

# PROVIDING THE RIGHT DIN RAIL POWER SUPPLY FOR YOUR APPLICATION NEEDS



SolaHD DIN RAIL POWER SUPPLY SOLUTIONS

SOLA<sup>HD</sup>

  
**EMERSON**<sup>TM</sup>

# CHOOSE THE PRODUCT YOU WANT WITH THE FEATURES YOU NEED.

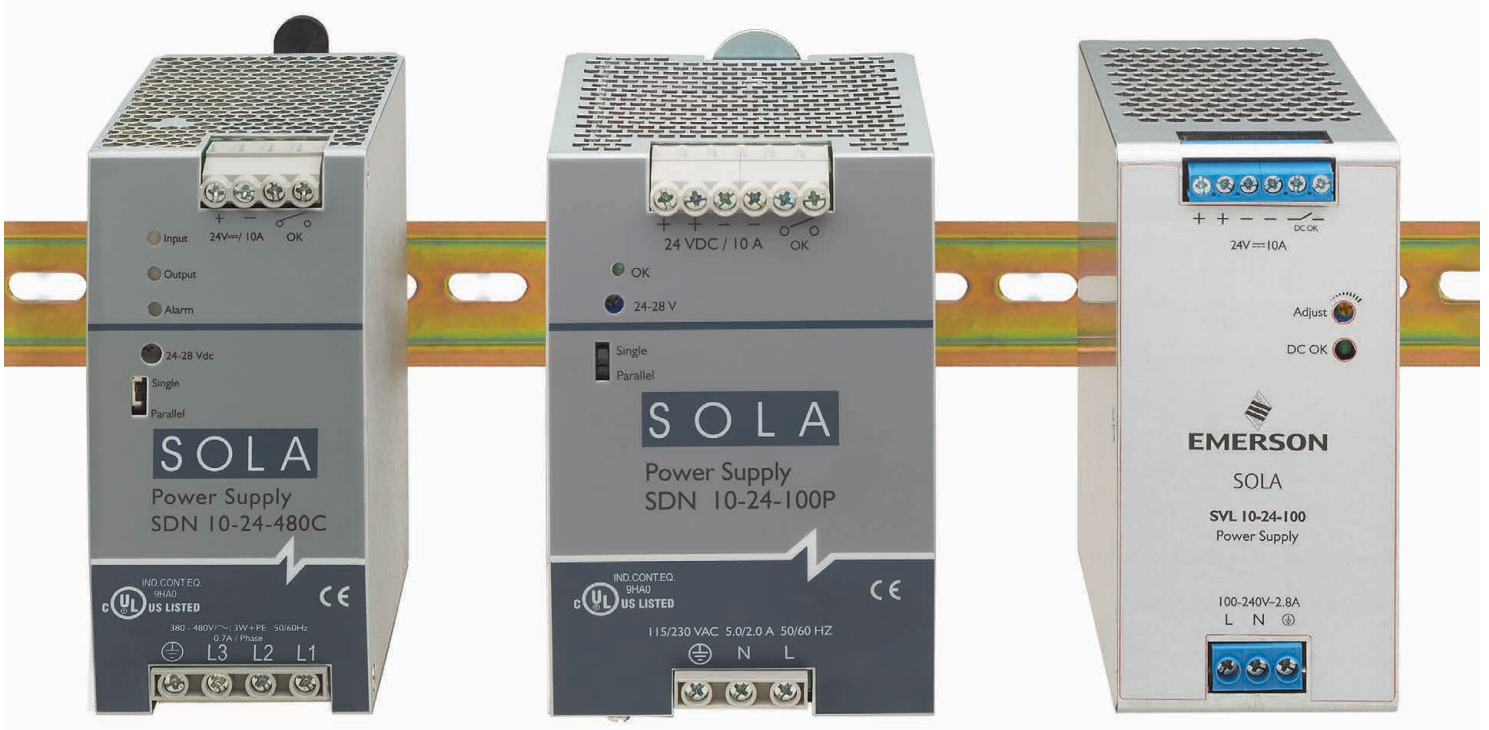


SolaHD offers a complete line of DIN rail power supplies, with choices tailored to every need from high volume deployment in controlled environments to specialized applications in harsh and hazardous locations.

We understand that machine availability is a fundamental business requirement. In any application or setting, these DC power supplies provide industry leading power quality and reliability to keep your processes productive and profitable.

Whatever your needs for performance, efficiency and operating environment, you have the right choice of power supplies from the total power quality leader: SolaHD.

# THREE TIERS TO CHOOSE FROM.



## PERFORMANCE: SDN-C SERIES

These DIN rail power supplies offer extreme reliability and efficiency, easy troubleshooting and our most resilient design for use in harsh environments, extreme temperatures and hazardous locations.

