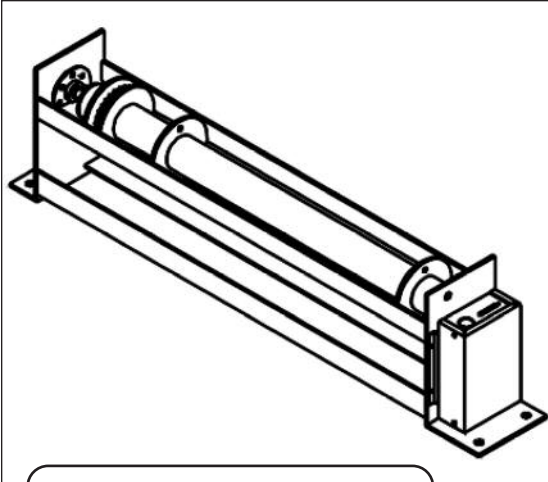




AC140-15 | TECHNICAL DOCUMENT



Width: 34 3/4 inches / 88.26 cm
Length: 5 inches / 12.7 cm
Height: 8.5 inches / 21.6 cm

POWER:	100-125 VAC 60Hz 2,3 A MAX.
MOTOR:	0.35 HP (260 watts) AC tubular motor.
AC140-15:	40 Nm torque (352 lbs-in.) at 15 RPM, 90 Kg (200 lbs) at 0.07 m/sec. (13 FPM) with the sprocket, 145 Kg (320 lbs) at 0.04 m/sec. (8 FPM) with the cable drum.
AXIAL LOAD:	Sprocket: 90kg (200 lbs) maximum. Cable drum: 145 Kg (320 lbs) maximum.
PRESETS/SPEEDS:	2 preset positions / 1 speed available.
SYSTEM LIMITS:	33 output shaft rotations, Sprocket: 28 feet of travel max, Cable drum: 17 feet of travel max.
CONTROL VOLTAGE:	12 - 20 volts DC, 100 mA.

Due to ongoing research and development, specifications are subject to change without notice.



WARNING

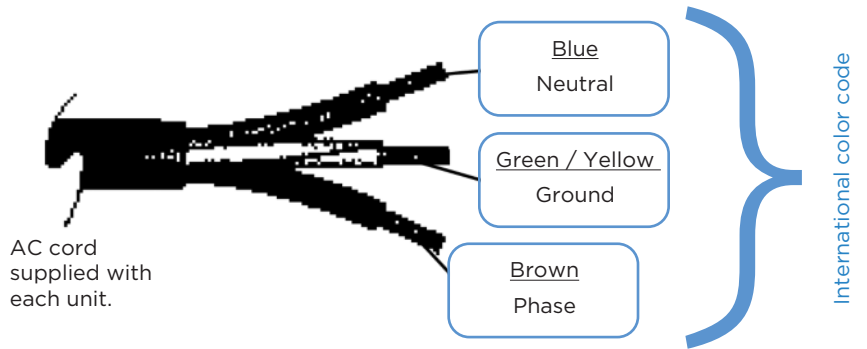
- **READ INSTRUCTIONS FIRST.**
- **Strong / MDI motors are designed and intended for the intermittent movement of theatrical curtains.**
- **Do not exceed load limits as units are not designed to stop loads over the stated maximum torque.**
- **These units should only be installed, operated and serviced by qualified professional technicians.**
- **Strong / MDI motors are not to be used for the lifting, supporting or transporting of people or over areas where people are present.**
- **The unit will stop and wait for the next command when overloaded.**
- **This is an automatic machine, motor may be remotely started at any time without warning.**
- **Do not connect multiple units to the same switch.**
- **An AC outlet with the proper connectors and protection against overload is to be supplied for the proper connection of the power cord (See instructions on back).**
- **Use chain #35 with the sprocket (Strong / MDI can supply this chain in lengths of 10 feet).**
- **To prevent fire or shock hazard, do not expose this product to rain or any type of moisture.**

