



MEDIUM VOLTAGE
CONTROL AND PROTECTION

FOR MUCH MORE THAN A SMART START

MORE THAN A SMART START



WHO WE ARE

For over 40 years, Solcon Industries has been designing and developing a full range of Medium Voltage products. We aim to be at the forefront of innovation for better productivity and a safer working environment everywhere.

As Global Providers of Innovative Starting Solutions, we are committed to design products according to the strict guidelines set by international standards aimed at keeping personnel safe, in addition to the safe working environment of Solcon employees both in the factory and on installation sites.

Our experience has taught us to be proactive, allowing for innovation and the initiation of progressive products always ensuring the ongoing development of our customers for the health of motors and optimal production in even the toughest applications everywhere.



QUALITY DESIGNED FOR SAFETY

The Progear Switchgear is a fully type tested Metal Enclosed switchgear cabinet; offering numerous designs as standard modular design blocks.

Designed and Built according to IEC standards, Progear can be tailored according to Customer requirements. Cabinets can be fitted with a soft starter, protection apparatuses and control products in addition to our newly developed Connex, a holistic solution for diagnostics and maintenance of the complete system.



Modular Design

Option for Multi Motor Start, Control and Protection

Separated Internal Compartments

For Complete Isolation of Low and Medium Voltage Compartments

Safety Locks

Prevent Accidental Opening of the Cabinet Doors

Hinged Door Panels

Ideal for Easy Access to Wires and Apparatus

Full Range of Switch Options

According to Motor Requirements

Design Options

Metal Enclosed & Metal Clad

Classifications LSC1 / LSC2



**WE DESIGN
EQUIPMENT
WITH SAFETY
IN MIND**

**IEC 62271-200
TYPE TESTED & CERTIFIED**

INTERNAL ARC PROTECTION

**IP54 INGRESS PROTECTION RATING
ACCORDING TO IEC STANDARDS**

**SHOCK & VIBRATION PROOF
ACCORDING TO IEC STANDARDS**

**9 POINT SEISMIC CERTIFICATION
ACCORDING TO IEC STANDARDS**



A VERSITILE SOLUTION

Solcon's heavy duty Medium Voltage Soft Starter the **HRVS-DN**, is designed for all Medium Voltage AC induction motors in any application anywhere.

Selecting the right HRVS-DN soft starter for any application can prove to be surprisingly complex.

Information concerning the voltage and the motor power are readily available on the motor label, but calculating the current and start time, in addition to the number of starts / stops in an hour is not an easy feat. Solcon has developed the tools that can help you select the right one, backed by an experienced team of engineers to assist along the way.

**IEC662271-200
TYPE TESTED
& CERTIFIED**

- + IP54 – DUST & MOISTURE
- + SEISMIC
- + ARC FAULT
- + SHOCK & VIBRATION

IEC60068-2-6 ENVIRONMENT TEST

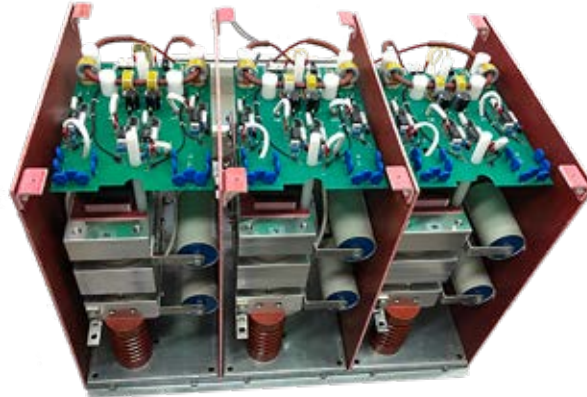
ACCORDING TO MARINE
REQUIREMENTS



HRVS - DN

Digital Heavy Duty, Medium Voltage Soft Starter

2.3 - 13.8kV, up to 48MW



Features include customizable starting curves, unique voltage and current measurements, as well as monitoring capabilities. The flexible design, enhanced motor protection and a superior global reputation make the HRVS-DN the starting solution of choice for Medium Voltage applications - even under the most demanding conditions.

