

regulated, 120 W



| | | |
|-----------------------|---|-------------|
| Identification | Type | DRAN120-24B |
| | Part-No. | 722758 |
| Description | Primary switchmode power supply, PFC, Single-phase Input: wide-range input AC 90–132 V, AC 186–264 V, DC 210–370 V Output: 12 V / 24 V / 48 V, adjustable | |

25.08.2017 – Subject to technical modification

Part-No. 722758

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SYSTEMATIC TECHNOLOGY

Technical data sheet · Power supply

Input

| | |
|--------------------------------|---|
| Number of phases | 1 |
| Rated voltage U_N | AC 115 / 230 V (auto select) |
| Operation voltage range | AC 90–132 V / AC 186–264 V / DC 210–370 V |
| Line frequency | 47 – 63 Hz |
| Rated current I_N | 1.25 A @ AC 115 V / 0.63 A @ AC 230 V |
| Inrush current | 24 A @ AC 115 V / 48 A @ AC 230 V |
| Internal fuse | T3, 15 A/AC 250 V |
| External fuse | Mini-circuit breaker: B 6 A |
| Power Factor Correction P.F.C. | 0.7 |

Output

| | |
|---|---|
| Rated voltage U_N | DC 24.00 V |
| Rated current I_N | 5.00 A |
| Heat dissipation | 20 A @ AC 230 V |
| Setting range $U_{out\ min.}/U_{out\ max.}$ | 22.5/28.5 V |
| Accuracy | ±1 % |
| Load regulation | Single ±1 %, Parallel ±5 % |
| Line regulation | ±0.5 % |
| Rise time | 1 s |
| Temperature coefficient | ±0.03 % / °C |
| Ripple and Noise | 50 mV |
| Hold up time | 25 ms @ 115 V / 30 ms @ 230 V |
| 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. 3 units at 90% load current, manual switch S/P |
| Efficiency | 86 % |
| Over voltage protection | 125–145 % |
| Rated over load protection | 105–125 % |
| Short circuit | Current limit |

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. 80 kHz |
| Insulation voltage input / output | DC 4.2 kV |
| Insulation voltage input / ground | DC 2.1 kV |
| Insulation voltage output / ground | DC 700 V |

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| Insulation resistance at DC 500 V | 100 M Ω |
| Derating | Capacity: -2.5 %/°C starting at 60 °C |
| Operation temperature range | -25 °C ... +70 °C (Derating) |
| Storage temperature range | -25 °C ... +85 °C |
| MTBF | 450000 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 (EN 60715) |
| Application height | 2000 m |
| Installation position | vertical |
| Protection class | IP20 |
| Protection class | I |
| Over voltage category | II |
| Degree of pollution | 2 |
| Weight | 0.920 kg/piece |
| Connection device | Screw terminal 0.20 mm ² – 2.5 mm ² plug-in max. 0.56 Nm |
| Dimensions (w × h × d) | 63.5 × 142.0 × 116.0 mm |
| Approvals | UL 508 listed UL 60950-1 EN 60950-1 EN 61000-6-3 EN 55022 Class B EN 61000-3-2 EN 61000-3-3 EN 61000-6-2 EN 61000-6-3 Class I EN 55024 Class I Division 2, Groups A, B, C, D |
| PU | 1 piece |

