

Power supply · regulated, 30 W

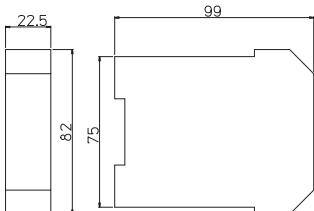
Primary switchmode power supply, PFC, Single-phase, Class 2

Input: wide-range input AC 90 V - 264 V, DC 100 V - 320 V

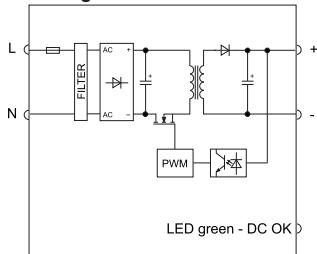
Output: DC 24 V



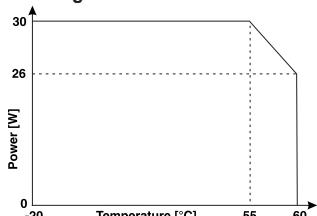
Dimensions



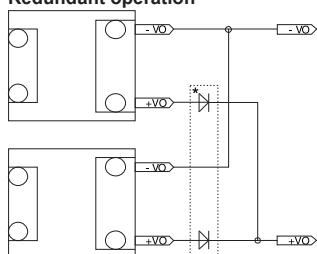
PIN assignment



Derating



Redundant operation



* Redundant Module 722987

| Description | Part-No. | Type | PU |
|------------------------------------|-----------------|---|--------------|
| Screw terminal | | | |
| Output voltage/current | DC 24 V / 1.2 A | 722790 | CPSFB1-30-24 |
| | | | 1 |
| Input | | CPSFB1-30-24 | |
| Nominal voltage | | AC 120 V / 230 V | |
| Operation voltage range | | AC 90–264 V / DC 100–320 V | |
| Line frequency | | 47 – 63 Hz | |
| Rated current | | $I_{\text{L}} = \text{AC } 120 \text{ V}: 0.55 \text{ A} / \text{DC } 240 \text{ V}: 0.30 \text{ A}$ | |
| Inrush current | | <25 A | |
| Internal fuse | | T 1.25 A / AC 250 V | |
| External fuse | | Mini-circuit breaker: C 2 A | |
| Power Factor Correction P.F.C. | | >0.6 | |
| Output | | | |
| Rated voltage output | | DC 24 V | |
| Rated current output | | 1.2 A | |
| Max. output current | | 1.4 A @ 24 V | |
| Short-circuit current | | 10 A, 50 ms | |
| Voltage trim range | | – | |
| Accuracy | | ±1% | |
| Line regulation | | – | |
| Load regulation | | <1 % | |
| Rise time | | – | |
| Temperature coefficient | | – | |
| Ripple & Noise | | <80 mV pp | |
| Hold up time | | >10 ms (AC 120 V); >30 ms (AC 240 V) | |
| Status indication DC ON LED green | | yes | |
| Status indication DC LOW LED red | | No | |
| Parallel/redundant operation | | max. 2 devices / via external diodes | |
| Efficiency | | >86 % (AC 120 V); > 87 % (AC 240 V) | |
| Low power loss | | <4.7 W (AC 120 V); <4.3 W (AC 240 V) | |
| Rated over load protection | | yes | |
| Over voltage protection | | yes | |
| Short circuit characteristics | | Hiccup-mode | |
| General | | | |
| Switching frequency | | approx. 70 – 110 kHz | |
| Insulation voltage input/output | | AC 3.0 kV _{eff} | |
| Insulation voltage input / ground | | class 2, without PE | |
| Insulation voltage output / ground | | class 2, without PE | |
| Insulation resistance at DC 500 V | | – MΩ | |
| Operation temperature range | | -20 °C – 60 °C (derating) (50°C UL508) | |
| Derating | | >55°C: -0.8 W / °C | |
| Storage temperature range | | -25 °C – 85 °C | |
| M.T.B.F. | | 750000 h to SN29500 / 250000 h to MIL Standard HDBK 217F | |
| Relative humidity | | 20–90% RH, non-condensing | |
| Dimensions (w × h × d) in mm | | 22.5 × 82.0 × 99.0 | |
| Cooling | | Natural air cooling, 10 mm distance right/left, 20 mm distance above/below | |
| Housing material | | Noryl UL 94-0 | |
| Field installation | | rail TS 35 (EN 50022) | |
| Application height | | – m | |
| Installation position | | vertical | |
| Protection class | | IP 20 (IEC529, EN60529) | |
| IP rating | | II (SELV, PELV) | |
| Oversupply category | | II | |
| Pollution degree | | 2 | |
| Weight (kg/piece) | | 0.140 | |
| Termination | | Screw terminal: 0.2–2.5 mm ² , max. 0.56 Nm | |
| Approvals | | UL, cUL: UL 508, IEC 950, EN 60950, UL 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 601000-6-4, EN 50178, EN 61558, EN 61000-3-2, EN 50081-1, EN 50082-2, EN 55022 Class B, EN 55011B | |
| Monitoring | | | |
| DC ON Control (Rdy) | | – | |
| Switching voltage | | – | |
| Switching current | | – | |
| Switching capacity | | – | |
| Insulation voltage | | – | |

