Switched Power Supply
BG 5595

Translation of the original instructions

0257046

Your Advantages
- Stable DC power supply

Features
- According to IEC/EN 60950
- Protection class II acc. to EN 61558-1
- Secondary voltage DC 24 V up to 1 A
- Short circuit and overload protection
- Width 22.5 mm

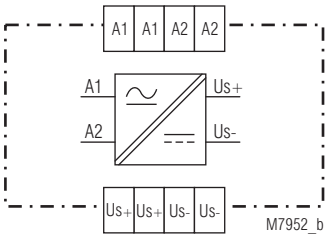
Product Description

The switched power supply BG 5595 provides a stable DC power supply for industrial applications.
Double connection terminals for easy loop-through of the input / output lines.

Approvals and Markings

CE

Circuit Diagram



Application

For supplying 24 V DC voltage.

Function

The switched power supply unit provides an regulated DC voltage of 24 V on the output. Due to the operating principle an efficiency of approx. 85 % the power dissipation is cut down to a minimum.

Connection Terminals

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

Indicator

LED green:	On when secondary voltage connected

Technical Data

Primary voltage:	AC/DC 110 ... 230 V The output voltage is available on 2 pairs of terminals (A1 and A2) These are connected internally in parallel.	
Voltage range		
AC:	70 ... 265 V	
DC:	85 ... 300 V	
Primary current at nominal voltage U_N:		
No-load operation		
At AC 230 V:	20 mA	
At DC 230 V:	7 mA	
At AC 110 V:	16 mA	
At DC 110 V:	10 mA	
Efficiency:	Approx. 85 %	
Secondary voltage:	DC 24 V ± 10 % The output voltage is available on 2 pairs of terminals. (U_{S+} and U_{S-}) These are connected internally in parallel.	
Secondary current:	Continuously, device mounted without distances heated by devices with same load: 0.5 A at ambient temperature 45 °C continuously, device mounted with 10 mm spacing: 1 A at ambient temperature 45 °C short time 1 min: 1,3 A at AC 110 V; 1,6 A at AC 230 V	
Residual ripple at max. load:	≤ 1 %	
Current limitation:	Electonic short circuit protection and overload protection. Disconnection of 1,3 A at AC 110 V and 1,6 A at AC 230 V.	

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 45 °C	
Storage:	- 25 ... + 70 °C	
Altitude:	≤ 2000 m	
Clearance and creepage distances		
Overvoltage category / contamination level:	6 kV / 2	IEC 60664-1
EMC		
Electrostatic discharge:	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 voltages between		
Wires for power supply:	2 kV	IEC/EN 61000-4-5
HF-wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011
Degree of protection:		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
Enclosure:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz	IEC/EN 60068-2-6
Climate resistance:	20 / 045 / 04	IEC/EN 60068-1
Terminal designation:	EN 50005	
Wire connection:	1 x 2,5 mm² stranded wire with sleeve or 1 x 4 mm² solid or 2 x 1,5 mm² stranded wire with sleeve DIN 46228-1/-2/-3/-4	
Insulation of wires or sleeve length:	10 mm	
Wire fixing:	Plus-minus terminal screws M3.5 box terminals with wire protection	
Fixing torque:	0.8 Nm	
Mounting:	DIN rail	IEC/EN 60715
Weight:	200 g	

Dimensions

Width x height x depth:	22.5 x 84 x 121 mm

Standard Type

BG 5595 AC/DC 110 ... 230 V 50 / 60 Hz	
Article number:	0055045
• Secondary voltage:	DC 24 V
• Primary nominal voltage U_N:	AC/DC 110 ... 230 V
• Width:	22.5 mm

Ordering Example

BG 5595 _ _ _ 50 / 60 Hz

- 50 / 60 Hz — Nominal frequency
- _ _ _ — Primary nominal voltage U_N
- BG 5595 — Type