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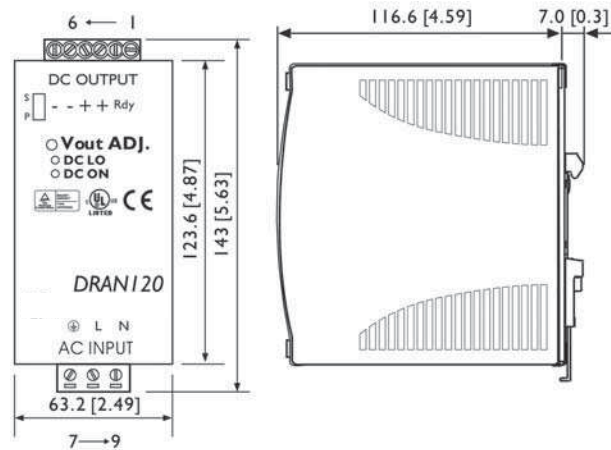
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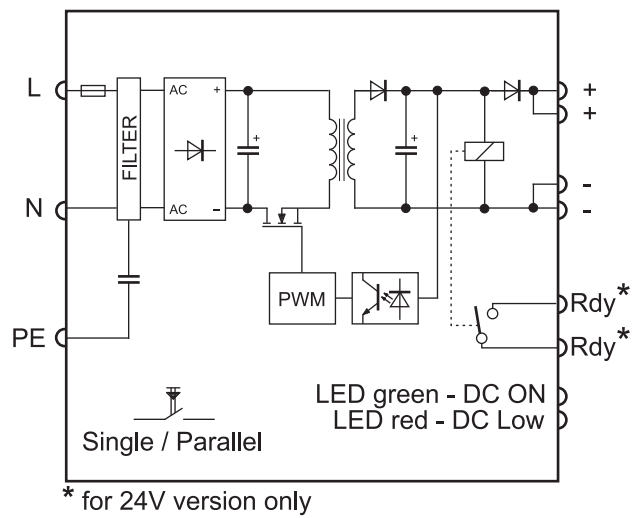
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Technical data sheet · Power supply

Dimensions



PIN assignment



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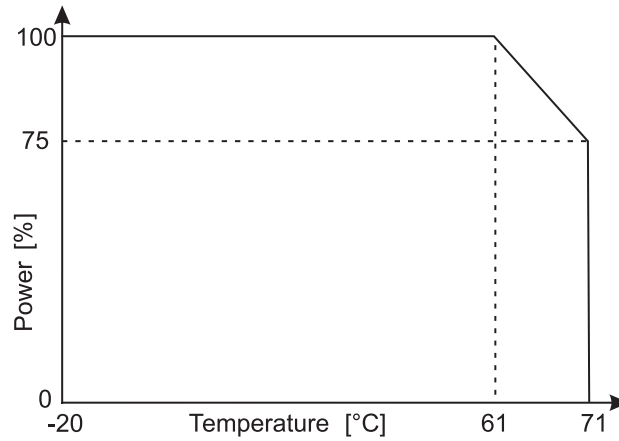
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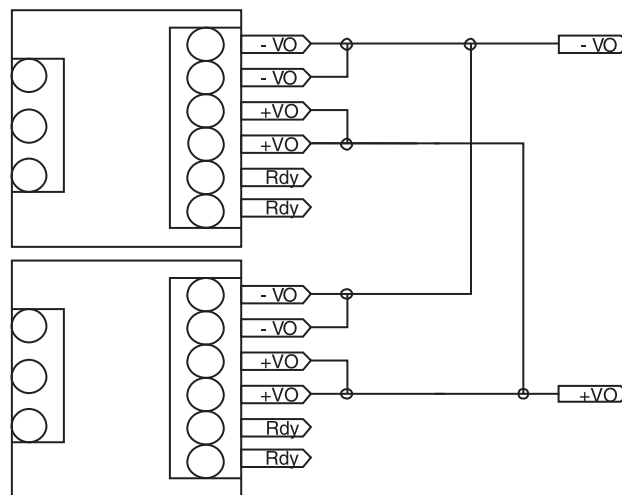
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Derating



Parallel/redundant mode



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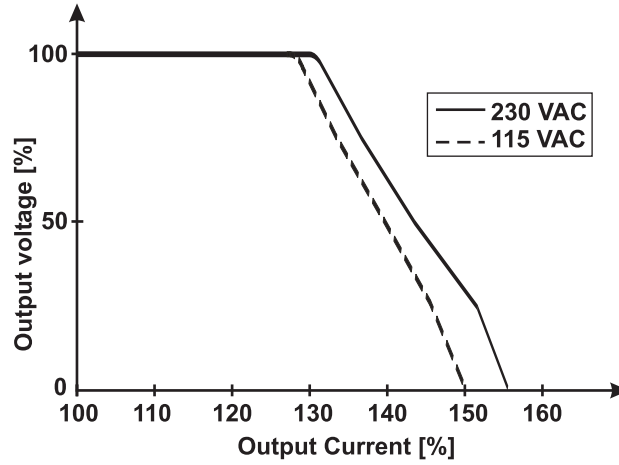
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Short circuit characteristics



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