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).
CABLE AND PUSH-BUTTON E-STOP

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.
CABLE AND PUSH-BUTTON E-STOP

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.

ORDERING INFORMATION

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Description</th>
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<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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<tr>
<td></td>
<td>(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)</td>
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</table>

Connection details

Run condition

Contact Adjustment

Eye Nut Extended

0 1/8 1/4 3/8 12 56 inches
0 3 6 9 11.5 13.5 mm

Safety Contacts

Auxiliary Contact

Rope Slack
Rope Tension
Rope Pulled
Lockout
Range

[Diagram of connection details and contact adjustment]

(Continued on next page.)
### WARRANTY, DISCLAIMER AND LIMITATION OF LIABILITY

#### WARRANTY
Rockford Systems, LLC warrants that this product will be free from defects in material and workmanship for a period of 12 months from the date of shipment thereof. ROCKFORD SYSTEMS LLC’S OBLIGATION UNDER THIS WARRANTY IS EXPRESSLY AND EXCLUSIVELY LIMITED to repairing or replacing such products which are returned to it within the warranty period with shipping charges prepaid and which will be disclosed as defective upon examination by Rockford Systems, LLC. This warranty will not apply to any product which will have been subject to misuse, negligence, accident, restriction and use not in accordance with Rockford Systems, LLC’s instructions or which will have been altered or repaired by persons other than the authorized agent or employees of Rockford Systems, LLC. Rockford Systems, LLC’s warranties as to any component part is expressly limited to that of the manufacturer of the component part.

#### DISCLAIMER
The foregoing Warranty is made in lieu of all other warranties, expressed or implied, and of all other liabilities and obligations on the part of Rockford Systems, LLC, including any liability for negligence, strict liability, or otherwise, and any implied warranty of merchantability or fitness for a particular purpose is expressly disclaimed.

#### LIMITATION OF LIABILITY
Under no circumstances, including any claim of negligence, strict liability, or otherwise, shall Rockford Systems, LLC be liable for any incidental or consequential damages, or any loss or damage resulting from a defect in the product of Rockford Systems, LLC.

### OPTIONAL ACCESSORIES

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<th>Part No.</th>
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<tr>
<td>CMK-039</td>
<td>Tension Kit (Consists of 1 turnbuckle, 1 hook bolt, 4 cable thimbles, and 4 cable clamps)</td>
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<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>
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<tr>
<td>FSL-028</td>
<td>Pulley</td>
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<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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</tbody>
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**DANGER**

**For use on spring-loaded machine parts that can cause serious injury to people.**

**DANGER**

**For use on down-acting machines that can cause serious injury to people.**

**DANGER**

**For use on any machine that can cause serious injury to people.**

**DANGER**

**Do not enter this area.**

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**KSL206/0119**