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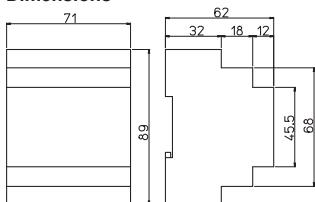
Primary switchmode power supply, PFC, Single-phase, Class 2

Input: wide-range input AC 90–264 V, DC 110–370 V

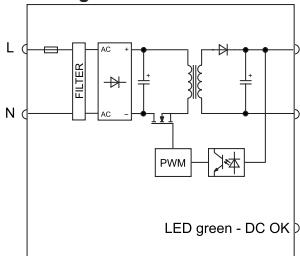
Output: DC 24 V



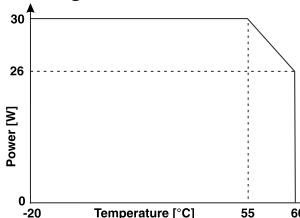
Dimensions



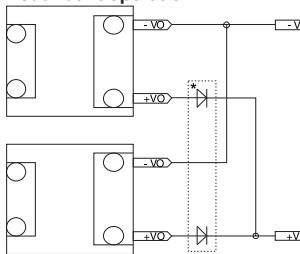
PIN assignment



Derating



Redundant operation



* Redundant Module 722987

| Description | Part-No. | Type | PU |
|------------------------------------|---|--------|-------------|
| Screw terminal | | | |
| Output voltage/current | DC 24 V/ 1.2 A | 722787 | CPSF1-30-24 |
| Input | | | |
| Nominal voltage | AC 115 / 230 V | | |
| Operation voltage range | AC 90–264 V / DC 110–370 V (DC 300 V; UL508) | | |
| Line frequency | 47 – 63 Hz | | |
| Rated current | $U_i = \text{AC } 100 \text{ V}: 0.65 \text{ A} / U_i = \text{AC } 240 \text{ V}: 0.30 \text{ A}$ | | |
| Inrush current | <13 A | | |
| Internal fuse | T2 A / AC 250 V | | |
| External fuse | Mini-circuit breaker: B 4 A, C 2 A | | |
| Power Factor Correction P.F.C. | >0.6 | | |
| Output | | | |
| Rated voltage output | DC 24 V | | |
| Rated current output | 1.2 A | | |
| Max. output current | 2.2 A @ 24 V | | |
| Short-circuit current | – | | |
| Voltage trim range | – | | |
| Accuracy | ±1% | | |
| Line regulation | – | | |
| Load regulation | <1 % | | |
| Rise time | – | | |
| Temperature coefficient | – | | |
| Ripple & Noise | <50 mV pp | | |
| Hold up time | >20 ms (AC 120 V); >60 ms (AC 240 V) | | |
| Status indication DC ON LED green | yes | | |
| Status indication DC LOW LED red | No | | |
| Parallel/redundant operation | max. 2 devices / via external diodes | | |
| Efficiency | >85 % (AC 120 V); > 87 % (AC 240 V) | | |
| Low power loss | – | | |
| Rated over load protection | yes | | |
| Over voltage protection | yes | | |
| Short circuit characteristics | Hiccup-mode | | |
| General | | | |
| Switching frequency | approx. 110 kHz | | |
| Insulation voltage input/output | AC 3.0 kV _{eff} | | |
| Insulation voltage input / ground | class 2, without PE | | |
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| Insulation resistance at DC 500 V | – MΩ | | |
| Operation temperature range | -20 °C – 60 °C (derating) | | |
| Derating | >55 °C: -0.8 W / °C | | |
| Storage temperature range | -25 °C – 85 °C | | |
| M.T.B.F. | 750000 h to SN29500 / 250000 h to MIL Standard HDBK 217F | | |
| Relative humidity | 20–90% RH, non-condensing | | |
| Dimensions (w × h × d) in mm | 71.0 × 89.0 × 62.0 | | |
| Cooling | Natural air cooling, 10 mm distance right/left, 20 mm distance above/below | | |
| Housing material | Noryl UL 94-0 | | |
| Field installation | rail TS 35 (EN 50022) | | |
| Application height | – m | | |
| Installation position | vertical | | |
| Protection class | IP 20 (IEC529, EN60529) | | |
| IP rating | II (SELV, PELV) | | |
| Overvoltage category | II | | |
| Pollution degree | 2 | | |
| Weight (kg/piece) | 0.200 | | |
| Termination | Screw terminal: 0.2–2.5 mm ² , max. 0.56 Nm | | |
| Approvals | UL, cUL: UL 508, IEC 950, EN 60950, UL 60950 CE: EN 61000-4-2/3/4/5/6/11, EN 61000-6-2, EN 601000-6-4, EN 50178, EN 61558, EN 61000-3-2, EN 50081-1, EN 50082-2, EN 55022 Class B, EN 55011B | | |
| Monitoring | | | |
| DC ON Control (Rdy) | – | | |
| Switching voltage | – | | |
| Switching current | – | | |
| Switching capacity | – | | |
| Insulation voltage | – | | |