

regulated, 120 W, 3-phase



|                       |   |           |
|-----------------------|---|-----------|
| <b>Identification</b> | Type  | WRA120-24 |
|                       | Part-No.  | 722803    |
| <b>Description</b>    | Primary switchmode power supply, PFC, 3-phase<br>Input: wide-range input AC 340–576 V, DC 480–820 V<br>Output: 24 V, adjustable |           |

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Part-No. 722803

USA: LUTZE INC.

13330 South Ridge Drive • Charlotte, NC 28273, USA  
Tel. +1 (704) 504-0222 • Fax +1 (704) 504-0223  
www.lutze.com • info@lutze.com

United Kingdom: LÜTZE Ltd.

Unit 3, Sandy Hill Park  
Sandy Way, Amington • GB-Tamworth, Staffs B77 4DU  
Tel. +44 (0)1827 31333-0 • Fax +44 (0)1827 31333-2  
www.lutze.com • sales.gb@lutze.co.uk



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## Technical data sheet · Power supply

### Input

|                                |                                      |
|--------------------------------|--------------------------------------|
| Number of phases               | 3                                    |
| Rated voltage $U_N$            | 3 × AC 380–480 V                     |
| Operation voltage range        | 3 × AC 340–575 V / 3 × DC 480–820 V  |
| Line frequency                 | 47 – 63 Hz                           |
| Rated current $I_N$            | 0.5 A @ AC 380 V / 0.35 A @ AC 500 V |
| Inrush current                 | 10 A                                 |
| Internal fuse                  | 3 × T2, 0 A/AC 600 V                 |
| External fuse                  | Mini-circuit breaker: 3 × B 6 A      |
| Power Factor Correction P.F.C. | 0.6                                  |

### Output

|   |   |
|---|---|
| Rated voltage $U_N$                         | DC 24.00 V  |
| Rated current $I_N$                         | 5.00 A  |
| Heat dissipation                            | 16 A @ AC 380 V   |
| Setting range $U_{out\ min.}/U_{out\ max.}$ | 22.5/28.5 V   |
| Accuracy                                    | 1 %   |
| Load regulation                             | ±1 %  |
| Line regulation                             | ±1 %  |
| Rise time                                   | 1 s   |
| Temperature coefficient                     | ±0.03 % / °C  |
| Ripple and Noise                            | 100 mV  |
| Hold up time                                | min. 20 ms  |
| Status indication DC ON LED green           | ≥17.6–19.4 V  |
| Status indication DC LOW LED red            | ≤17.6–19.4 V  |
| Parallel / redundant mode                   | max. 2 devices / via external decoupling diodes e.g. 722987                               |
| Efficiency                                  | 89 %  |
| Over voltage protection                     | 125–137 %   |
| Rated over load protection                  | 115–135 %, temperature: disconnection at 100–110°C and automatic activation when cool off |
| Short circuit                               | Hiccup Mode   |

### Monitoring

|                     |             |
|---------------------|-------------|
| DC ON Control (Rdy) | N/O contact |
| Switching voltage   | DC 60 V     |
| Switching current   | max. 300 mA |
| Isolation voltage   | DC 500 V    |

### General

|                                   |                |
|-----------------------------------|----------------|
| Switching frequency               | approx. 70 kHz |
| Insulation voltage input / output | DC 4.2 kV      |
| Insulation voltage input / ground | DC 2.1 kV      |

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|                                    |  |
|------------------------------------|--|
| Insulation voltage output / ground | DC 700 V   |
| Insulation resistance at DC 500 V  | 100 MΩ   |
| Derating                           | Capacity: -2.5 %/°C starting at +61 °C   |
| Operation temperature range        | -25 °C ... +71 °C (Derating)   |
| Storage temperature range          | -25 °C ... +85 °C  |
| MTBF                               | 559000 h   |
| Relative air humidity              | 20 – 90 % RH, not condensing   |
| Cooling                            | Air convection, 25 mm clearance all-round  |
| Housing material                   | Metal  |
| Mounting                           | DIN rail mountable TS35<br>(EN 60715)  |
| Application height                 | 3000 m   |
| Installation position              | vertical   |
| Protection class                   | IP20   |
| Protection class                   | I  |
| Over voltage category              | II   |
| Degree of pollution                | 2  |
| Weight                             | 0.800 kg/piece   |
| Connection device                  | Screw terminal<br>0.20 mm <sup>2</sup> – 4.0 mm <sup>2</sup><br>max. 0.62 Nm   |
| Dimensions (w × h × d)             | 74.3 × 123.6 × 118.8 mm  |
| Approvals                          | cULus (E249179)  |
| Standards                          | UL 60950-1<br>EN 60950-1<br>EN 61000-6-3<br>EN 55022 Class B<br>EN 61000-3-2<br>EN 61000-3-3<br>EN 61000-6-2<br>EN 55024 Class I |
| PU                                 | 1 piece  |

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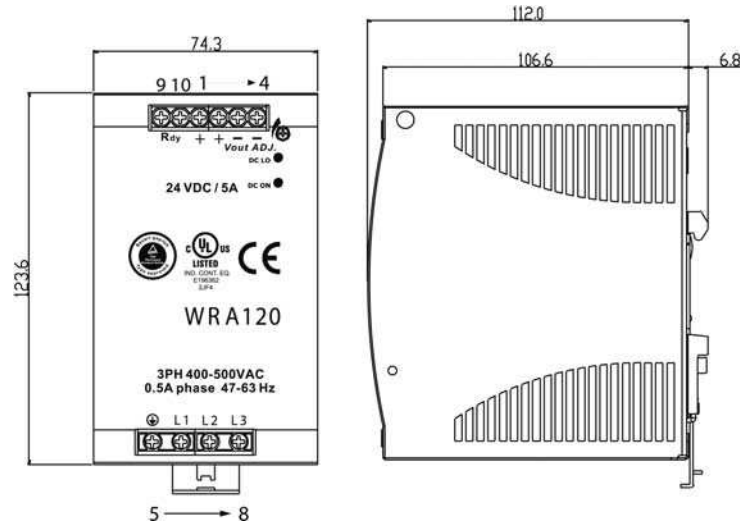
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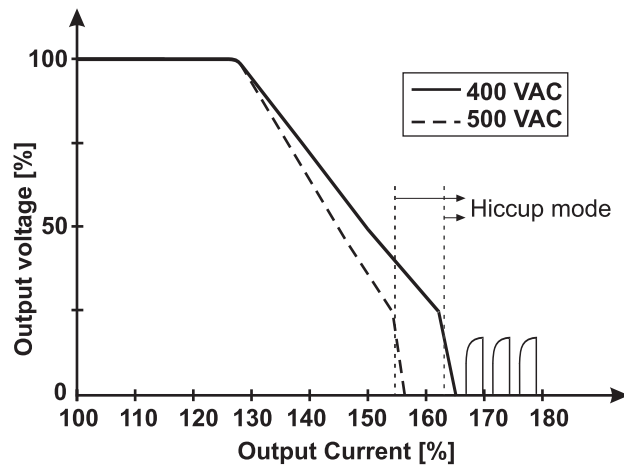
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## Dimensions



## Short circuit characteristics



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