

# 3.1

## NEMA Manual Starters

### Starters and Switches

#### MS Series, Single-Phase Starters



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#### MS Series, Single-Phase Starters

##### Product Description

- The MS Motor Starter is a compact, versatile unit featuring heavy sliding contacts as well as “quick-make” and “quick-break” mechanism
- Standard with large pressure type terminals, straight-through wiring and a trip-free handle mechanism
- The “plug-in” heater element is keyed to ensure proper positioning and an adjustable knob allows a setting of plus or minus ten percent of the nominal heater rating

##### Application Description

The MS Manual Motor Starter provides manual control and overload protection to single-phase motors. By utilizing the interchangeable heater elements, the starter can protect motors ranging from 0.40A up to 16.0A. Ideal for HVAC applications.

##### Features

- Compact size
- Trip-free handle mechanism
- Keyed heater elements to ensure proper installation
- Starters available with red pilot light
- The operating handle of the enclosed units can be locked in the OFF position
- Enclosures are offered in NEMA 1, 3, 4 and 5
- Hazardous locations cast aluminum enclosures are available rated for Type 7, Class I, Group D (vapors) and Type 9, Class II, Groups E, F and G (dust)

##### Standards and Certifications

- UL File No. E19222, Category NLRV
- CSA File No. LR39402-6, Class 3211-05



**Instructional Leaflet**  
IL12987G

### Product Selection

#### When Ordering Specify

- Catalog number of manual motor starter
- Heater pack selection
- Any required accessories
- Heater coil selection according to the motor full load current requirements

#### MS Series Starters

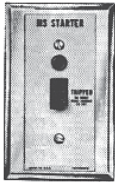
##### MS Series, Single-Phase Starters



#### Open Type

Number of Poles	Horsepower	Voltage	Catalog Number <sup>①</sup>
1	1	120/240V, 277 Vac	<b>MST01</b>
	1/4	120/240 Vdc	<b>MST01</b>
	1/4	32 Vdc	<b>MST01</b>
2	1	120/240V, 277 Vac	<b>MST02</b>
	1	120/240 Vdc	<b>MST02</b>
	1/4	32 Vdc	<b>MST02</b>

##### Switch and Pilot Light Mounted on Flush Plate



#### Flush Plate (No Enclosure Included)

Number of Poles	Flush Plate Type	Voltage	Catalog Number <sup>①</sup>
1	General purpose	Switch only	<b>MST01FN</b>
2		Switch with pilot light	<b>MST02FN1P</b>
1	Stainless steel	Switch only	<b>MST01DN</b>
		Switch with pilot light	<b>MST01DN1P</b>
2		Switch only	<b>MST02DN</b>
		Switch with pilot light	<b>MST02DN1P</b>

#### Note

<sup>①</sup> Does not include heater. Select heater from tables on [Page V5-T3-8](#).