FEATURES

- # Modular Design Control Panel
- # Large HMI Interface
- # Panel on cabinet door or remote site
- # Multi Language Support
- # Configurable starting & stopping characteristics
- # Enhanced motor protection package
- # User friendly setup and operation
- # Multi-soft start and multi-soft stop
- # Unique synchronous motor starting module
- # Pump and load control
- # Advanced Electronic Current & Potential Transformer
- # Partial Discharge test according to EN50178/625.1
- # Direct Power Factor Capacitor connection
- # Unique Pump start/stop curves including special torque curve
- # Optional - Modbus / Profibus / Devicenet / Anybus



MPS-3000

Motor Protection & Control Package

The MPS-3000 monitors 3-phase currents and voltage together with 10 RTD/Thermistor temperature inputs, and is designed with built in power measurement capabilities.

Remote parameter programming and control supervision is made easy with the MPS-3000 built in MODBUS communication system.



CERTIFIED
ANSI/IEE C37.2

FEATURES

- » Monitoring 10 temperature inputs
- » Power measurement
- » Statistical data of last 10 trips with time and date stamp
- » RTD bias for thermal overload
- » Multiple Thermal Overload curves
- » Too Many Starts pre-alarm,
- » Configurable to energize dedicated output relay
- » Ground Fault setting during start
- » MODBUS communication
- » Programmable discrete inputs/output
- » 4 programmable analog outputs
- » 4 programmable analog inputs
- » Capture and display : - min and max RMS,
 - average 3-phase current
 - one voltage
 - min and max frequency

MIP-6

Motor Insulation Protection

The MIP-6 is vital for the monitoring of the insulation levels of motors. This relay measures the motor's insulation resistance and displays the average highs and lows over a predefined period of time.

FEATURES

- » Monitors insulation deterioration
- » Display - present and average insulation resistance
- » Monitoring while motors are de-energized
- » Programmable parameters Microprocessor based technology
- » Alarm / Trip Setpoint in the range of 0.1 to 60 Mega Ohms
- » Utilizes up to 48 VDC test voltage
- » Illuminated LCD display
- » Six keys for easy programming
- » Three LEDs for easy status indication
- » Deterioration monitoring by storing history with time stamp
- » Unauthorized parameter modification prevention
- » Four C/O 8 Amp., 250V programmable signaling relays
- » Analog 0/4-20mA output for remote reading
- » Modbus communication
- » Control Voltage: 85-230VDC/AC (50/60Hz)
- » Operating Temperature Range 0°C to +50°C (default - all units) -10°C to +60°C (optional)



