SOLCON™ POWERED

MOTOR CONTROL IS OUR NATURE

PRODUCT CATALOG

PROFILE

Solcon Industries Ltd. is a dynamic high-tech Power Electronics Company that has been at the forefront of design, development and manufacturing of industrial electronic systems for over 30 years.

As a global industry leader in Low Voltage and Medium Voltage Soft Starter Technology, as well as Motor Protection, and associated products, we take pride in being The Soft Start Specialist, providing solutions for the toughest applications including the Mining, Marine and Oil & Gas Industries.

We utilize advanced technology with leading edge designs basd on continuous field research, test and development. Our design criterion allow us to offer the highest long-term product reliability available in the market today while providing future focused innovative solutions in quick response to the needs of our customers. This approach has allowed the company to maintain its position as a leader in the Soft Starter Industry.

Close cooperation with well known multi-national companies has been key to our success in specific market and product areas. These strong relationships have contributed greatly to Solcon's acceptance as a valued supplier.

Solcon is accredited with ISO 9001:2000. Our products are designed to meet international standards such as CE, UL, cUL, Ex, CCC and Gost-R. Lloyds, DNV, BV, ABS and other approvals are also available.

The Solcon manufacturing complex is dedicated to the development, production and marketing of Soft Starters and related control products in over 75 countries worldwide.

INDEX

WATER

OIL & GAS

INDUSTRY

MINING

MARINE

Product Approvals

MEDIUM VOLTAGE SOFT STARTERS

HRVS-DN

The HRVS-DN Soft Starter was developed to start motors in the most demanding applictions. Advance features such as enhanced motor protection, starting curves, unique voltage measurement and many years of field proven reliability makes the HRVS-DN the best choice for starting Medium Voltage Motors.

Solcon offers a wide range of Soft Starter Solutions

Solcon develops unique solutions for special applications such as Multi-Start, Redundancy Systems, and Marine Models.

Advanced Features

- Range 2300-15000V, Up to 48MW
- Heavy duty design up to 50°C ambient temperature
- Unique starting & stopping characteristics
- Advanced motor protection package
- User friendly, simple installation
- Enclosures IP31-65 and Ex
- Synchronous motor starting utilizing Solcon's unique module
- Innovative Low Voltage test modes
- Advanced Electronic Potential Transformer
- Unique fiber-optic firing system
- Each and every Soft Starter is partial discharge tested
- Communication: Modbus, Profibus, Devicenet, other by request
- Frequency auto tracking 45-65Hz

HRVS-DN (Standard Switchgear)

Control Panel

HRVS-DN Multi-Start Lineup

MEDIUM VOLTAGE SOFT STARTERS

HRVS-DN MEGA

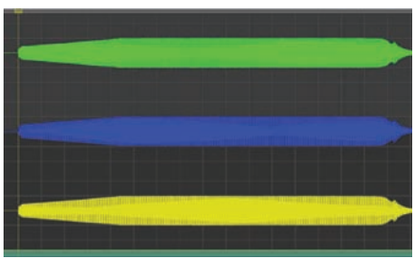
Solcon Industries is redefining the capabilities of Medium Voltage Soft Starter Solutions with units up to 48MW, the largest Electronic Medium Voltage Soft Starters in the world.

Applications

- Turbo blowers
- Sinter fans
- Centrifugal blowers
- Blast furnace blowers
- Wind-tunnel drive
- Gas compressors
- Turbo compressors
- Screw compressors
- Pipeline compressors
- Cryogenic compressors
- Centrifugal compressors
- Reciprocating compressors
- High pressure injection pumps
- SAG mills
- Ball mill systems

1800A, 10KV Mega Soft Starter

Solcon Medium Voltage Mega Soft Starter connected to an asynchronous air cooled 10kV 1627A Motor



Recording from one of the soft starts during commissioning

LOW VOLTAGE DIGITAL SOFT STARTERS

RVS-DN

The RVS-DN is a heavy duty, advanced, highly reliable Soft Starter. Designed to operate in the most severe applications such as Marine and Mining. It offers the widest range of Low Voltage Power, starting from 8A up to 3000A. The microprocessor based digital control has advanced features such as pump control, slow speed, electronic reversing and enhanced motor protection.

Advanced Features

- Range 8-3000A, 220-1200V (1200V up to 820A)
- Heavy duty
- Robust construction
- Highly advanced starting & stopping characteristics
- Comprehensive motor protection package
- User friendly set up and operation
- Line or Inside delta connection
- Ambient operating temperature: up to 60°C
- Motor insulation tester
- Communication: Modbus, Profibus, Devicenet
- Thermistor input
- Analog output
- Optional 24VDC output power supply
- Various marine approvals available

RVS-DN 2700A

RVS-DN 72A

RVS-DN 170A

LOW VOLTAGE DIGITAL SOFT STARTERS

RVS-DX/M

The RVS-DX/M is an advanced digital, highly reliable Soft Starter, providing advanced methods of reducing current and torque during motor starting.
The RVS-DX/M starts the motor by supplying a slowly increasing voltage, providing a soft start and a smooth acceleration, while drawing the minimum current necessary to start the motor. The RVS-DX/M is equipped with a digitally controlled internal bypass. The bypass closes at the end of the starting process, saving power.

