Control / Monitoring Technique

Translation **Switched Power Supply** DOLD 浙 of the original instructions BG 5595 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 •

Circuit Diagram

0257046



Connection Terminals

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

Approvals and Markings



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.

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: DC: Primary current at	70 265 V 85 300 V
nominal voltage U_N : No-load operation At AC 230 V: At DC 230 V: At AC 110 V: At DC 110 V: Efficiency:	20 mA 7 mA 16 mA 10 mA
Secondary voltage:	DC 24 V \pm 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
Residual ripple at max. load: Current limitation:	short time 1 min: 1,3 A at AC 110 V; 1,6 A at AC 230 V \leq 1 % Electonic short circuit protection and overload protection. Disconnection of 1,3 A at AC 110 V and 1,6 A at AC 230 V.

1

Technical Data

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:	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 subj	ect 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 mm ² stranded wire with sleeve or			
	1 x 4 mm ² solid or			
	2 x 1,5 mm ² 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

B	G 5595 AC/DC 110 230	V	50 / 60 Hz	
A	rticle number:		0055045	
•	Secondary voltage:		DC 24 V	
•	Primary nominal voltage U		AC/DC 110 230 V	
•	Width:	IN	22.5 mm	

Ordering Example

<u>BG 5595</u> ___ <u>50 / 60 Hz</u>



Nominal frequency Primary nominal voltage ${\rm U}_{\rm N}$ Type

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