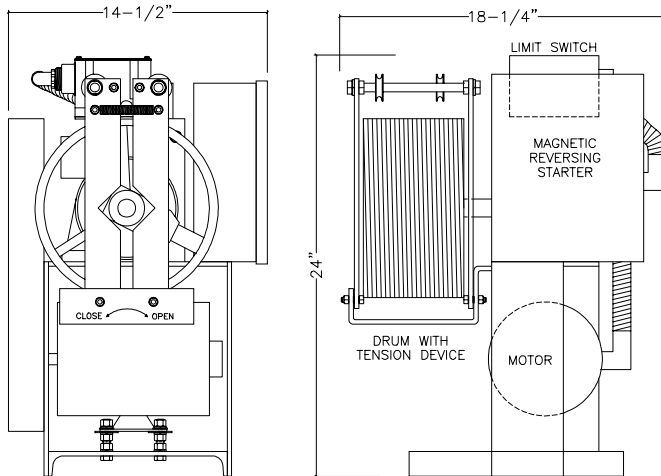


MODEL NO. 454 DRAW CURTAIN MACHINE

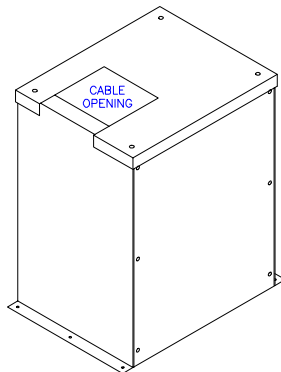


STANDARD FEATURES:

- Instantly reversing motor.
- Rotary limit switch.
- Cable tension device.
- Magnetic reversing starter.
- 10" x 5" drum grooved for 3/16" cable.
- Temporary power supply cord.
- Remote push button control station.

OPTIONAL FEATURES:

- Low voltage control circuit.
- Three phase motor and controls.
- 3 or 4-stop limits and controls.
- Variable speed drive and controls.
- 491x454 Curtain Machine Enclosure.

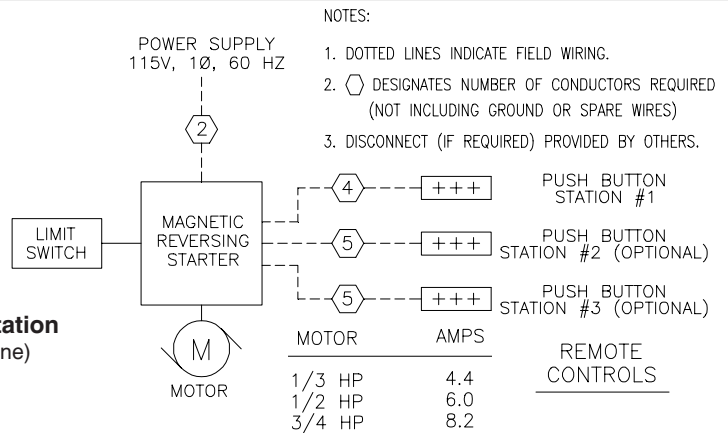


No. 481 Push Button Station
(one supplied with machine)



No. 491x454 Curtain Machine Enclosure
(optional) 24" wide x 27" high x 17-1/2" deep

POWER SUPPLY
115V, 1Ø, 60 HZ



Model No. 454 Riser Diagram

DRAW CURTAIN MACHINE:

Drum-style automatic curtain machine shall be capable of operating curtain between preset "open" and "close" positions at a cable speed of 89 feet per minute. Secure machine to heavy steel base for attachment to building structure.

Provide 10" diameter helically-grooved aluminum drum machined to accept 3/16" diameter operating cable. Drum shall be mounted to extended output shaft of gear reducer and secured by keyed steel hub. Install spring-loaded cable tension device onto drum to maintain proper tension and guide operating line.

Gear reducer shall be single reduction worm gear type designed for continuous duty. Precision machined alloy steel worm and bronze gear shall operate in an oil bath within a cast aluminum housing with dual-lip oil seals on the output shafts to prevent leakage. The gear reducer shall have a AGMA service factor of at least 1.0 for continuous operation.

Unit shall be driven by 1/3 HP*, 115V single phase capacitor motor connected to reducer with guarded V-belt drive. Motor shall be instantly reversing type to allow motor to reverse rotation without stopping.

Starter cabinet shall be located at the machine, containing all the necessary contactors, circuit breakers, overloads and fuses to provide for reversing operation. Controls shall be automatic with electrical latch to hold run circuit until limit switch is reached or "stop" button is pushed. Provide mechanical and electrical interlocks between contactors to prevent accidental motor reversal. Mount three pushbuttons on cabinet for local "open", "close" and "stop" control. All field connections shall be made through terminal blocks in the starter cabinet.

Provide two-stop mechanical, rotating shaft limit switch in separate NEMA 1 enclosure. Switch shall employ 36:1 worm gear reduction and shall operate two independently adjustable cams. Each cam shall activate a separate contact block for "open" and "close" positions.

Supply remote control station consisting of three pushbuttons mounted to stainless steel plate to fit standard single-gang switch box.

Model No. 454-1/3* as manufactured by H & H Specialties Inc.

* 1/2 HP and 3/4 HP motors also available.