CABLE AND PUSH-BUTTON E-STOP
INSTALLATION MANUAL

INTRODUCTION

This switch is a cable and push-button emergency-stop device. At the same time, it is used to provide an awareness barrier on exposed machinery, such as conveyors, packaging machinery, assembly lines, process equipment, transfer lines, and the back sides of press brakes and shears.

The switch has a unique cam operation of the contact mechanism to give rapid, positive operation of the contacts. This mechanism also provides a failure to the safe condition if the cable goes slack or is cut, but is immune to nuisance tripping due to machine vibration. Should the cable be pulled, the contacts are opened, isolating machine power, and the latch engages. The machine cannot restart until the hazard has been corrected and the switch is reset. The switch is reset by turning the blue reset dial from the off position to the run position. This switch also incorporates a cable-tension indicator. This indicator assists in installation and maintenance of the switch. A red mushroom-head emergency-stop button is provided on each switch. Optionally available is an indicator light as shown.

A cable tension kit, which includes thimbles, cable clamps and a turnbuckle, must be used with this switch. This kit includes the components to properly tension the cable. The cable should be supported by eye bolts every 6½ to 10 feet (2 to 3 m) along its length. An eye bolt should also be used about one foot from the switch to ensure that all emergency-pull movement is transmitted to the unit in a linear fashion (see Figure 1). If this assembly is to go around a corner, free-moving pulleys should be used (see Figure 2).
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INSTALLATION

SWITCH INSTALLATION
1. Determine the mounting position for the switch.
2. Loosen and remove all cover screws using the furnished Torx bit. See Figure 3.
3. Drill and tap holes where the switch(es) will be mounted. Mount the switch(es) using four fasteners (not furnished). See Figure 3.
4. With the blue reset knob in the off position, replace the cover.
5. Push the red emergency-stop button. The switch should lock out. Reset the switch by turning the blue reset button on the cover to the run position (see Figure 4).

CABLE INSTALLATION
1. Pass a thimble through the eye of the switch.
2. Thread one end of the PVC-covered cable through a cable clamp.
3. Wrap the cable around the thimble and back through the cable clamp. See Figure 5. Lock the cable in position by tightening the cable clamp.
4. Install an eye bolt 12 inches from the end of the switch and one eye bolt every 6½ to 10 feet after that.
5. Extend the adjusting eyes on the turnbuckle. At approximately half the total cable span, mount the turnbuckle to the cable. Thread the cable through a cable clamp, through one end of the turnbuckle, and back through the cable clamp. Lock the cable in position by tightening the cable clamp.
6. Repeat steps 1-5 at the other end of the installation using a hook bolt.
7. Tension the cable. The turnbuckle has a left-hand thread at one end and a right-hand thread at the other. When rotating the turnbuckle body, the cable will slacken or tighten at both ends simultaneously. The black tension mark within the red arrows should be in the center of the window on each switch when the switch is tensioned properly. See Figure 6.
8. Set the blue reset knob to the run position. Perform a test procedure by pushing the red emergency-stop button and then resetting the reset button (blue button) before putting the switch into operation.

(Continued on next page.)
Make sure the system is correctly installed and working before the machine is put back into production.

**TECHNICAL SPECIFICATIONS**

Safety Contacts ................................................................. 2 NO
Auxiliary Contacts .......................................................... 2 NC
Switching Ability ..................................................... 1 A @ 500 V AC, 2 A @ 250 V AC
5A @ 100 V AC, 0.5 A @ 250 V DC, 1 A @ 125 V DC, 2 A @ 24 V DC
Case ................................................................. Heavy-Duty Die-Cast Alloy
Operating Temperature .................................. -13° to 176°F
(-25° to 80°C)
Operating Force ........................................................ < 28 lb (12 in deflection)
Tensioning Force to Run Position ....................... 23 lb Typical
Tensioning Force to Lockout ................................. 42 lb Typical

Safety contacts are NO when the E-stop button is pushed, or if the cable is slack or pulled as shown in the illustration below.

**APPLICATION**

![Application Diagram]

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>6024884</td>
<td>Cable and Push-Button E-Stop Device Only</td>
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<tr>
<td>CML-510</td>
<td>Cable and Push-Button E-Stop Assembly</td>
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</table>

(Consists of cable and push button e-stop, indicator light, 115-V AC bulb, 7 yards of red PVC-covered steel cable, turnbuckle, hook bolt, 4 cable thimbles, and 4 cable clamps)

**Connection details**

![Connection Diagram]

**Run condition**

![Run Condition Diagram]

**Contact Adjustment**

![Contact Adjustment Diagram]
CABLE AND PUSH-BUTTON E-STOP

OPTIONAL ACCESSORIES

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<tbody>
<tr>
<td>CMK-039</td>
<td>Tension Kit (Consists of 1 turnbuckle, 1 hook bolt, 4 cable thimbles, and 4 cable clamps)</td>
</tr>
<tr>
<td>CMK-064</td>
<td>Indicator Light Without Bulb</td>
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<tr>
<td>CTT-335</td>
<td>24 V AC/DC Bulb for CMK-064 Indicator Light</td>
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<tr>
<td>CTT-336</td>
<td>115 V AC Bulb for CMK-064 Indicator Light</td>
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<tr>
<td>5312998</td>
<td>M20 to 1/2” Conduit Adapter</td>
</tr>
<tr>
<td>FSL-024</td>
<td>Red PVC-Covered Steel Cable/Yard</td>
</tr>
<tr>
<td>FSL-028</td>
<td>Pulley</td>
</tr>
<tr>
<td>KSC-056</td>
<td>Danger Sign for Miscellaneous Machines</td>
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<tr>
<td>KSC-064</td>
<td>Danger Sign for Down-Acting Machines</td>
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