

## PRO ECO 72W 24V 3A

**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)



You are looking for a reliable power supply with basic functions.

With PROeco we can offer you low-cost switch-mode power supply units with

high efficiency and system capability. Let's connect.

In the series production of machines, in particular, switch-mode power supply units with

above-average performance values can deliver genuine competitive advantages.

The low-cost PROeco series offers all the basic functions and delivers impressively

high performance and flexibility.

Our PROeco switch-mode power supply units feature a compact design, high

efficiency and are extremely easy to maintain. Thanks to temperature protection,

short-circuit and overload resistance they can be universally used in all

applications.

Wide-ranging safety functions and compatibility with our diode and capacitance modules, together with UPS components for setting up a

redundant power supply, characterise solutions with PROeco.

### General ordering data

|            |   |
|------------|---|
| Version    | Power supply, switch-mode power supply unit, 24 V |
| Order No.  | <a href="#">1469470000</a>                        |
| Type       | PRO ECO 72W 24V 3A                                |
| GTIN (EAN) | 4050118275711                                     |
| Qty.       | 1 pc(s).  |

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## Technical data

### Dimensions and weights

|            |        |                 |            |
|------------|--------|-----------------|------------|
| Depth      | 100 mm | Depth (inches)  | 3.937 inch |
| Height     | 125 mm | Height (inches) | 4.921 inch |
| Width      | 34 mm  | Width (inches)  | 1.339 inch |
| Net weight | 557 g  |                 |            |

### Temperatures

|                     |                |                       |                |
|---------------------|----------------|-----------------------|----------------|
| Storage temperature | -40 °C...85 °C | Operating temperature | -25 °C...70 °C |
|---------------------|----------------|-----------------------|----------------|

### Input

|                        |                                       |                           |  |
|------------------------|---------------------------------------|---------------------------|--|
| AC current consumption | 0,55 A @ 230 V AC / 1,04 A @ 110 V AC | AC input voltage range    | 85...264 V AC (derating at 100 V AC)   |
| Connection system      | Screw connection                      | DC current consumption    | 0,22 A @ 370 V DC / 0,68 A @ 120 V DC  |
| DC input voltage range | 80...370 V DC (Derating @ 120 V DC)   | Frequency range AC        | 47...63 Hz   |
| Input frequency        | 47...63 Hz                            | Input fuse (internal)     | Yes  |
| Inrush current         | max. 40 A                             | Nominal power consumption | 82.8 VA  |
| Rated input voltage    | 100...240 V AC                        | Recommended back-up fuse  | 2 A / DI, safety fuse<br>6 A, Char. B, circuit breaker<br>2...4 A, Char. C circuit breaker |
| Surge protection       | Varistor                              |                           |  |

### Output

|   |                             |                                      |  |
|---|-----------------------------|--------------------------------------|--|
| Capacitive load                           | unrestricted                | Connection system                    | Screw connection                       |
| Continuous output current @ $U_{Nominal}$ | 3 A @ 55 °C, 2,25 A @ 70 °C | Nominal output current for $U_{nom}$ | 3 A at 55 °C                           |
| Output power                              | 72 W                        | Output voltage, max.                 | 28 V                                   |
| Output voltage, min.                      | 22 V                        | Output voltage, note                 | (adjustable via potentiometer)         |
| Overload protection                       | Yes                         | Parallel connection option           | yes, max. 5                            |
| Protection against inverse voltage        | Yes                         | Ramp-up time                         | ≤ 100 ms                               |
| Rated output voltage                      | 24 V DC ± 1 %               | Residual ripple, breaking spikes     | < 50 mV <sub>pp</sub> @ 24 V DC, $I_N$ |

### General data

|  |  |   |                                      |
|--|--|---|--------------------------------------|
| AC failure bridging time @ $I_{nom}$   | > 100 ms @ 230 V AC / > 20 ms @ 115 V AC   | Degree of efficiency                              | 87 %                                 |
| Earth leakage current, max.            | 3.5 mA   | Housing version                                   | Metal, corrosion resistant           |
| Indication                             | Green LED ( $U_{output} > 21.6$ V DC), Yellow LED ( $I_{output} > 90\% I_{Rated}$ typ. ), red LED (overload, overtemperature, short-circuit, $U_{output} < 20.4$ V DC) | Max. perm. air humidity (operational)             | 5 %...95 % RH                        |
| Mounting position, installation notice | on terminal rail TS 35   | Power factor (approx.)                            | > 0.5...230 V AC / > 0.53...115 V AC |
| Power loss, idling                     | 4 W  | Power loss, nominal load                          | 9.5 W                                |
| Protection against over-heating        | Yes  | Protection against reverse voltages from the load | 30...35 V DC                         |
| Protection degree                      | IP20   | Short-circuit protection                          | Yes                                  |
| Surge voltage category                 | II   |   |                                      |

Creation date 19 April 2024 4:59:46 AM

Catalogue status 06.04.2024 / We reserve the right to make technical changes.

