



Powering Business Worldwide

1000 Eaton Boulevard  
Cleveland, OH 44122  
United States

## Eaton 850VA 510W 120V AC DIN Rail Industrial UPS - Hardwire Input/Output

MODEL NUMBER: DIN850AC



DIN rail UPS battery backup offers network-grade power protection for industrial and machine control installations.

### Features

#### Flexible Power Protection for Smart Industrial Applications

The DIN850AC standby UPS system with hardwire AC input/output delivers reliable power and battery backup for computing, networking, control and storage equipment in factories, warehouses, edge computing locations and automated manufacturing and fabrication facilities. The rugged compact housing withstands demanding conditions and integrates seamlessly and securely into electrical enclosures in any non-traditional IT environment.

#### Ideal for Factory Floors and Extreme Temperatures

Get full use of the DIN850AC's power capacity because there is no derating based on its operating temperature range of 0°C (32°F) to 50°C (122°F), which expands the number of locations in which it can be used. Built to fit into small spaces, the DIN850AC is a UL 508 recognized component for use in industrial panels. Its pre-installed clamp enables quick mounting to a 35 mm DIN rail. Its fanless design reduces noise and increases reliability.

#### Reliable Battery Backup Keeps You Operational Through Power Outages

Power outages not only drain productivity from the factory floor, but they also damage expensive equipment. The DIN850AC protects productivity by providing enough runtime to maintain operation during a brief power outage and protects equipment by allowing it to complete an operation during an extended outage. It also prevents brownouts, overvoltages, surges and line noise from damaging equipment that could destroy data and contribute to costly downtime.

#### Convenient Automatic Restart

The DIN850AC automatically restarts when AC power is restored after an outage, eliminating the need for a costly site visit.

#### Stay in Control of Your Operation

LEDs on the front panel confirm normal operation and indicate alarm or fault status. Remote on/off and a battery indicator mode can help you avoid maintenance surprises. The DIN850AC is compatible with PowerAlert® Office software for UPS monitoring and control via USB connection.

#### Easy Preventative Maintenance and Initial Troubleshooting

The DIN850AC's self-test capability and user-replaceable internal battery can extend the life of the UPS

### Highlights

- Recommended for industrial locations where temperatures range within 0°C and 50°C
- Protects equipment against blackouts, brownouts, overvoltages, surges and line noise
- Keeps power running during brief outages to allow time for safe system shutdown
- Restarts automatically when power is restored, eliminating a costly site visit
- Built-in clamp mounts easily to a "top hat" 35mm DIN rail with no mounting screws or brackets required

### Package Includes

- DIN850AC 850VA 510W 120V DIN Rail Industrial UPS
- USB communication cable
- Safety card
- Owner's manual



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and minimize disruption to operations. A resettable circuit breaker helps prevent dangerous system overloads.

## Specifications

| OVERVIEW                                 |                                                  |
|------------------------------------------|--------------------------------------------------|
| UPC Code                                 | 037332274922                                     |
| UPS Type                                 | Standby                                          |
| INPUT                                    |                                                  |
| Rated input current (Maximum Load)       | 10A                                              |
| Nominal Input Voltage(s) Supported       | 120V AC                                          |
| UPS Input Connection Type                | Hardwire                                         |
| UPS Input Connection Description         | Recommended 14 AWG 194°F(90°C) rated copper wire |
| Input Circuit Breakers                   | 10A                                              |
| Recommended Electrical Service           | 15A 120V                                         |
| Input Phase                              | Single-Phase                                     |
| OUTPUT                                   |                                                  |
| Output Capacity (VA)                     | 850                                              |
| Output Capacity (kVA)                    | 0.85                                             |
| Output Capacity (Watts)                  | 510                                              |
| Output Capacity (kW)                     | 0.51                                             |
| Power Factor                             | 0.6                                              |
| Nominal Voltage Details                  | 120v nominal output in battery mode              |
| Frequency Compatibility                  | 50 / 60 Hz                                       |
| Frequency Compatibility Details          | 50 or 60Hz +/- 10% (Auto-sensing)                |
| Output Voltage Regulation (Battery Mode) | +/- 10%                                          |
| Output AC Waveform (AC Mode)             | Sine wave                                        |
| Output AC Waveform (Battery Mode)        | PWM sine wave                                    |
| Nominal Output Voltage(s) Supported      | 120V                                             |
| Output Receptacles                       | (1) Hardwire                                     |
| BATTERY                                  |                                                  |
| Battery Type                             | Valve Regulated Lead Acid (VRLA)                 |



