

## 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	e Output Voltage Range Nominal Output (Adjustable) 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]	<u>PDF</u>	
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]	<u>PDF</u>	

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				≤0.3 @ 230VAC ≤0.6 A @ 100VAC	≤10A [after 1ms]	≥120ms (230VAC) ≥15ms (110VAC)	85%-90%	
<u>2687-2144</u>	100-240 VAC	90-264 VAC	47-63 Hz	≤0.8 A @ 230VAC ≤1.5 A @ 100VAC	≤ 20A [after 1ms]	≥20ms (230VAC)	85%-90%	C Curve 15A
<u>2687-2146</u>				≤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		22-29 VDC	≤30mV (peak-to-peak, at 230 VAC)	Constant power up to 125%; shutdown and automatic restart in the	> 1,000,000h [per IEC 61709]		
<u>2687-2144</u>	24 VDC (SELV)	23-28 VDC		event of a short circuit			
<u>2687-2146</u>	(0227)	23-28 VDC ≤75mV (peak-to-peak)	≤75mV (peak-to-peak)	Constant current up to 105 to 110%; shutdown and automatic restart in the event of a short circuit			



# **Switching Power Supplies Eco2 Series**

General Specifications WAGO Eco2 Series						
Part Number		2687-2142	<u> 2687-2144</u>	<u> 2687-2146</u>		
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]				
	Primary - Secondary	3510VAC				
Isolation	Primary - Ground	_	2200VAC			
Isolation	Secondary - Ground	_	DC, 0.5 kV			
	Secondary Signal	_	DC, (	).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 6	0068-2-6)	5Hz ≤ f ≤ 8.4 Hz: 3.5 mm, 8.4 Hz ≤ f ≤ 150Hz: 1g				
Shock (according to IEC 600)	68-2-27)	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 mm <sup>2</sup>				
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**



