



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

Part no. **GD4-050-BD3**
 Catalog No. **200007**

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 derating 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 current nominal value per phase | | A | 0.24 |
| No-load losses | | W | 5 |
| Short-circuit losses | | W | 19.6 |

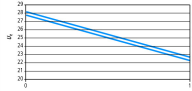
Output voltage

| | | |
|--------------------------------|------|-------|
| 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 |
| 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

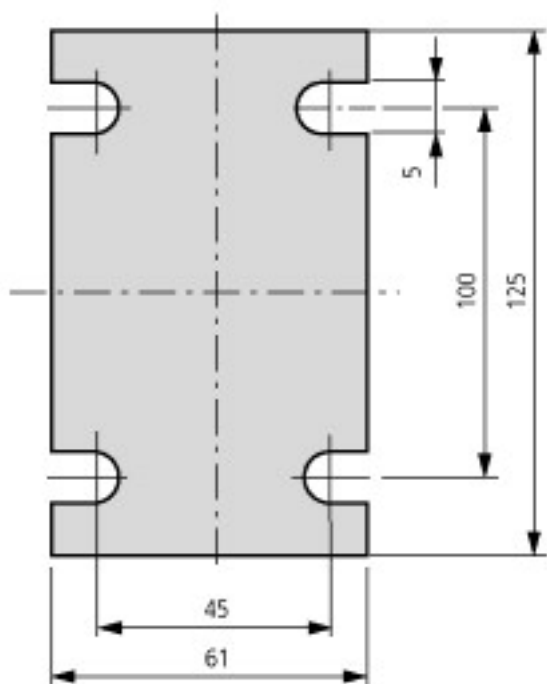
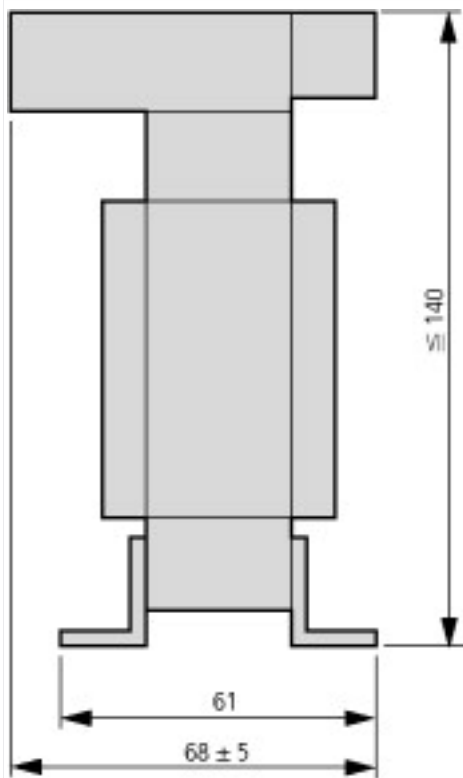
| Technical data for design verification | | | |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation | I _n | A | 0 |
| Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 0 |
| Static 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 | | | |
| 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 7.0

| | | | |
|---|--|----|-------|
| PLC's (EG000024) / PLC system power supply (EC000599) | | | |
| Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS system power supply (ecl@ss10.0.1-27-24-22-09 [AKE532014]) | | | |
| 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 |
| 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 |
| Power output | | W | 120 |
| 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/IL05012007Z2018_02.pdf