## CORE: SDN-P & SDP SERIES

Choose these industrial grade power supplies when performance counts in environments subject to rugged conditions, wide temperature ranges and power quality issues.

## ESSENTIAL: SVL SERIES

When your equipment is installed in a controlled environment, these power supplies convert AC to DC power in a compact footprint.



# SDN-C: HIGHEST PERFORMANCE FOR EXTREME APPLICATIONS.



These next generation power supplies offer the highest efficiency in a compact size, providing up to 960 Watts of output power in both single and three phase models. They are built tough and reliable for extreme applications, with ATEX/IECEx certified models available for use in Class I, Division 2 and Class I, Zone 2 hazardous locations.

## HIGHEST EFFICIENCY

### Lower energy consumption.

Efficient design with active power factor correction that reduces input current.

**Lower cooling costs.** No input inductor and no need for additional cooling fans in the panel.

**No derating.** Operates efficiently in temperatures from  $-40^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ .

## EASY TO USE

**Simple installation.** Easy screw clamp connections; patented no tools required DIN rail clip for quick mounting and removal.

**Universal input voltage with sag immunity.** Single phase models accept 85–264 Vac; three phase models accept 320–540 Vac at 50/60 Hz.

**Eight visual diagnostics at a glance.**

## GREATEST RELIABILITY

**PowerBoost™.** Our exclusive technology handles high inrush loads without voltage dips.

**Reduced parts count.** Fewer components for lower failure rates compared to more complex designs.

**Less heat.** Due to higher efficiency, the SDN-C Series is less prone to damaging heat buildup.

**Smarter component layout.** Heat sensitive components are placed near cool air intakes and away from heat producing components.

**Warranty.** SDN-C Series is five years.

Visual diagnostics: multicolored LEDs enable quick, confident troubleshooting of status conditions.



Indicator	Normal	AC Power Loss	AC Input Low	No DC	High Load	Overload	Hot	Too Hot
Input	●	○	●	●	●	●	●	●
Output	●	○	●	○	●	●	●	○
Alarm	○	○	○	●	●	●	●	●

# SDN-P & SDP: CORE PERFORMANCE FOR INDUSTRIAL PROCESSES.



The SDN-P Series offers single phase models with options from 12 to 48 Vdc at 16 Amps or less. The SDP Low Power Series provides single phase power for applications from 5 to 48 Vdc at 5 Amps or less. Easy to use, efficient and durable, these power supplies are the standard choice for the widest range of industrial applications.

## EFFICIENT

### **Power factor correction.**

Reduces harmonic emissions that can waste energy and affect power quality.

**Low losses.** Efficiencies greater than 80–90% depending on model.

**Adjustable voltage.** Meet precise application needs while compensating for voltage drop in long wire runs.

## EASY TO USE

**Simple installation.** Easy screw clamp connections; patented no tools required DIN rail clip for quick mounting and removal.

**Universal input voltage.** No additional transformer required.

**LED diagnostics.** Basic status information at a glance.

## RELIABLE

**Rugged case and DIN connector.** Built to withstand shock and vibration.

**Wide temperature range.** Operates from –10°C to +60°C without derating.

**Trouble free performance.** Short circuit, overvoltage and overtemperature protection; powers high inrush loads without shutdown or foldback.

**Warranty.** SDN-P Series is five years. SDP Low Power Series is three years.

# SVL: ESSENTIAL PERFORMANCE FOR CONTROLLED ENVIRONMENTS.



The SVL Series provides the essential features needed for high volume applications where the power supply will be installed in a controlled environment. Typical examples include ATMs, vending machines, building automation, industrial machinery, life sciences and other applications protected from excess shock, vibration or temperature extremes.