**DISCONNECT
POWER BEFORE
MECHANICAL
OR ELECTRICAL
SERVICING.**

**THIS AUTOMATIC
MACHINE MAYBE
REMOTELY STARTED
AT ANY TIME
WITHOUT WARNING.**

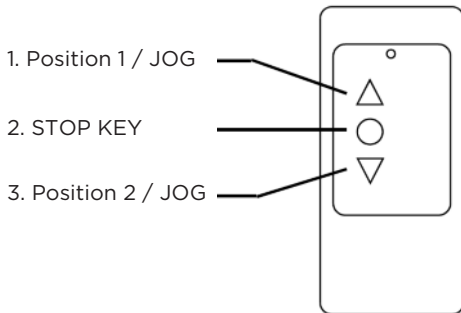
ELECTRICAL CONNECTIONS

A power cord is supplied with each unit. The connection to the AC power should be made by qualified personnel only as it may result in injuries and/or damage to the unit.



If you utilize connectors, please ensure they are CSA or UL approved. (Not supplied)

WIRELESS REMOTE



Strong/ MDI has provided you a handheld wireless remote for the AC masking motor. These motors can be triggered by the wireless remote and/or by connecting to your automation system. We advise that if you are using an automation system, you use the wireless remote for set-up or to jog to a temporary position if required. If the remote are not required, either lock them away in a safe place or discard it. If you intend on using just the wireless remote to trigger the motor, we suggest you label these remotes and place them in a position where they will not be misplaced or accessed by non-technical personnel.

HARDWIRED CONTROL CONNECTIONS

NC: no connection

NC: no connection

VC: VCC (common)

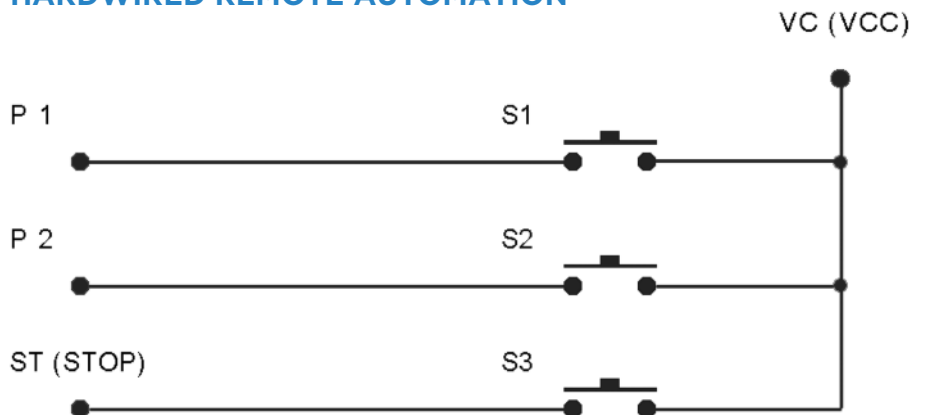
ST: stop

P1: stop #1 / Jog / CLOSE

P2: stop #2 / Jog / OPEN

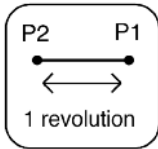


HARDWIRED REMOTE AUTOMATION

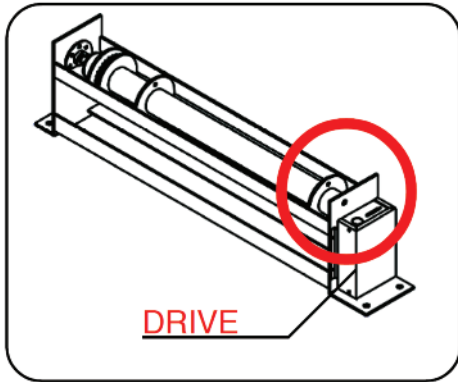


Note: The contacts don't need a double pole pushbutton. The pushbuttons shall have a momentary action.