TPR-6

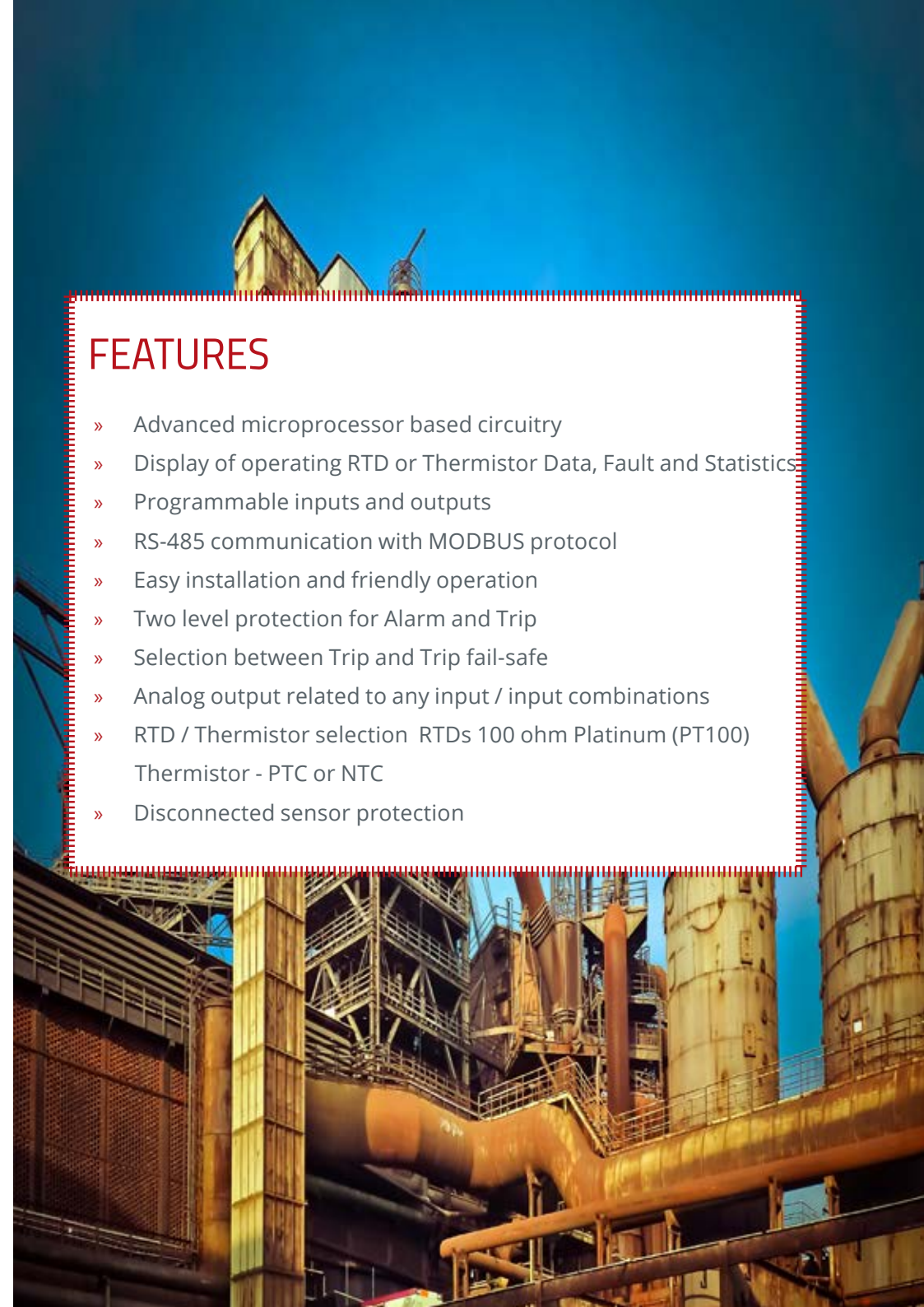
Temperature Protection Relay

For the Protection of electric motors, transformers and other systems against overheating.



FEATURES

- » Advanced microprocessor based circuitry
- » Display of operating RTD or Thermistor Data, Fault and Statistics
- » Programmable inputs and outputs
- » RS-485 communication with MODBUS protocol
- » Easy installation and friendly operation
- » Two level protection for Alarm and Trip
- » Selection between Trip and Trip fail-safe
- » Analog output related to any input / input combinations
- » RTD / Thermistor selection RTDs 100 ohm Platinum (PT100)
Thermistor - PTC or NTC
- » Disconnected sensor protection



