Power supply unit, 3-phase, 400VAC/24VDC, 5A

Part no. GD4-050-BD3
Article no. 200007

Powering Business Worldwide

Delivery program

Product range			GD4 power supply units
Description			unregulated smoothed
Phases			Three-phase
Input voltage range			380 - 420 V AC
Nominal input voltage			3 x 400 V AC
Rated output voltage			24 V DC
Rated output current		A	5
For use with			easy… MFD… EC4P… XC-CPU… XIOC… PS4…

Technical data

General

Protection class			1
Potential isolation			Yes, VDE 0551, IEC/EN 60742, SELV
Supply frequency			
Rated value		Hz	50/60
Range		Hz	50 - 60
Electromagnetic compatibility (EMC)			
Emitted interference			Class B (EN 55011, 22)
ESD	Air/contact discharge	kV	6 kV contact (Level 3), 8 kV air (Level 3), IEC/EN 61000-4-2
RFI			10 V/m, modulated, IEC/EN 61000 4-2
Burst			2 kV (Level 3) IEC/EN 61000-4-4
Surge			2 kV (Inst. Class 3), IEC/EN 61000-4-5
Surge voltage			4.9 kV, IEC EN 60947
Environmental compatibility			
Ambient temperature			-25 - 55
Ambient temperature, storage		°C	- -25 - 85
Overvoltage category/pollution degree			2, EN 50178
Vibration			0.075 mm (10 - 57 Hz), 10 cycles, IEC 60068-2-6
Shock resistance Shock duration 11 ms		g	15, IEC 60068-2-27 (3 shocks)
Altitude		m	Up to 2000 m a.s.l.; observe drating at higher altitudes
Notes			Derating From +44 to +55 °C: linear derating of power from 100 % to 93 %
Degree of Protection			IP20
Fixing			Screw fixing
Mounting position			As required
Heat dissipation		W	27

Input voltage

Rated value		V AC	400
Range		V AC	Pick-off ± 5 % 380, 400, 420
Input currentnominal value per phase		A	0.24
No-load losses		W	5
Short-circuit losses		W	19.6

Output voltage

Rated value		V DC	24
Residual ripple		%	3
Output current (nominal value)		A	5
Output current, range at 55 °C		A	0 - 5

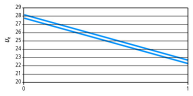
Terminal capacities

Solid		mm^2	0.5 - 4
Flexible with ferrule		mm^2	0.5 - 2.5
Connections			Screw connection

Dimensions

Width		mm	125
Height		mm	73
Depth		mm	140
Weight		kg	2.4

Fuse specification

Input current	I_1	A	0.24
Circuit-breaker			
PKZ			PKZM0-0.25
Current setting		A	0.24
Miniature circuit-breaker			
FAZ			FAZ-S1/1
Short-circuit protection only			●
Current/voltage characteristics			

Notes

Range of rated voltages U_e at 230 V or 3 x 400 V AC (primary side)