SETTING THE LIMITS



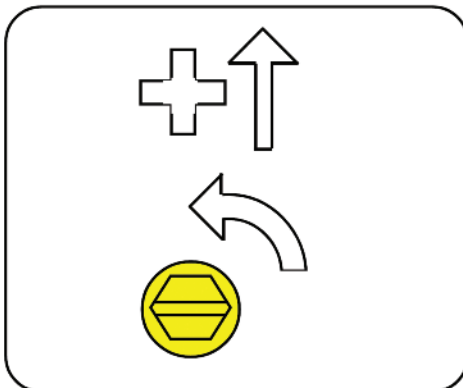
Please note that factory default limits are set for one revolution of the cable drum.




Locate the adjustment screws

1. For this operation you need an Allen key 5/32 (supplied with the masking motors); an electric screwdriver is strongly recommended.
2. Cable or chain must be installed on the cable drum or sprocket before setting the limits. You cannot use both a chain and a cable on the same masking motor.
3. To make it easy to set, you have to install the chain or cable in the masking OPEN position.
4. You have to be careful because when you'll set the CLOSE position the tube will turn CLOCKWISE (if you stand in front of the drive).

CLOSE LIMIT

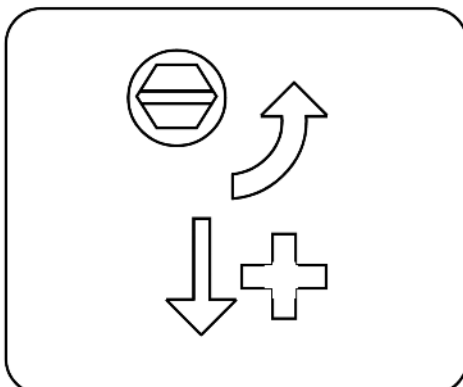


Setting the CLOSE limit.


To set the masking CLOSE you have to press the  on the remote keypad then you turn the YELLOW screw (motor will turn slowly as you screw as you increase the limit) to the desired position. If you decrease the limit you will not be able to see the motor moving so you have to play with the jog keys to see the limit modification.

- Turning the YELLOW screw COUNTER-CLOCKWISE will increase the CLOSE limit.
- Turning the YELLOW screw CLOCKWISE will decrease the CLOSE limit.

OPEN LIMIT



Setting the OPEN limit.

To set the masking OPEN you have to press the  on the remote keypad then you turn the WHITE screw (motor will turn slowly as you screw as you increase the limit) to the desired position. If you decrease the limit you will not be able to see the motor moving so you have to play with the jog keys to see the limit modification.

- Turning the WHITE screw COUNTER-CLOCKWISE will increase the OPEN limit.
- Turning the WHITE screw CLOCKWISE will decrease the OPEN limit.



TECHNICAL SPECIFICATIONS OF AC SERIES MOTORS

Model #	AC116-36	AC140-15	AC216-30	AC240-12
Speed FPM (m/sec) Sprocket	31 (0.16)	13 (0.07)	26 (0.13)	10 (0.05)
Speed FPM (m/sec) Cable Drum	19 (0.1)	8 (0.04)	16 (0.08)	7 (0.03)
Operating Voltage	110 VAC	110 VAC	220 VAC	220 VAC
Amp. Max.	2.3 A	2.3 A	0.63 A	1.02 A
RPM	36	15	30	12
Torque lbs/in (N.m)	141 (16)	352 (40)	141 (16)	352 (40)
Power HP (watts)	0.35 (260)	0.35 (260)	0.2 (150)	0.33 (241)
Max. Load Sprocket Lbs (kg)	85 (38)	200 (90)	85 (38)	200 (90)
Max. Load Cable drum Lbs (kg)	140 (63)	320 (145)	140 (63)	320 (145)
System Limit Revolutions	33	33	33	33

SPROCKET SPECIFICATIONS: for chain #35; diameter: 3.31 inches.

CABLE DRUM SPECIFICATIONS: diameter: 2 inches; width: 18 inches.

The drum is not grooved as this is not necessary as long as the cable remains tight at all the time.

Continuous usage may result in overheating of the motor and cause a temporary out of order state. If this does occur, allow the motor time to cool down so the thermal protection in the motor resets itself.