## K SERIES MASKING MOTORS

## INSTRUCTIONS

K1/4-S
Width: 14 " $/ 35.6 \mathrm{~cm}$
Length: 14 " $/ 35.6 \mathrm{~cm}$
Height: 7 " $/ 17.8 \mathrm{~cm}$

## K1/2-GD*

Width: 19 " $/ 48.3 \mathrm{~cm}$
Length: 22" $/ 55.9 \mathrm{~cm}$
Height: 8"/20.3 cm
*See specification sheet for all K SERIES models: K1/4-S, K1/4-RD, K1/4-GD, K1/2-S, K1/2-GD


Class 671101 and 671181 Door Operating Units. Commercial theatrical curtain movement apparatus, intermittent indoor use, $120-220 \mathrm{~V}$ single phase, 60 Hz 2,5 A max. 1/4 HP, Models K1/4-GD, K1/4-S, K1/4-RD. Applicable requirements: CAN/CSA - C22.2 Nos 247-92 and 14-M95,
UL Std No. 325, ANSI/UL and CSA standards for the use in the U.S and Canada.

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- POWER
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100-125 VAC 60 Hz
$200-250$ VAC $50 / 60 \mathrm{~Hz}$ 2,5 A max.

- MOTOR
$1 / 4$ HP permanent magnet DC gear motor
- TORQUE

K 1/4-GD: 12,3 N.M.
torque at 62 RPM
$23 \mathrm{~kg}(50 \mathrm{lb})$
at 0,08-0,32 m/sec.
(22-110 FPM)
$160 \mathrm{~kg}(350 \mathrm{lb})$ estimated draw weight

9,1 m (30 ft) capacity
K1/4-S, K1/4-RD: 12,3 N.M. torque at 62 RPM
$41 \mathrm{~kg}(90 \mathrm{lb})$
at 0,04-0,2 m/sec.
with \#35B21 sprocket
$109 \mathrm{lb}-\mathrm{in}$. torque
at 10-40 FPM
with \#35B21 sprocket

- AXIAL LOAD $40,8 \mathrm{~kg}$ ( 90 lb ) max.
- PRECISION
$\pm 5^{\circ}$ shaft rotation at rated load
- PRESETS / SPEEDS

10 preset position 4 speeds available

- SYSTEM LIMITS

180 output shaft rotations

- DRIVE

Microprocessor controlled regenerative

SCR drive with dynamic brake

- CONTROL VOLTAGE 12-20 volts DC, 100 mA
- POWER

100-125 VAC 60 Hz 200-250 VAC $50 / 60 \mathrm{~Hz}$ 6,5 A max.

- MOTOR
$1 / 2$ HP permanent magnet DC gear motor
- TORQUE

K1/2-GD: 29,5 N.M
torque at 35 RPM
$90 \mathrm{~kg}(200 \mathrm{lb})$
at $0,15 \mathrm{~m} / \mathrm{sec}$. (30 FPM)
$340 \mathrm{~kg}(750 \mathrm{lb})$ estimated draw weight

9,1 m (30 ft) capacity
K1/2-S: 29,5 N.M.
torque at 35 RPM
135 kg (300 lb)
at $0,10 \mathrm{~m} / \mathrm{sec}$.
with \#35B21 sprocket
257,2 lb-in. torque
at 19,5 FPM
with the \#35B21 sprocket

- AXIAL LOAD
$236 \mathrm{~kg}(520 \mathrm{lb})$ max.
(at 1" from seal)
- PRECISION
$\pm 5^{\circ}$ shaft rotation
at rated load
- PRESETS / SPEEDS

10 preset position
4 speeds available

- SYSTEM LIMITS

160 output shaft rotations

- DRIVE

Microprocessor controlled regenerative

SCR drive
with dynamic brake

- CONTROL VOLTAGE
$12-20$ volts $D C$,
100 mA


## READ ALL INSTRUCTIONS BEFORE USE

- 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 lifting, supporting or transporting people or for use 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 must be supplied for the proper connection of the power cord (see instructions)
- Use chain \#35 with K1/4-S \& K1/2-S (Strong | MDI can supply this chain in lengths of ten feet)
- As a safety measure, this device should be installed with limit switches.
- 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 may be remotely started at any time without warning.

## REMOTE CONTROL CONNECTIONS

NC: No connection
P1: Stop \#1
P2: Stop \#2
P3: Stop \#3
P4: Stop \#4
SP: Stop / program

GD: - / - Led
AS: Alt. stop (for limit switch)
VC: VCC (common)
LD: Led +
$J \Leftarrow$ : Jog left
$\mathrm{J} \Rightarrow$ : Jog right

Control cable shield should be hooked up to the GD on one end of the cable.


## PROGRAMMING

## REPEAT THESE THREE STEPS FOR EACH STOP:

1. Simultaneously press $S / P$ and numbered key (1-4).

Release when led flashes.
The combination of keys to obtain 10 positions is:
1, 2, 3, 4, 1-2, 1-3, 1-4, 2-3, 2-4, 3-4.
2. Jog to required position.
3. Select speed. (1 slow, 4 fast)

## RESET (ERASE MEMORY)

Simultaneously press $S / P, ~ \Leftarrow$ and $\Rightarrow$. Release when led goes off.
MDI.

## ELECTRICAL CONNECTIONS

A 6' power cord is supplied with each unit; the connection to the AC power should be done by qualified personnel only as it may result in injuries and/or damage to the unit.

Use a CSA approved connector to connect the unit (not supplied)


## REMOTE CONTROL WIRING

Follow the schematic to program up to 10 different stop positions with the keypad.

Note: The first 4 stops don't need a double pole pushbutton. Momentary pushbutton action is required.


## FUSE REPLACEMENT

## MOTOR FUSE

- The motor fuse is located beside the power fuses in its own holder.
- Use a 7 Amps 250 V AC SLOBLO fuse for K1/2.
- Use a 2.5 Amps 250 V AC SLOBLO fuse for K1/4.
- Use a flat screwdriver to access fuse.


## FUSE REPLACEMENT

## POWER FUSES

- The power fuses are located on the fuse drawer accessible by a slot, as indicated by the arrow.
- Use 10 AMPS 250 V AC fuses for K1/2.
- Use 5 AMPS 250 V AC fuses for K1/4.
- Use a flat screwdriver to remove the fuse drawer.


## VOLTAGE SELECTION

Align triangles to select proper voltage