## EASY DESIGN INTEGRATION

**High power density in a small frame.** Compact footprint and light weight to fit your machine.

**Universal input voltage.** Adapts to locally available power.

## QUICK INSTALLATION

**Simple to wire.** Easy screw clamp connections.

**Trouble free mounting.** Clips on DIN rail for easy installation.

## PRACTICAL OPERATION

**Reliable power.** Overload, over voltage and short circuit protection.

**Power factor correction.** Reduces harmonic emissions that can waste energy and affect power quality.

**Visual verification.** LED indicator for DC status and blinking over current protection.

**For use in controlled environments.**

**Warranty.** SVL Series is two years.

# CHOOSE THE RIGHT FEATURES FOR YOUR APPLICATION

	PERFORMANCE SDN-C Series	CORE		ESSENTIAL SVL Series
		SDN-P Series	SDP Series	
Power Range	120-960 W Single Phase 120-960 W Three Phase	60-240 W Single Phase	15-100 W Single Phase	15-480 W Single Phase
<b>INPUT</b>				
Input Voltage Range	85-264 Vac; 90-375 Vdc 320-540 Vac; 450-760 Vdc	85-132/176-264 Vac; 210-375 Vdc	80-264 Vac, 90-375 Vdc	85-264 Vac; 120-375 Vdc
Efficiency	> 90%	> 88% typical	> 80%	> 79% typical
Power Factor Correction	Active	Passive	Passive	Active on select models
<b>OUTPUT</b>				
Nominal Voltage Range	24 V	12 - 48 V	5 - 48 V	5 - 48 V
Ripple / Noise (25°C)	< 50 mVpp	< 50 mVpp	< 50 mVpp	< 100 mVp-p
Nominal Current Range	5 - 40 A	2.5 - 10 A	0.6 - 5 A	1.25 - 20 A
Regulation	< 0.5% line and load	< ±2% overall line and load	< 2% line and load	< 0.5% Line and < 1% Load
PowerBoost	✓		✓	
<b>ENVIRONMENTAL DATA</b>				
Operating Temperature	-40°C to +70°C	-10°C to +60°C	-10°C to +60°C	-20°C to +70°C
Storage Temperature	-40°C to +85°C	-25°C to +85°C	-25°C to +85°C	-40°C to +85°C
Power Derating ①	Starts at +60°C	Starts at +60°C	Starts at +60°C	Starts at +50°C
<b>PROTECTIONS</b>				
Overvoltage Protection	Auto-recovery	Auto-recovery	Auto-recovery	Re-power to recover
Overload Protection	Auto-recovery	Auto-recovery	Auto-recovery	Auto-recovery
Short Circuit Protection	Auto-recovery	Auto-recovery	Auto-recovery	Auto-recovery
<b>RELIABILITY</b>				
MTBF	> 800 khrs per Telcordia	> 500 khrs to > 820 khrs per Telcordia	> 500 khrs per Telcordia	> 350 khrs to > 700k hrs per Telcordia
<b>GENERAL</b>				
LED Signals	8 visual diagnostics	DC OK LED	DC OK LED	Green DC OK LED, Blinking OCP
DC OK Relay Contact	✓	✓	✓	Available in select models
Warranty	5 year	5 year	3 year	2 year
<b>APPROVALS</b>				
IECEX	✓			
ATEX	✓			
Ex EAC	✓			
ABS Type Approval	✓			
CE, EMC & LV	✓	✓	✓	
Class I, Division 2, Haz. Loc.	✓	✓	✓	
UL 508	✓	✓	✓	✓
CSA C22.2 No. 107.1	✓	✓	✓	✓
UL 60950-1	✓	✓	✓	✓
CSA C22.2 60950-1	✓	✓	✓	✓

This table is an overview of the entire power supply offering. Individual model specifications may vary. For detailed information on individual models, please consult the SolaHD catalog.

① >120 Watt models measured at 230 Vac input and +25 °C ambient temperature.

**PERFORMANCE – CORE – ESSENTIAL:  
SOLAHD OFFERS THE IDEAL POWER SUPPLY FOR ANY APPLICATION.**



SolaHD is our premium line of power conversion and power quality products under Appleton Group, a business unit of Emerson. SolaHD offers industrial grade products that help increase machine availability and ensure data reliability while bringing greater flexibility to the design of your machines and production line. SolaHD products improve efficiency, productivity and longevity in the most demanding industrial environments.

Emerson brings integrated manufacturing solutions to diverse industries worldwide. Our comprehensive product line, extensive experience, world class engineering and global presence enable us to implement solutions that give our customers the competitive edge.

For over 150 years, our electrical product brands have been providing a rich tradition of long term, practical, high quality solutions with applications ranging from the construction and safe operation of petrochemical and process plants to providing quality power that precisely controls automotive robotic production.

Engineers, distributors, contractors, electricians and site maintenance professionals around the world trust Emerson Industrial Automation brands to make electrical installations safer, more productive and more reliable.

Appleton Group is organized into three focused businesses that provide distributors and end users expert knowledge and excellent service.

#### **ELECTRICAL CONSTRUCTION MATERIALS**

This group is made up of the Appleton and O-Z/Gedney brands, offering a broad range of electrical products including conduit and cable fittings, plugs and receptacles, enclosures and controls, conduit bodies and lighting for industrial and hazardous locations.

#### **POWER QUALITY SOLUTIONS**

The SolaHD brand offers the broadest power quality line, including uninterruptible power supplies, power conditioners, voltage regulators, shielded transformers, surge protection devices and power supplies.

#### **HEATING CABLE SYSTEMS**

This group is made up of the EasyHeat and Nelson brands, offering a broad range of electrical heating cable products for residential, commercial and industrial applications.

**SOLAHD®**



**EMERSON. CONSIDER IT SOLVED.™**