Advanced Features

- Range 8-1100A, 220-600V (690V above 390A)
- Internal bypass for the entire range
- Pump control
- Large ,clear, two line, multiple languages digital display
- Advance starting & stopping characteristics
- Comprehensive motor protection package
- Communication: Modbus, Profibus, Devicenet
- Frequency auto tracking 45-65Hz
- User friendly set up and operation
- Line or Inside delta connection
- Analog output

RVS-DXM 310A

RVS-DX 105A

RVS-DX 31A

LOW VOLTAGE ANALOG SOFT STARTERS

RVS-AX

The RVS-AX is an easy to use electronic three phase control Soft Starter including an internal bypass. By supplying a slowly increasing voltage, it provides a soft start and a smooth linear acceleration, while drawing the minimum current necessary to start the motor. A soft stop feature can be enabled with the Ramp-Down Potentiometer. Upon a stop signal, the motor's voltage is slowly reduced to zero. The RVS-AX incorporates built-in motor protection.

Control voltage is not required to operate the RVS-AX.

Advanced Features

- Range 8-170A, 220-600V
- Built-in motor protection
- Built-in bypass (31-170A)
- Soft start & soft stop
- Current limit
- Start / Stop with voltage free contact

RVS-AX 58A RVS-AX 170A

SOLSTART

The Solstart is a miniature, two phase control, Electronic Soft Starter with an internal bypass. By supplying a slowly increasing voltage, the Solstart provides a smooth soft start linear acceleration, while drawing the minimum current necessary to start the motor. A soft stop feature can be enabled by adjusting the setting on the Ramp-Down Potentiometer. When soft stop is used, upon a stop signal, the motor's voltage is slowly reduced to zero.

Control voltage is not required to operate the Solstart.

Advanced Features

- Range 8-58A, 220-600V
- Built-in bypass
- Soft start & soft stop
- Start / Stop with voltage free contact
- End of acceleration contact
- Compact foot print
- DIN Rail mounting

Solstart 17A Solstart 58A

MEDIUM VOLTAGE INRUSH CURRENT LIMITER

HRVS-TX

The HRVS-TX is a unique solution for limiting inrush current to Medium Voltage Transformers. The specialized algorithm in the TSR-6 Protection Relay ensures the complete elimination of the large magnetizing inrush current and dynamic shock to the transformer windings and to the electrical network.

Advanced Features

- TSR-6 Control and Protection Relay
- Heavy duty design up to 60°C ambient temperature
- Advanced protection package
- Communication: Modbus, Profibus, Devicenet
- User friendly setup and operation
- Advanced Electronic Potential Transformer
- Fault indication for each individual phase
- Wide 40-70Hz range for fluctuating frequency systems

ELIMINATING INRUSH CURRENT

HRVS-TX

THYRISTOR POWER CONTROLLER

The TPS is an advanced Thyristor Power Controller (heater controller). It is a heavy duty, digital, Zero Crossing and Phase Control Power System. Available in a wide range: 8-1400A, 230-1200V, 50/60Hz. Unique three-phase power controller unit for all types of resistive/ inductive loads (power control for heating applications, etc.).

Advanced Features

- Range 8-1400A, 230-1000V
- Two phase or three phase control
- Zero crossing & phase control (field programmable)
- Comprehensive protection package
- Communication: Modbus, Profibus, Devicenet
- Line and Inside delta connection
- Synchronized mode (up to 10 units)

TPS 210A-1000V

DC INJECTION BRAKE

SOLBRAKE

The Solid State Motor Brake, provides fast and smooth braking of three phase squirrel cage motors by injecting a controlled DC current to the motor windings. This induces a stationary magnetic field, which exerts a braking torque on the rotor. An intelligent sensing system turns the brake off automatically when the motor comes to a full stop.

Advanced Features

- Range 8-820A, 208-690V
- Reduces stopping time of high inertia loads
- Adjustable braking time
- Auto stop - DC Injection stops when the motor stops
- DIN rail mounting
- Easy to install and simple to operate

Solbrake 17A

Solbrake 10A

PROTECTION RELAYS

A Range of advanced Protection Relays designed to complement the HRVS-DN Soft Starter package or as stand alone Protection Relays. The complete line combines built-in communication and programmable output relays.

MPS-3000

The MPS-3000 provides a comprehensive motor protection package. Monitoring three phase currents and voltage together with 10 RTD/Thermistor temperature inputs it provides an ideal solution for Medium and Large Low Voltage Motors.

MPS-3000

MPS-6

The MPS-6 is an advanced motor protection and control relay for protection, control, and supervision for Large Low Voltage Motors.

TPR-6

The TPR-6 Temperature Protection Relay is designed to protect electric motors, transformers and other systems from overheating. The TPR-6 has up to 14 temperature inputs that can be programmed to measure thermistors (PTC or NTC) and RTDs (Pt100).

MIP-6

The MIP-6 monitors the level of deterioration in motor insulation of Low and Ledium Voltage Motors. It measures the motors' insulation resistance and displays the actual and average highs and lows over a predefined period of time.

MPS-6

TPR-6

MIP-6

SOLCON™ POWERED

Soft Starters ▬ Motor Protection ▬ Power Controllers

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