



Base Series Switching Power Supplies 1-Phase



2587-2146

Overview

The WAGO 1-Phase Switching Power Supplies - Base Series deliver a regulated 24 VDC output in 120W, 240W, and 480W models. They accept a wide input voltage range of 90–264 VAC, making them compatible with power systems worldwide. All three models mount on a standard 35mm DIN rail and connect via push-in termination for fast, tool-free wiring. Housed in an enclosed metal case, these power supplies are rated for operating temperatures from -30 to +70 °C and are well-suited for industrial and building automation applications.

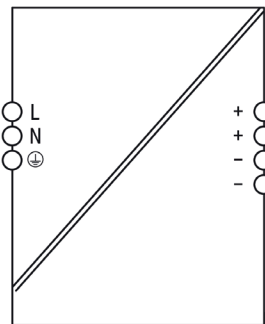
Features

- Visual status indicator
- Suitable for parallel and series operation
- Self-cooling via natural convection
- Connection technology with push-in termination
- Electrically isolated output voltage (SELV) per EN 62368-1/UL 61010-1
- 35mm DIN rail mount
- 2-year warranty



Switching Power Supplies Selection Chart										
Part Number	Price	Output	Output Voltage Adjustment Range	Input Voltage Range	Nominal Input Voltage	Efficiency (Typ.)	Operating Temperature	Weight g [lb]	Dimensions H x W x D mm [in]	Drawing Link
2587-2144	\$43.00	24 VDC @ 5A/120W (adjustable)	23.5–28 VDC	90–264 VAC	120 VAC 240 VAC	88% @ 115 VAC	-30 to +70 °C [-22 to +158 °F]	470 [1.04]	125 x 35 x 110 [4.92 x 1.38 x 4.33]	PDF
2587-2146	\$69.00	24 VDC @ 10A/240W (adjustable)				91% @ 115 VAC		752 [1.66]	125 x 52 x 117 [4.92 x 2.05 x 4.61]	PDF
2587-2147	\$124.00	24 VDC @ 20A/480W (adjustable)				94% @ 115 VAC		1149 [2.53]	125 x 56 x 138 [4.92 x 2.20 x 5.43]	PDF

Wiring Diagram





Base Series Switching Power Supplies 1-Phase

Specifications			
Models	2587-2144	2587-2146	2587-2147
Nominal Input Voltage $U_{i nom}$	120 VAC 240 VAC		
Input Voltage Range	90–264 VAC (Derating -1% for <100 VAC)		
Nominal Mains Frequency Range	50/60 Hz		
Input Current i	≤4A	≤3.5A	≤7A
Inrush Current	≤35A (230 VAC / 25 °C)	≤15A (230 VAC / 25 °C)	≤20A (230 VAC / 25 °C)
Power Factor Correction (PFC)	Passive	Active	
Mains Failure Hold-up Time	≥50 ms (230 VAC)	≥22 ms (230 VAC)	≥16 ms (230 VAC)
Nominal Output Voltage $U_{o nom}$	24 VDC (SELV)		
Output Voltage Range	23.5–28 VDC (adjustable)		
Default Setting	24 VDC		
Nominal Output Current $I_{o nom}$	5A (24 VDC)	10A (24 VDC)	20A
Nominal Output Power	120W	240W	480W
Deviation	≤1%		
Residual Ripple	≤100 mV (peak-to-peak)		
Overload Behavior	Shutdown and automatic restart in the event of a short circuit		
Signaling	Optical status indication (DC OK)		
Power Loss P_i	≤5W (standby); ≤16.8W (full load)	≤5W (230 VAC; no load) ≤24.6W (230 VAC; nominal load)	≤5W (no load); ≤32.5W (full load)
MTBF	> 1,000,000h (at 25 °C; per IEC 61709; SN 29500)		
Operating Temperature	-30 to +70 °C [-22 to +158 °F]		
Storage Temperature	-40 to +85 °C [-40 to +185 °F]		
Relative Humidity	5–96% (no condensation permissible)		
Altitude During Operation	5,000m [16,400ft]		
Short Circuit Protection	Yes		
Vibration	2–13.2 Hz, Displacement 1.0mm (Peak value) 2h/axis, 13.2–100 Hz, constant acceleration 1g Ref. EN 60068-2-6		
Shock	Acceleration 30g, and 6 times per X,Y,Z direction (1 set)		
Protection Rating	IP20		
Mounting	35mm DIN rail		
Connection	Push-in Cage clamp®		
Solid and Fine-stranded Conductor	0.2–6 mm ² [24–10 AWG]		0.2–10 mm ² [24–8 AWG]
Fine Stranded with Insulated or Uninsulated Ferrule	0.25–2.5 mm ²		0.25–6 mm ²
Strip Length	10–12mm [0.39–0.47in]		13–15mm [0.51–0.59in]
Housing Material	Metal (enclosed)		
Agency Approval *	cULus File E255817, CE		

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