Motor Starter
Universal Single Phase

Features and Functions

The fundamental function of a motor starter is to protect the motor from damage that can occur from overheating. With a Greenheck motor starter you will be provided with the best motor protection available.

Disconnect/Physical Interface

An On/Off switch with a concealed Hand/Auto switch is incorporated into the interface of the starter for advanced controllability. The MS-1P includes LED indicator lights that display power, run, fault status and a Lock-Out Tag-Out switch to meet safety regulations.

Overload Protection

Electronic Class 10 adjustable electronic overload with protection up to 16A. The use of thermal elements are not required.

Easy System Integration

Building automation ready with pre-engineered input and output capabilities specifically designed for fan operation. It also allows for the use of a Fireman's Override and eliminates interposing relays for wet or dry contacts.

Installation

Unit is easy to install in any location in a single gang box for a surface or flush mount.

Specification

Motor Starter Single Phase (MS-1P)

The single phase motor starter shall consist of a manually operated quick-make toggle mechanism lockable in the "Off" position which can also function as the motor disconnect. The starter shall provide thermal overload protection with an adjustable current setting of 1-16 amps to allow field adjustment for specific motor Full Load Amps (FLA). Starter shall be equipped with LED status lights to indicate power, run and fault status. The starter must include the capability to operate in both manual and automatic control modes. When the starter is remotely controlled by an automation system, the starter shall include remote run terminals which accept both a voltage input signal and a contact closure. The voltage run input shall accept both AC and DC signals from 12-120V to allow direct connection of the transistorized automation signal to the starter. Starter must contain an integral current sensor with Normally Open contact which closes to indicate motor run status as well as a normally open contact which closes when an overload trip condition occurs.

The starter shall be UL listed.

MS-1P	
Phase	1Ø
Voltage	120-240V
Horsepower	0.1 - 1
Amps	1 - 16 FLA
Class	10
Enclosure	NEMA 1 or 4
Disconnect	Yes
Lock-Out ready	Yes
Reset	Manual
Stall/Locked Rotor	Trips at 2 seconds @ 300% FLA

Control Features	
Inputs	
Voltage input from BMS	12-120V AC/DC
Auxiliary input (run command contact)	N.O. dry contact closure
Outputs	
Motor Status output	N.O., 0.3A@125VAC; 1A@24VAC
Fault alarm output signal	N.O., 0.3A@125VAC; 1A@24VAC

c UL us LISTED

MS-1P model is Listed for manual motor controller (UL/cUL) File E258387

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Motor Starter Offering Model Comparison

	MS-1P	MSSC	MSAC
Description	Hand/Off/Auto (HOA) capability in a single phase package with wide range overload. Universal application.	An economical starter with advanced motor protection.	An innovative and versatile starter. Proven for reliability and advanced control capability.
Ranges	1Ø, 110-240V, 0.1-1HP	3Ø, 200-600V, 1-25HP	3Ø, 200-600V, 1-25HP
User Interface	On/Off switch, recessed hand-auto mode switch, LED status indicators (power run fault).	Hand/Off/Auto (HOA) keypad with corresponding LED lights. LED status indicators (power, run, fault).	Hand/Off/Auto (HOA) keypad with corresponding LED lights. LED status indicators (power, run, fault).
Overload Type	Wide range electronic overload (1-16FLA) class 10.	Wide range electronic overload (1-40FLA) class 10	Wide range electronic overload (1-40FLA) class 10 or 20.
Control Features	Voltage input from BMS Auxiliary input (run command contact) Motor status output Fault alarm output signal	Voltage input from BMS Auxiliary input (run command contact) Motor status output	Voltage input from BMS Auxiliary input (run command contact) Motor status output Fault alarm output signal Fireman's override Emergency shutdown Damper control output and limit switch closed loop signal Auxiliary input (stop command contact)
Enclosures	Compact design conceals hand/auto switch behind sliding door. Mounts on a single gang box. Indoor (NEMA-1) enclosure. Outdoor (NEMA-4) enclosure is weather resistant.	Indoor (NEMA-1) enclosure constructed of 16 gauge steel. Lockable door. Outdoor (NEMA-3R) enclosure is weather resistant with a fully gasketed door. Constructed of 16 gauge steel. Door and keypad are lockable.	Indoor (NEMA-1) enclosure constructed of 16 gauge steel. Lockable door. Outdoor (NEMA-3R) enclosure is weather resistant with a fully gasketed door. Constructed of 16 gauge steel. Door and keypad are lockable.
Disconnect	Allows manual control of input power to motor and provides short circuit protection.	Allows manual control of input power to motor and provides short circuit protection. Lockable handle, no fuses required. *Optional.*	Allows manual control of input power to motor and provides short circuit protection. Lockable handle, no fuses required. *Optional.*

Motor Starters are available for the following Greenheck fans:

- Centrifugal Exhaust
- Centrifugal Upblast
- Propeller Upblast
- Mixed Flow Upblast Exhaust
- Centrifugal Supply
- Hooded Propeller Exhaust and Supply
- Recirculating
- Ceiling, Cabinet and Inline Centrifugal
- Mixed Flow Inline
- Tube and Vane Axial
- Circulators and Mancoolers
- Utility Single and Double Width Blowers
- Radial Blade Industrial Blowers
- Plug and Plenum
- Sidewall Centrifugal Spun Aluminum
- Sidewall Propeller Exhaust and Supply

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