross section:	0.34 ... 2.5 mm² (AWG 22 - 14) solid or 0.34 ... 2.5 mm² (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

- 50 / 60 Hz — Nominal frequency
- _ _ _ — Primary voltage
- RL 5596 — Type