

MTSTR-3P-600-645HP-600A-DCM

480kW Soft Starter – 645 HP, 600 Amps – 600V (540-660V) – 3PH Delta, 3-Wire – 50/60 Hz

Product ID: 321484



Image: MTSTR-3P-600-645HP-600A-DCM

Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

MTSTR-3P-600-645HP-600A-DCM Soft Starter

Unit Type: Reduced Voltage Starter

Dimensions: 39.37×62.99×23.62 in

Weight: 551.2 lbs

Capacity: 645 HP

Power: 480 kW

Voltage: 600V Nominal (540V-660V)

Phase: 3PH Delta, 3-Wire Configuration

Frequency: 50/60 Hz

Amps: 600A (Secondary)

Starting Times: 20x per hour (Maximum)

Adaptive Motor: Squirrel-cage 3PH Asynchronous

Control Modes: Operation Panel Control, Operation Panel + External Control, External Control, External Control + COM Control, Operation Panel + External + COM Control, Operation Panel + COM Control, COM Control, No Start or Stop Operation

Start Modes: Current-limiting to Start, Voltage Ramp to Start, Torque Control + Current-limiting to Start, Torque Control + Voltage Ramp to Start, Current Ramp to Start, Voltage Current-limiting Double Closed-loop Start

Stop Modes: Soft Stop, Free Stop

Monitoring and Protections: Overload, phase loss, phase unbalance, overcurrent; Motor PTC input

Control & Communication: Modbus RTU (RS-485), Digital/Analog Inputs & Outputs (programmable)

Vibration: <0.5G

Features/Ratings

IP20 Enclosure

Digital Panel Interface

Protective Functions

Soft Start/Soft Stop

Built-in Bypass Contactor: Improves efficiency and reduces heat

Overload Protection

Operating Temp: -10°C to +50°C
Humidity: 90% RH w/o Dew Condensation
Altitude: Up to 1000m without derating
Mount: Wall or Surface
Color: Grey

Special Orders - Special Requirements

Contact us for special requirements
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The Larson Electronics MTSTR-3P-600-645HP-600A-DCM Soft Starter provides reduced voltage starting solutions for industrial equipment. This 645 HP unit offers compatibility with 600V (nominal, range of 540V-660V) three-phase delta, 50/60 Hz. Multiple start, stop and control modes are available during use, via a digital panel. Operators can mount the unit on walls or surfaces, via four screw holes at every corner of the soft starter.

The MTSTR-3P-600-645HP-600A-DCM is a reduced voltage starter, which can be used to soft start and preserve industrial motors. This 645 HP unit is compatible with 600V (nominal, range of 540V-660V) three-phase delta, 50/60 Hz. The 600-amp soft starter is equipped with a squirrel-cage three-phase asynchronous motor. Starting times should not exceed 20 attempts per hour.

The reduced voltage starter is protected by an IP20-rated enclosure. Cooling is provided by natural wind, making the unit suitable for indoor locations with adequate ventilation. The presence of corrosive gas or conductive heat may hinder the performance of the soft starter. The MTSTR-3P-600-645HP-600A-DCM is designed for use at altitudes below 3,280.84 feet (1,000 meters). Above this range, the rate of power must be increased during operation.

The industrial soft starter features the following operating modes and protective functionalities:

- **Start Modes:** Current-limiting to Start, Voltage Ramp to Start, Torque Control + Current-limiting to Start, Torque Control + Voltage Ramp to Start, Current Ramp to Start, Voltage Current-limiting Double Closed-loop Start
- **Stop Modes:** Soft Stop, Free Stop
- **Control Modes:** Operation Panel Control, Operation Panel + External Control, External Control, External Control + COM Control, Operation Panel + External + COM Control, Operation Panel + COM Control, COM Control, No Start or Stop Operation
- **Protective Functions:** Open Loop Protection for External Instantaneous Stop Terminals, Over-heat Protection for Soft Starter, Protection for Long Starting Time, Input Open Phase Protection, Output Open Phase Protection, Unbalanced Three-phase Protection, Starting Over Current protection, Running Overload Protection, Under Voltage Protection for Power Voltage, Overvoltage Protection for Power Voltage, Protection for Fault Parameter Setting, Load Short Circuit Protection, Auto Restart or Incorrect Wiring Protection, Incorrect Wiring Protection of External Control Stop Terminals

Mount: The MTSTR-3P-600-645HP-600A-DCM can be securely mounted on walls or surfaces. Four screw holes at every corner of the unit available for seamless mounting.

Applications: Industrial motors, overload protection, reduced voltage starter, equipment preservation, pumps, manufacturing belts, inrush control, power monitoring and more.



At Larson Electronics, we do more than meet your lighting needs. We also provide replacement, retrofit, and upgrade parts as well as industrial grade power accessories. Our craftsmen can custom build any lighting system and/or accessories to fit the unique demands of your operation. A commitment to honesty, quality, and dependability has made Larson Electronics a leader in the lighting and electronics business since 1973. Contact us today at 800-369-6671 or message sales@larsonelectronics.com for more information about our custom options tailored to meet your specific industry needs.





Frequently Asked Questions (FAQ)

There are no Faqs