



Switching Power Supplies Eco2 Series

Overview

The WAGO Eco2 series is a great combination of performance and value when enhanced features are not required. The push-in connection and WAGO levers make connection with the Eco2 series quick, easy, and tool-free, saving time on wiring the power supply units. With a reduced overall width of just 50mm [2.16 in], the Eco2 saves space. With a high efficiency over 90% and the associated reduction in heat generated, the devices are sustainable and durable. The built-in DC OK relay contact indicates whether the output voltage is in the nominal range. WAGO's impressive Eco2 Power Supply is an economical, reliable, robust power supply in control cabinets for 24VDC mechanical engineering applications.



2687-2142



2687-2144

Features

- Optical status indication
- Suitable for both parallel and series operation
- Connection technology with push-in termination and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
- 2-year warranty



| Switching Power Supplies WAGO Eco2 Series | | | | | | |
|---|----------|-----------------------------------|------------------------|----------------------|-------------------|---------------------|
| Part Number | Price | Output Voltage Range (Adjustable) | Nominal Output Current | Nominal Output Power | Weight grams [oz] | Drawing Link |
| Single Phase Input | | | | | | |
| 2687-2142 | \$62.00 | 22-29 VDC | 1.25 A | 30W | 160 [5.64] | PDF |
| 2687-2144 | \$108.00 | 23-28 VDC | 5A | 120W | 620 [21.86] | PDF |
| 2687-2146 | \$182.00 | 23-28 VDC | 10A | 240W | 800 [28.21] | PDF |

| Input Specifications WAGO Eco2 Series | | | | | | | | |
|---------------------------------------|-----------------|---------------|-----------------|------------------------------------|-------------------|-----------------------------------|-------------------|---------------------------|
| Part Number | Nominal Voltage | Voltage Range | Frequency Range | Input Current | Inrush Current | Mains Failure Hold-Up Time | Efficiency [Typ.] | Circuit Breaker [Minimum] |
| 2687-2142 | 100-240 VAC | 90-264 VAC | 47-63 Hz | ≤0.3 @ 230VAC ≤0.6 A @ 100VAC | ≤10A [after 1ms] | ≥120ms (230VAC) ≥15ms (110VAC) | 85%-90% | C Curve 15A |
| 2687-2144 | | | | ≤0.8 A @ 230VAC ≤1.5 A @ 100VAC | ≤ 20A [after 1ms] | ≥20ms (230VAC) | 85%-90% | |
| 2687-2146 | | | | ≤1.1 A @ 230VAC ≤2.7 A @100VAC | ≤25A [after 1ms] | ≥25ms (230VAC) | 90.1% and above | |

| Output Specifications WAGO Eco2 Series | | | | | |
|--|----------------|--------------------------|----------------------------------|--|------------------------------|
| Part Number | Output Voltage | Voltage Range Adjustable | Residual Ripple | Overload Behavior | MTBF (@ 25°C) |
| 2687-2142 | 24 VDC (SELV) | 22-29 VDC | ≤30mV (peak-to-peak, at 230 VAC) | Constant power up to 125%; shutdown and automatic restart in the event of a short circuit | > 1,000,000h [per IEC 61709] |
| 2687-2144 | | 23-28 VDC | ≤75mV (peak-to-peak) | | |
| 2687-2146 | | 23-28 VDC | | Constant current up to 105 to 110%; shutdown and automatic restart in the event of a short circuit | |



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| General Specifications WAGO Eco2 Series | | | | |
|---|---------------------|--|---|-----------|
| Part Number | | 2687-2142 | 2687-2144 | 2687-2146 |
| Temperature | | Operating: -25 to 70°C [-13 to 158°F] Storage: -40 to 85°C [-40 to 185°F] | | |
| Humidity | | 5 to 96% [no condensation permissible] | | |
| Isolation | Primary - Secondary | 3510VAC | | |
| | Primary - Ground | — | 2200VAC | |
| | Secondary - Ground | — | DC, 0.5 kV | |
| | Secondary Signal | — | DC, 0.5 kV | |
| Short Circuit Protection | | Yes | | |
| Parallel Operation | | Yes | | |
| Status Indicators | | 1 x LED DC OK (green) | Optical status indication (overload) Optical status indication (DC OK) Digital signal output (DO) | |
| Vibration (according to IEC 60068-2-6) | | 5Hz ≤ f ≤ 8.4 Hz: 3.5 mm, 8.4 Hz ≤ f ≤ 150Hz: 1g | | |
| Shock (according to IEC 60068-2-27) | | 15g, 11ms, 3 shocks per axis (18 shocks in total) | | |
| Protection Rating | | IP20 | | |
| Mounting | | 35mm DIN rail | | |
| Housing Material | | Plastic | Metal | |
| Connection | | Push-in Cage Clamp® | | |
| Solid or Fine Conductor | | 0.2 to 4mm² / 24 - 12AWG | | |
| Ferrule Size | | 0.25 to 2.5 mm² | | |
| Agency Approval | | CE, UKCA, cULus File E255817 | | |

To obtain the most current agency approval information, see the Agency Approval Compliance & Certifications Checklist section on the specific part number's web page.

Wiring Diagrams