MV-TPS

Thyristor Power System Up to 13.8kV,500A

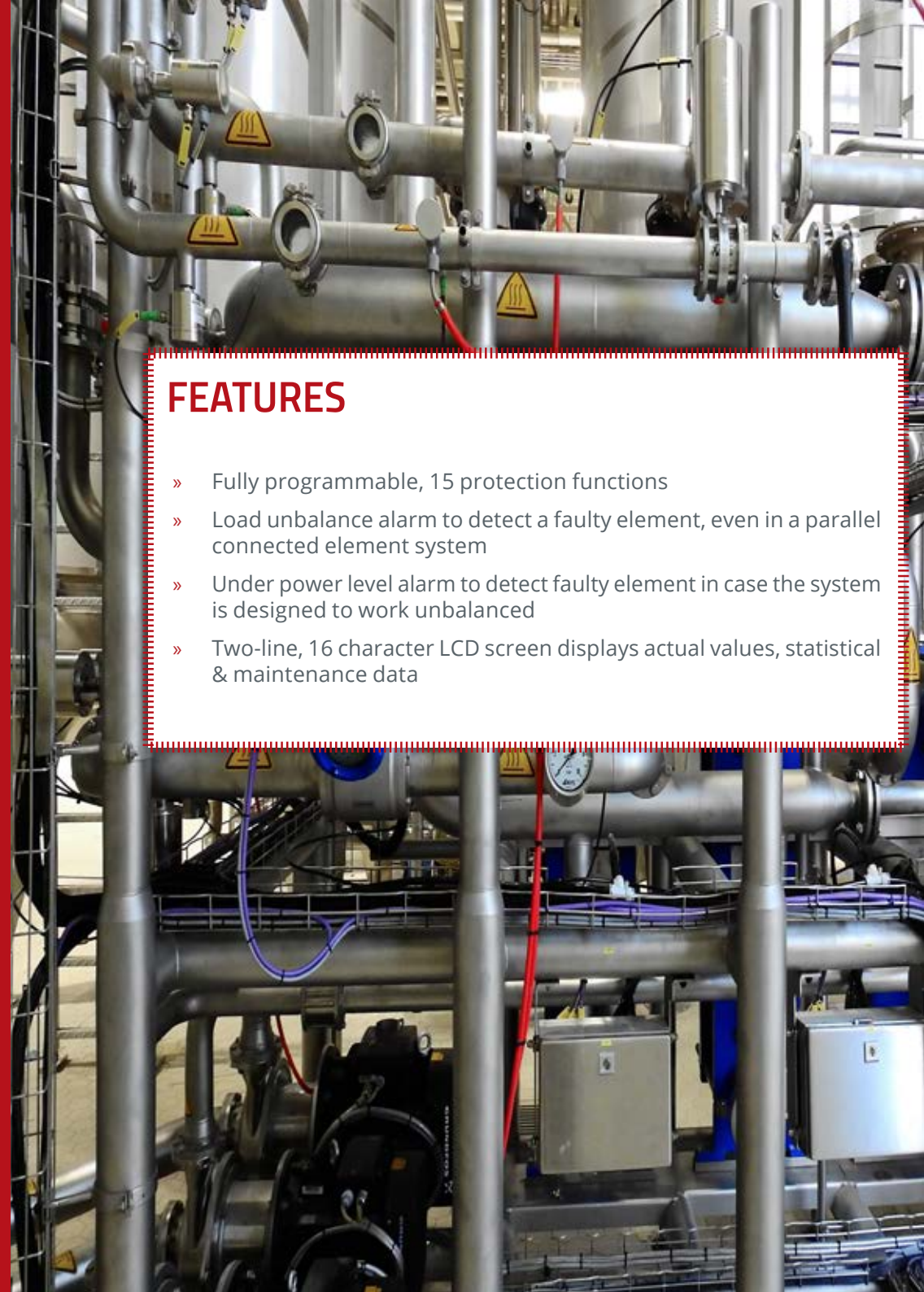
A heavy duty ,fully digital zero crossing phase control power unit for all types of resistive loads.

The MV-TPS controls the voltage of heating applications, drastically reducing the amount of cable , size of heating elements and the size of electrical equipment (switchgear) cabinets , in addition to the cost reduction of step-down transformers and switchgear versus a typical Low Voltage system.



FEATURES

- » Fully programmable, 15 protection functions
- » Load unbalance alarm to detect a faulty element, even in a parallel connected element system
- » Under power level alarm to detect faulty element in case the system is designed to work unbalanced
- » Two-line, 16 character LCD screen displays actual values, statistical & maintenance data





AROUND THE WORLD AND ACROSS INDUSTRIES

For additional product information

please contact us

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