### **DATASHEET - GW4-100-BA3**



Power supply unit, 1-phase, 230VAC/24VDC, 10A

GW4-100-BA3 Part no. Catalog No. 200019



Similar to illustration

**Delivery program** 

| Don'tory program      |   |                               |
|-----------------------|---|-------------------------------|
| Product range         |   | GW4 power supply units        |
| Description           |   | unregulated smoothed          |
| Phases                |   | Single-phase                  |
| Input voltage range   |   | 230 V AC                      |
| Nominal input voltage |   | 230 V AC                      |
| Rated output voltage  |   | 24 V DC                       |
| Rated output current  | Α | 10                            |
| For use with          |   | easy MFD EC4P XC-CPU XIOC PS4 |

## Technical data

| Technical data                        |                       |      |  |
|---------------------------------------|-----------------------|------|--|
| General                               |                       |      |  |
| Protection class                      |                       |      | 1  |
| Potential isolation                   |                       |      | Yes, VDE 0551, IEC/EN 60742, SELV  |
| Supply frequency                      |                       |      |  |
| Rated value                           |                       | 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    | 57   |
| Input voltage                         |                       |      |  |
| Rated value                           |                       | V AC | 230  |
| Range                                 |                       | V AC | 230  |
|                                       |                       |      |  |

| Rated value                          | V AC | 230 |
|--------------------------------------|------|-----|
| Range                                | V AC | 230 |
| Input currentnominal value per phase | Α    | 1.4 |

| No-load losses                  |                | W               | 10.2                                  |
|---------------------------------|----------------|-----------------|---------------------------------------|
| Short-circuit losses            |                | W               | 35                                    |
| Output voltage                  |                |                 |                                       |
| Rated value                     |                | V DC            | 24                                    |
| Residual ripple                 |                | %               | ≦5                                    |
| Output current (nominal value)  |                | Α               | 10                                    |
| Output current, range at 55 °C  |                | Α               | 0 - 10                                |
| Terminal capacities             |                |                 |                                       |
| Solid                           |                | $\text{mm}^2$   | 0.5 - 4                               |
| Flexible with ferrule           |                | $\mathrm{mm}^2$ | 0.5 - 2.5                             |
| Connections                     |                |                 | Screw connection                      |
| Weight                          |                | kg              | 4.45                                  |
| Fuse specification              |                |                 |                                       |
| Input current                   | I <sub>1</sub> | Α               | 1.4                                   |
| Circuit-breaker                 |                |                 |                                       |
| PKZ                             |                |                 | PKZM0-1,6                             |
| Current setting                 |                | Α               | 1.4                                   |
| Miniature circuit-breaker       |                |                 |                                       |
| FAZ                             |                |                 | FAZ-S2/1                              |
| Current/voltage characteristics |                |                 | 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 |

#### 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

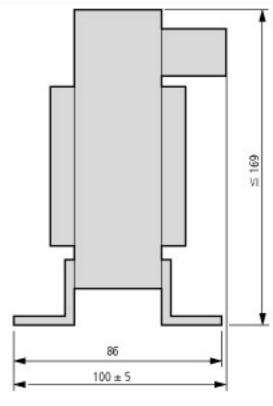
| Technical data for design verification   |                   |    |  |
|--|-------------------|----|--|
| Rated operational current for specified heat dissipation   | I <sub>n</sub>    | Α  | 0  |
| Heat dissipation per pole, current-dependent   | P <sub>vid</sub>  | W  | 0  |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 0  |
| Static heat dissipation, non-current-dependent   | P <sub>vs</sub>   | W  | 57   |
| Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| · · · · · ·  | diss              |    |  |
| 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.                             |

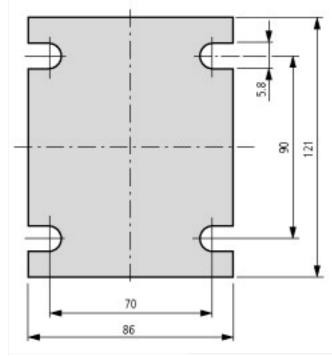
| 10.9.4 Testing of enclosures made of insulating material | Is the panel builder's responsibility.   |
|--|--|
| 10.10 Temperature rise                                   | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 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 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   |  | Α  | 1.4   |
| Max. input current AC 60 Hz   |  | Α  | 1.4   |
| Max. input current DC   |  | Α  | 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  |  | Α  | 0     |
| Max. output current AC 60 Hz  |  | Α  | 0     |
| Max. output current DC  |  | Α  | 10    |
| Power output  |  | W  | 240   |
| Redundancy  |  |    | No    |
| Suitable for safety functions   |  |    | Yes   |
| Width   |  | mm | 121   |
| Height  |  | mm | 169   |
| Depth   |  | mm | 105   |

## **Dimensions**





1) Maximum space requirements

## **Additional product information (links)**

IL05012006Z (AWA2700-1611) Power supply unit

 $IL05012006Z\ (AWA2700-1611)\ Power\ supply\ unit\ ftp://ftp.moeller.net/DOCUMENTATION/AWA\_INSTRUCTIONS/IL05012006Z2018\_02.pdf$