WAGO

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, the Eco2 saves space. With a high efficiency over 88% and the associated reduction in heat generated, the metal housing models 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 24 VDC mechanical engineering applications.

Features

- Optical status indication
- Suitable for either parallel or series operation
- Push-in Cage Clamp® technology and tool-free lever operation
- Electrically isolated output voltage (SELV/PELV) per EN 61010/UL 61010
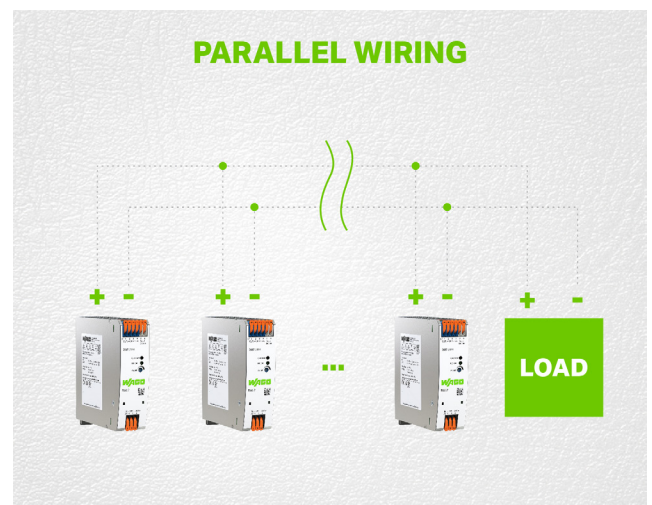- Rated for UL Hazardous Locations
- 2-year warranty

2687-2142

2687-2144

Switching Power Supplies

Part Number	Price	Output Voltage Range (Adjustable)	Nominal Input	Output (Adjustable)	Efficiency	MTBF (@ 25°C)	Circuit Breaker	Weight grams [oz]	Drawing Link
Single Phase Input									
2687-2142	$62.00	22-29 VDC	100-240 VAC	24 VDC @ 1.25A/30W	88% @110 VAC	> 1,000,000h [per IEC 61709]	C Curve 15A	160 [5.64]	PDF
2687-2143	$86.00	22-29 VDC	120/240 VAC	24 VDC @ 2.5A/60W	90.5% @115 VAC			250 [8.81]	PDF
2687-2144	$108.00	23-28 VDC	100-240 VAC	24 VDC @ 5A/120W	90% @110 VAC			620 [21.86]	PDF
2687-2146	$182.00	23-28 VDC	100-240 VAC	24 VDC @ 10A/240W	93% @110 VAC			800 [28.21]	PDF

Wiring Diagrams

SERIAL WIRING

LOAD

PARALLEL WIRING

LOAD

WAGO

Switching Power Supplies
Eco2 Series

General Specifications				
Part Number	**2687-2142**	**2687-2143**	**2687-2144**	**2687-2146**
Voltage Range	90-264 VAC			
Frequency Range	47-63 Hz			
Input Current	≤ 0.3A @ 230 VAC ≤ 0.6A @ 100 VAC	≤ 0.5A @ 230 VAC ≤ 1.1A @100 VAC	≤ 0.8A @ 230 VAC ≤ 1.5A @ 100 VAC	≤ 1.1A @ 230 VAC ≤ 2.7A @100 VAC
Inrush Current	≤ 10A [after 1ms]	≤ 20A [after 1ms]	≤ 20A [after 1ms]	≤ 25A [after 1ms]
Mains Failure Hold-Up Time	≥ 120ms (230 VAC) ≥ 15ms (110 VAC)	≥ 130ms (230 VAC) ≥ 3ms (110 VAC)	≥ 20ms (230 VAC)	≥ 25ms (230 VAC)
Residual Ripple	≤ 30mV (peak-to-peak @ 230 VAC)	≤ 20mV (peak-to-peak @ 230 VAC)	≤ 75mV (peak-to-peak)	
Overload Behavior	Constant power up to 125%; shutdown and automatic restart in the event of a short circuit	Constant power up to 130 %; shutdown and automatic restart in the event of a short circuit	Constant power up to 125%; shutdown and automatic restart in the event of a short circuit	Constant current up to 105 to 110%; shutdown and automatic restart in the event of a short circuit
Isolation — **Primary - Secondary**	3510 VAC			
Isolation — **Primary - Ground**	—		2200 VAC	
Isolation — **Secondary - Ground**	—		DC, 0.5 kV	
Isolation — **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)			
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]			
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, UL Hazardous E198726			

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