



AMPGARD MV4S 400 Ampere
Reduced Voltage
Solid State Soft Starter



Powering Business Worldwide

The AMPGARD MV4S

Reduced Voltage Solid State Soft Starter

Offered as an alternative to traditional reactor or autotransformer type reduced voltage starters, the 400 ampere AMPGARD MV4S reduced voltage solid state soft starter allows the user to fine tune starting parameters to meet a wide variety of unique load conditions. With voltage ratings to 4160 volts, the AMPGARD MV4S can be applied to induction motors as large as 2500 horsepower.

The AMPGARD MV4S fits seamlessly into AMPGARD starter lineups. Lineups can include main breakers, load break switches, full and reduced voltage starters, as well as medium voltage adjustable frequency drives. Placing the starters in a lineup allows integration of all of your medium voltage control needs into one size-effective assembly.

The AMPGARD MV4S has a rollout SCR truck that allows easy access to the soft start components. Conversion to a full voltage starter is easily accomplished, if required.

Why Choose Soft Starting?

Soft starting is the intelligent choice for your mechanical components. In addition to eliminating mechanical shock, soft starting also allows you to avoid coupling and shaft damage, minimize rotor and winding failure, and reduce drive belt squeal and breakage. Other benefits include:

- Prevent "water hammer" in pipes by soft stopping the pump motor, minimizing the surge wave and reducing pressure so valves close gently
- Reduce peak starting currents that minimize voltage drop on motor start



Get to Know the AMPGARD MV4S

- Protection and ramp features programmable via the keypad or a laptop computer including:
 - Dual ramp adjustments with current limit to 600%FLA, acceleration time of 1 to 120 seconds
 - Kick start, 0.1 to 2.0 seconds at 10% to 100% voltage
 - Pump deceleration, 1 to 60 seconds with begin and end torque adjustments
- Fiber optically isolated low voltage compartment
- Fully rated vacuum bypass contactor
- Truck mounted soft start components minimizes maintenance time
- Heavy duty SCR assemblies with ring transformer isolation for reliable firing
- Selectable ramping profiles to match any application

Available ratings

- 100 to 1500 hp at 2400 volts
- 200 to 2500 hp at 4160 volts
- 50/60 Hz
- Nema 1, 1A, 12, and 3R enclosures

Industry standards:

The AMPGARD MV4S reduced voltage soft starter is designed and built to meet all applicable industry standards, including UL listing as a complete assembly. The MV4S like all AMPGARD assemblies, is manufactured in an ISO 9001 and ISO 14001 certified facility.



A 720-amp RVSS is also available. Ask an Eaton representative for more information, or refer to brochure PA02000001E.



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