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### EMC / shock / vibration

|   |  |   |                              |
|---|--|---|------------------------------|
| Interference immunity test acc. to        | EN 61000-4-2 (ESD),<br>EN 61000-4-3 (RS), EN<br>61000-4-4 (burst), EN<br>61000-4-5 (surge), EN<br>61000-4-6 (conducted),<br>EN61000-4-8 (Fields),<br>EN61000-4-11 (Dips) | Limiting of mains voltage harmonic currents | According to EN<br>61000-3-2 |
| Noise emission in accordance with EN55032 | Class B  | Shock resistance IEC 60068-2-27             | 15 g In all directions       |
| Vibration resistance IEC 60068-2-6        | 1 g according to EN<br>50178   |   |                              |

### Insulation coordination

|                                  |                       |                                   |        |
|----------------------------------|-----------------------|-----------------------------------|--------|
| Insulation voltage input / earth | 2 kV                  | Insulation voltage output / earth | 0.5 kV |
| Insulation voltage, input/output | 3 kV                  | Pollution severity                | 2      |
| Protection class                 | I, with PE connection | Surge voltage category            | II     |

### Electrical safety (applied standards)

|   |  |   |                                       |
|---|--|---|---------------------------------------|
| Electrical machine equipment                | Acc. to EN60204  | For use with electronic equipment                           | Acc. to EN50178 /<br>VDE0160          |
| Protection against dangerous shock currents | Acc. to VDE0106-101  | Protective separation / protection against electrical shock | VDE0100-410 / acc. to<br>DIN57100-410 |
| Safety extra-low voltage                    | SELV acc. to IEC 60950-1,<br>PELV according to EN<br>60204-1 | Safety transformers for switch-mode power supplies          | According to EN<br>61558-2-16         |

### Connection data (input)

|   |                     |   |                     |
|---|---------------------|---|---------------------|
| Conductor cross-section, AWG/kcmil , max. | 12                  | Conductor cross-section, AWG/kcmil , min.             | 26                  |
| Conductor cross-section, flexible , min.  | 0.5 mm <sup>2</sup> | Conductor cross-section, rigid , max.                 | 6 mm <sup>2</sup>   |
| Conductor cross-section, rigid , min.     | 0.5 mm <sup>2</sup> | Connection system                                     | Screw connection    |
| Number of terminals                       | 3 for L/N/PE        | Tightening torque, max.                               | 0.6 Nm              |
| Tightening torque, min.                   | 0.5 Nm              | Wire connection cross section, flexible (input), max. | 2.5 mm <sup>2</sup> |

### Connection data (output)

|   |                     |   |                     |
|---|---------------------|---|---------------------|
| Conductor cross-section, AWG/kcmil , max. | 12                  | Conductor cross-section, AWG/kcmil , min. | 26                  |
| Conductor cross-section, flexible , max.  | 2.5 mm <sup>2</sup> | Conductor cross-section, flexible , min.  | 0.5 mm <sup>2</sup> |
| Conductor cross-section, rigid , max.     | 6 mm <sup>2</sup>   | Conductor cross-section, rigid , min.     | 0.5 mm <sup>2</sup> |
| Connection system                         | Screw connection    | Number of terminals                       | 5 (+,-, 13,14)      |
| Tightening torque, max.                   | 0.6 Nm              | Tightening torque, min.                   | 0.5 Nm              |

### Signalling

|                           |   |                  |     |
|---------------------------|---|------------------|-----|
| Contact load (NO contact) | max. 30 V DC / 1 A                                    | Floating contact | Yes |
| Relay on/off              | Output voltage<br>>21.6 V DC/ <20.4 V DC,<br>overload |                  |     |

### Approbations

|                         |         |                   |       |
|-------------------------|---------|-------------------|-------|
| Certificate no. (cULus) | E258476 | Institute (cULus) | CULUS |
|-------------------------|---------|-------------------|-------|

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## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002540    | ETIM 7.0    | EC002540    |
| ETIM 8.0    | EC002540    | ETIM 9.0    | EC002540    |
| ECLASS 9.0  | 27-04-07-01 | ECLASS 9.1  | 27-04-07-01 |
| ECLASS 10.0 | 27-04-07-01 | ECLASS 11.0 | 27-04-07-01 |
| ECLASS 12.0 | 27-04-07-01 | ECLASS 13.0 | 27-04-90-02 |

## Environmental Product Compliance

|            |                                      |
|------------|--------------------------------------|
| REACH SVHC | Lead 7439-92-1                       |
| SCIP       | 6d8cdf22-8230-4af8-86c8-3558c716666d |

## Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate no. (cULus) | E258476    |

## Downloads

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of Conformity</a><br><a href="#">UK Conformity Assessed</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>   |
| Engineering Data                            | <a href="#">Zuken E3.S</a>  |
| User Documentation                          | <a href="#">Operating instructions</a>  |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>  |

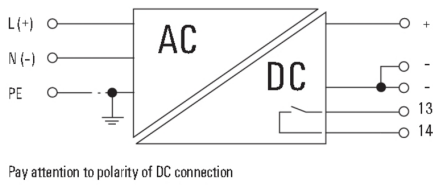
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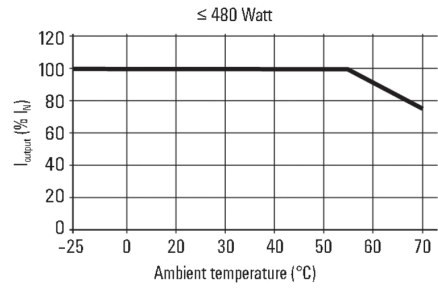
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**Drawings**

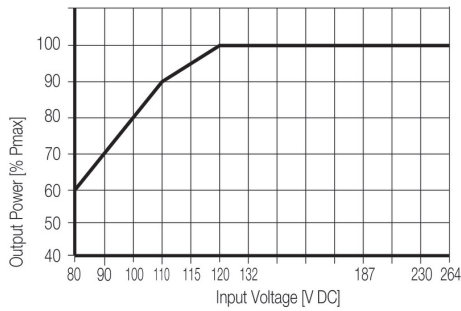
**Electric symbol**



**Derating curve**



**Derating curve**



**Derating curve**

