# Complete Range of Soft Start / Motor Control, Motor Protection & Control Solutions













# Want to start something?

- Global Acceptance
- Wide Range of Product
- Innovative Packaging
- Engineering Excellence
- Reliable Performance
- Friendly Support





# Soft Starters Since 1977

Solcon Industries is a global industry leader in low voltage and medium voltage soft start technology and has been manufacturing solid state soft starters for over 30 years. We are recognized throughout the world for our highly engineered solid state controls, protection products and world class service.

Solcon USA delivers this same high level of product, service and support to the North American market.



## A Record of Excellence

Customers choose Solcon for technical excellence and application reliability. Whether it's a marine, mining, oil & gas, water or industrial application we have the right solution for you. With a proven track record of over 150,000 installations worldwide, look to Solcon USA for a reliable and complete solution that best fits your needs.





# Global Acceptance & Support

Providing global reach with product, service and support available through strategic manufacturing and distribution locations in more than 75 countries around the world.

Solcon USA delivers product designed and tested to UL, cUL, ABS, and other industry compliance standards to meet the needs of our North American customers.





































# Wide Range of Product

From standard stock units to custom engineered systems, Solcon USA offers the advantage of being a reliable source for all your AC motor control needs. We carry an extensive stock of low voltage and medium voltage soft starters and related components, allowing for quick-ship of standard units or quick-build of products packaged to your specifications.

Solcon USA has made control panel/system integration a key focus of our business. And our integrated control solutions are built with the highest quality components and workmanship...it's what you can expect from Solcon USA.

### Medium Voltage Soft Starters

- 2.3KV 15KV
- HRVS-DN up to 30,000 HP
- MEGA starter up to 50MW
- Outdoor rated design
- Retrofit units

### Low Voltage Soft Starters

- 208 1200V, up to 3000A
- Heavy duty & standard duty
- Custom packaged solutions
- Marine / mine duty models

## **Full Voltage Controls**

- Low Voltage up to 600V
- Medium Voltage up to 15KV
- Package assemblies:
  ATL, Wye-Delta, 2-Speed,
  Part Winding, and Wound Rotor

### **Motor Protection**

 RTD monitors and motor protection relays

### **DC Injection Brakes**

• 10 - 390A, 230 - 690V

#### **SCR Power Controls**

- · Zero Voltage and Phase Angle
- Low Voltage and Medium Voltage

#### **AC Drives**

- Standard and custom enclosures
- Packaged solutions
- Up to 690V

## **Custom Line-ups**

- Low Voltage
- Medium Voltage
- Synchronous exciters
- UL 508 Panel Shop

Get in Control with Solcon USA

# Soft Starter Advantages at a Glance



- Eliminates high inrush current and damaging mechanical shock
- Soft, stepless acceleration and deceleration
- Built-in motor protection
- Solves system problems:
  - Eliminates water hammer and minimizes pressure surges when starting and stopping pumps
  - Prevents product breakage on conveyor systems
  - Makes it easier to start with generator sourced power and weak power grids
- Fully adjustable: current limit, pump control, dual adjust, controlled decel
- Ideal for pumps, fans, compressors, conveyors, bow thrusters,

# **Innovative Packaging**

Whether its a stand-alone class E2 type MV soft starter, metal-clad construction or a complete line up for starting and stopping multiple motors, look to Solcon USA for the best solutions for your application.

Combo starters, custom stainless steel packaged units, outdoor rated construction, packaged VFD/SSRV bypass systems... you name it, we can do it!



# **Retrofit Capabilities**



Pre-built Solcon turn-key Medium Voltage Soft Start retrofit kits can be installed on site with minimal downtime for the customer. So, if you are looking for a cost effective and reliable solution to a seemingly 'unfixable' problem, contact us! We have the solution!



# Medium Voltage Soft Starters

Product	Description	Current & Voltage Range
HRVS-DN	Digital, Heavy Duty	2300-15000V, up to 15MW
HRVS-DN MEGA	Digital, Heay Duty, High Power	2300 - 15000V, 15-48 MW





Outdoor



### **HRVS-DN**

The ideal solution for starting medium voltage motors. Standard class E2 starters or custom line-ups engineered to your specifications.



13.8kV, 300A

#### **MEGA Starter**

Big gets even bigger. The highest rated medium voltage soft starter available on the market today.

# Introducing the **DriveStart**



# **Low Voltage Soft Starters**

Product	Description	Current & Voltage Range	Bypass	Controlled Phases
RVS-DX	Digital, Standard Duty	8 - 170A, 220-600V	Internal	3-Phase
RVS-DXM	Digital, General Duty	210-1100A, 208 - 600V	Internal	3-Phase
RVS-DN	Digital, Heavy Duty	8 - 3000A, 230 - 1200V	External	3-Phase
RVS-AX	Analog	8 - 170A, 220-600V	Internal > 31 A	3-Phase
Solstart	Compact Analog	31-170A, 220 - 600V	Internal	2-Phase











#### **RVS-DX/DXM**

General duty soft starter. Compact digital soft starter with built-in bypass and protection. Provides excellent torque control for pumps and other standard duty load requirements.

#### **RVS-DN**

Heavy duty soft starter. Full featured digital soft starter solution for the most demanding applications. Also available:

**Marine or Crusher Duty** 

#### **RVS-AX** and Solstart

Simple to use analog soft starters. Cost effective, simple solutions for small and mid-size motors. Ideal replacement for wye delta and auto transformer starters.

#### The First of its Kind - IGBT based MV Soft Starter

The DriveStart is the ideal solution for applications that require low starting current and/or high starting torque but where speed or process control during operation is not needed. Ideal for large reciprocating compressors and other hard to start loads.

- 2.3kV to 6.6kV
- A cost-competitive alternative to MV VFDs
- Up to a 50% size reduction in footprint requirements
- Full torque at zero speed
- 100% nominal current up to 600 seconds
- Integrated bypass ensures reduction in energy and operational costs
- Minimized harmonics during run cycle
- Soft start / soft stop

### **Motor Protection**

Product	Description	Monitors
MPS-3000	Full motor protection for medium voltage or large low voltage motors	All three phase currents, voltages and up to 10 RTD inputs
TPR6-14	RTD relay	Accepts up to 14 PT100 RTD inputs or thermistor inputs
MIP	Motor insulation protection system	Monitors MV or large LV motors. Provides status indication (alarm and trip)





#### **Motor Protection**

Available as "stand alone units or built-in to the MV or LV packaged units.

# **DC Injection Brakes**



Product	Description	Current & Voltage Range
Solbrake	Controlled stopping of 3 phase motors	10-390A, 230-690V

Provides fast, smooth, frictionless braking of standard motors by injecting DC current into the motor windings. Adjustable braking torque based on the load and required stopping time.

Product	Description	Current & Voltage Range
TPS	Industrial power control for resistive and inductive loads	8-1500A, 220-1000V
MV-TPS	Medium voltage SCR power controller	up to 300A, 4160V

#### **TPS**

Power controls for inductive or resistive heating loads. Continuous and automatic temperature control while eliminating contactor switching and over/under heating.

#### **NEW! MV TPS**

Medium Voltage SCR power control provides precise temperature control of 4160V electric heaters for power generation, gas & oil and other industries.



## **SCR Power Controls**





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