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|                                              |                                                                                                                                                                                                                                                                               |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Runtime Full Load (min.)                     | 2 min. (510W)                                                                                                                                                                                                                                                                 |
| Runtime Half Load (min.)                     | 7 min. (255W)                                                                                                                                                                                                                                                                 |
| Expandable Runtime                           | No                                                                                                                                                                                                                                                                            |
| DC System Voltage (VDC)                      | 12                                                                                                                                                                                                                                                                            |
| Battery Recharge Rate (Included Batteries)   | 0.7A Maximum; Less than 8 hours from 10% to 90%                                                                                                                                                                                                                               |
| Battery Access                               | Top-mounted battery access panel                                                                                                                                                                                                                                              |
| Internal UPS Replacement Battery Cartridge   | RBC12V9ET                                                                                                                                                                                                                                                                     |
| <b>USER INTERFACE, ALERTS &amp; CONTROLS</b> |                                                                                                                                                                                                                                                                               |
| Switches                                     | Power ON/OFF/TEST - Momentary push button                                                                                                                                                                                                                                     |
| Alarm Cancel Operation                       | Press and hold On/Off/Test button for 1 second                                                                                                                                                                                                                                |
| Audible Alarm                                | Yes                                                                                                                                                                                                                                                                           |
| LED Indicators                               | ALARM - RED - Flashes when the battery needs to be recharged and tested. SOLID RED when the unit is subjected to an overload condition. YELLOW - ON SOLID when the UPS is supplying battery power to the loads. GREEN - ON SOLID GREEN when the line input voltage is normal. |
| <b>SURGE / NOISE SUPPRESSION</b>             |                                                                                                                                                                                                                                                                               |
| EMI / RFI AC Noise Suppression               | Yes                                                                                                                                                                                                                                                                           |
| AC Suppression Joule Rating                  | 588                                                                                                                                                                                                                                                                           |
| <b>PHYSICAL</b>                              |                                                                                                                                                                                                                                                                               |
| Primary Form Factor                          | DIN-Rail                                                                                                                                                                                                                                                                      |
| Cooling Method                               | Convection                                                                                                                                                                                                                                                                    |
| Shipping Dimensions (hwd / in.)              | 15.87 x 7.95 x 7.72                                                                                                                                                                                                                                                           |
| Shipping Weight (kg)                         | 6.00                                                                                                                                                                                                                                                                          |
| UPS Housing Material                         | Steel                                                                                                                                                                                                                                                                         |
| Unit Dimensions (hwd / in.)                  | 5.220 x 12.280 x 5.500                                                                                                                                                                                                                                                        |
| Unit Weight (lbs.)                           | 12.125                                                                                                                                                                                                                                                                        |
| Unit Weight (kg)                             | 5.50                                                                                                                                                                                                                                                                          |
| <b>ENVIRONMENTAL</b>                         |                                                                                                                                                                                                                                                                               |
| Operating Temperature Range                  | 32° to 122°F (0° to 50°C)                                                                                                                                                                                                                                                     |
| Storage Temperature Range                    | 5° to 122°F (-15° to 50°C)                                                                                                                                                                                                                                                    |
| Relative Humidity                            | 0% to 95%, Non-Condensing                                                                                                                                                                                                                                                     |
| AC Mode BTU / Hr. (Full Load)                | 52.169                                                                                                                                                                                                                                                                        |
| AC Mode Efficiency Rating (100% Load)        | 97%                                                                                                                                                                                                                                                                           |



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|-------------------------------------------------------------|---------------------------------------------------------------------------------|
| Operating Elevation (ft.)                                   | 9843 ft. (3000 m) above sea level                                               |
| Audible Noise                                               | 40 dBA at 1 meter                                                               |
| <b>COMMUNICATIONS</b>                                       |                                                                                 |
| PowerAlert Software                                         | PowerAlert Office                                                               |
| Communications Cable                                        | USB 2.0 Cable                                                                   |
| Network Management Card Description                         | Network management not supported                                                |
| Communications Interface                                    | (1) USB (HID enabled)                                                           |
| Emergency Power Off (EPO)/Remote On-Off (ROO)               | Yes                                                                             |
| <b>LINE / BATTERY TRANSFER</b>                              |                                                                                 |
| Transfer Time                                               | <8ms typical, 10ms max                                                          |
| Low Voltage Transfer to Battery Power (Setpoint)            | 87V                                                                             |
| High Voltage Transfer to Battery Power (Setpoint)           | 144V                                                                            |
| <b>FEATURES &amp; SPECIFICATIONS</b>                        |                                                                                 |
| Cold Start (Startup in Battery Mode During a Power Failure) | Cold Start operation supported                                                  |
| High Availability UPS Features                              | Surge/noise protection                                                          |
| Green Energy-Saving Features                                | Greater than 95% efficiency - GREEN UPS; High efficiency economy mode operation |
| <b>STANDARDS &amp; COMPLIANCE</b>                           |                                                                                 |
| Product Certifications                                      | CAN/CSA-C22.2 No. 107.3 (Canada); CSA (Canada); ICES (Canada); UL 1778          |
| Product Compliance                                          | FCC Part 15 Class B (USA); RoHS                                                 |
| <b>WARRANTY &amp; SUPPORT</b>                               |                                                                                 |
| Product Warranty Period (Worldwide)                         | 2-year limited warranty                                                         |



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