and a load current of I = 0 A up to rated current 1 x I_e

Design verification as per IEC/EN 61439

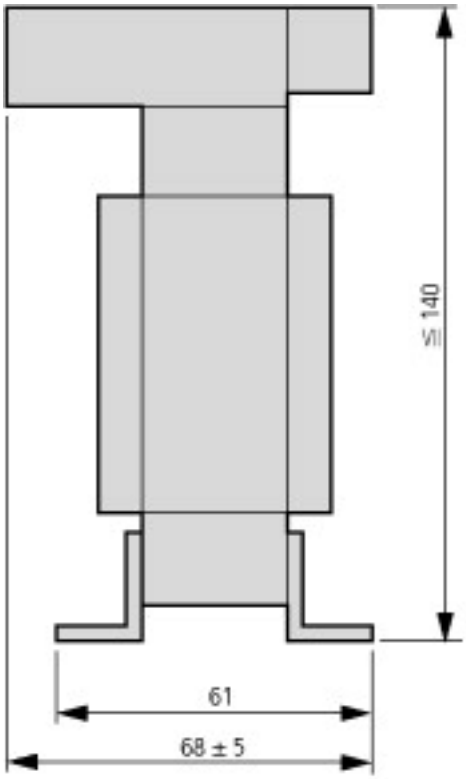
Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	0
Heat dissipation per pole, current-dependent	P_{vid}	W	0
Equipment heat dissipation, current-dependent	P_{vid}	W	0
Static heat dissipation, non-current-dependent	P_{vs}	W	27
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			Meets the product standard's requirements.
10.2.3.1 Verification of thermal stability of enclosures			Meets the product standard's requirements.
10.2.3.2 Verification of resistance of insulating materials to normal heat			Meets the product standard's requirements.
10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects			Meets the product standard's requirements.
10.2.4 Resistance to ultra-violet (UV) radiation			Meets the product standard's requirements.
10.2.5 Lifting			Does not apply, since the entire switchgear needs to be evaluated.
10.2.6 Mechanical impact			Does not apply, since the entire switchgear needs to be evaluated.
10.2.7 Inscriptions			Meets the product standard's requirements.
10.3 Degree of protection of ASSEMBLIES			Meets the product standard's requirements.
10.4 Clearances and creepage distances			Meets the product standard's requirements.
10.5 Protection against electric shock			Does not apply, since the entire switchgear needs to be evaluated.
10.6 Incorporation of switching devices and components			Does not apply, since the entire switchgear needs to be evaluated.
10.7 Internal electrical circuits and connections			Is the panel builder's responsibility.
10.8 Connections for external conductors			Is the panel builder's responsibility.

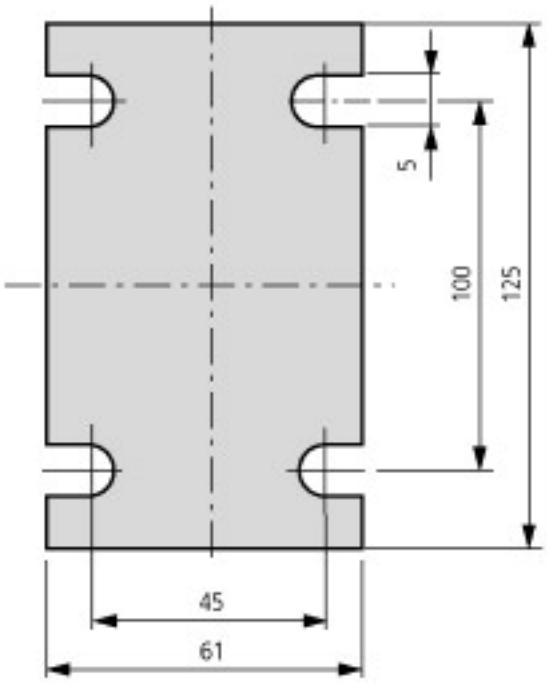
10.9 Insulation properties			
10.9.2 Power-frequency electric strength			Is the panel builder's responsibility.
10.9.3 Impulse withstand voltage			Is the panel builder's responsibility.
10.9.4 Testing of enclosures made of insulating material			Is the panel builder's responsibility.
10.10 Temperature rise			The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
10.11 Short-circuit rating			Is the panel builder's responsibility.
10.12 Electromagnetic compatibility			Is the panel builder's responsibility.
10.13 Mechanical function			The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

Technical data ETIM 6.0

PLC's (EG000024) / PLC system power supply (EC000599)			
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS system power supply (ecl@ss8.1-27-24-22-09 [AKE532011])			
Input voltage at AC 50 Hz		V	0 - 0
Input voltage at AC 60 Hz		V	0 - 0
Input voltage at DC		V	0 - 0
Type of voltage (input voltage)			AC
Max. input current AC 50 Hz		A	0.24
Max. input current AC 60 Hz		A	0.24
Max. input current DC		A	0
Type of output voltage			DC
Output voltage at AC 50 Hz		V	0 - 0
Output voltage at AC 60 Hz		V	0 - 0
Output voltage at DC		V	0 - 0
Max. output current AC 50 Hz		A	0
Max. output current AC 60 Hz		A	0
Max. output current DC		A	5
Redundancy			No
Suitable for safety functions			Yes
Width		mm	125
Height		mm	140
Depth		mm	73

Dimensions





[1] Maximum space requirements

Additional product information (links)

IL05012007Z (AWA2700-1612) Power supply unit	
IL05012007Z (AWA2700-1612) Power supply unit	ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL05012007Z2010_11.pdf