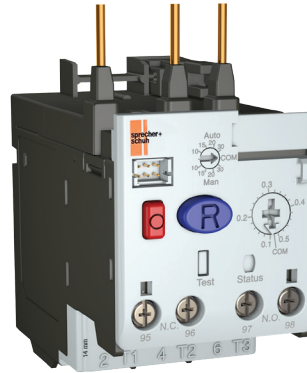


**PRODUCT MIGRATION-  
Electronic Overload Relay  
CEP7 to CEP7-1**

**Obsolete CEP7****CEP7-1**

## Why Upgrade or Migrate

While the CEP7 Overload Relay has been a valuable part of our portfolio for the past 18 years, this product will no longer be available for sale after April 2021.<sup>❶</sup> Now is the time to migrate to the CEP7-1 Electronic Overload Relay. The CEP7-1 is the next generation basic-tier electronic overload relay. It has enhanced features to better safeguard your motor investments, including increased accuracy and repeatability, a self-powered design with lower heat dissipation, and an aggressive component certification strategy.

## CEP7-1 Features and Benefits

- CEP7-1EE: Trip Class 10 and 20, manual reset only
- CEP7-1EF: Trip Class 10, 15, 20, 30, manual or automatic reset
- 5:1 wide current adjustment range to cover a variety of motor applications
- Supports both single- and three-phase operation in a single component
- A variety of accessories for enhanced protection
  - ◆ Ground fault/jam
  - ◆ Remote reset and/or indication
  - ◆ Anti-tamper shields
  - ◆ DIN rail/panel mounting
  - ◆ External CT configurations
- Current measurement-based protection
- Electronic design and thermal memory
- Phase loss protection
- Self-powered and direct-mount design with CA7/CAN7 style contactors

## Identify, Mitigate and Help Eliminate the Risk of Automation Obsolescence

In today's economy, it is necessary to have migration solutions that help you to achieve increased productivity and lessen your risk of maintaining your legacy equipment. You need to work with a supplier that has the product, service and industry knowledge to partner with you on an upgrade strategy that will help you maximize your competitive advantage.

Sprecher+Schuh understands that your overload relays are a critical asset in your automation system, and we support that by providing you with the latest technology to maximize your investment. New technologies can improve and extend the operation of existing equipment and provide an immediate boost to productivity. By migrating from your legacy CEP7-ED1/EE Overload to a new CEP7-1 Electronic Overload Relay, you can help to decrease downtime, increase speed to market, and optimize operations well into the future.

We will help you to meet ever changing industry demands to innovate by proactively planning and managing your transition every step of the way to help you get the highest possible return on your automation investment.

<sup>❶</sup> Discontinued date may be subject to change.

## Migration Options & Application

The CEP7-1 Electronic Overload Relay was designed with migration in mind for customers looking to upgrade from a 2nd gen CEP7.

- CEP7-1 improves application coverage with adjustable Trip Class 10 and 20 for the basic CEP7-1EE model
- Identical mounting footprint to CEP7 for directmount configurations with Series CA7 (IEC) and CAN7 (NEMA) contactors
- Equivalent overload performance, features, and wiring as compared to 2nd gen CEP7
- CEP7-1 offers optional accessory modules which can be front-mounted on series CA7/CAN7 contactors for ease-of-access & minimizing panel space

|                                     | 2nd gen CEP7 O/L Types         |                                | 3rd gen CEP7-1 O/L Types                        |   |
|-------------------------------------|--------------------------------|--------------------------------|---|---|
|                                     | CEP7-ED1                       | CEP7-EE                        | CEP7-1EE  | CEP7-1EF  |
| <b>Model</b>                        | CEP7 Electronic Overload Relay | CEP7 Electronic Overload Relay | CEP7-1 Electronic Overload Relay                | CEP7-1 Electronic Overload Relay                |
| <b>Type</b>                         | Basic                          | Advanced                       | Basic   | Advanced  |
| <b>Rated Current (Range)</b>        | 0.1...45A                      | 0.1...800A                     | 0.1...100A<br>(Single- or Three-Phase)          | 0.1...800A<br>(Single- or Three-Phase)          |
| <b>UL/NEMA Op Voltage, Nominal</b>  | 600V AC                        | 600V AC                        | 600V AC   | 600V AC   |
| <b>IEC Op Voltage, Nominal</b>      | 690V AC                        | 690/1000V AC                   | 690/1000V AC                                    | 690/1000V AC                                    |
| <b>Rated Operating Frequency</b>    | 50/60 Hz (sinusoidal)          | 50/60 Hz (sinusoidal)          | 45...65 Hz                                      | 45...65 Hz                                      |
| <b>Operating Temperature (open)</b> | -20...+60 °C (-4...+140 °F)    |                                | -20...+65 °C (-4...+149 °F)                     |   |
| <b>Overload Type</b>                | Electronic                     | Electronic                     | Electronic                                      | Electronic                                      |
| <b>Trip Class (Fixed)</b>           | 10                             | -                              | -   | -   |
| <b>Trip Class (Adjustable)</b>      | -                              | 10, 15, 20, 30                 | 10, 20  | 10, 15, 20, 30                                  |
| <b>Reset Type</b>                   | Manual Only                    | Automatic or Manual            | Manual Only                                     | Automatic or Manual                             |
| <b>Adjustment Range</b>             | 5:1                            | 5:1                            | 5:1   | 5:1   |
| <b>Rated Impulse Strength</b>       | 6kV AC                         | 6kV AC                         | 6kV AC  | 6kV AC  |
| <b>Phase Loss Protection</b>        | Yes                            | Yes                            | Yes   | Yes   |
| <b>Phase Imbalance Protection</b>   | Yes                            | Yes                            | Yes   | Yes   |
| <b>Overcurrent (Jam) Protection</b> | No                             | With Accessory                 | No  | With Protection Accessory                       |
| <b>Ground (Earth) Protection</b>    | No                             | With Accessory                 | No  | With Protection Accessory                       |
| <b>N.C. Trip Contact</b>            | Yes                            | Yes                            | Yes   | Yes   |
| <b>N.O. Alarm Contact</b>           | Yes                            | Yes                            | Yes   | Yes   |
| <b>Contact Rating</b>               | N.O./N.C. B600                 | N.O./N.C. B600                 | N.O. C600/N.C. B600<br>(AC) N.O./N.C. R300 (DC) | N.O. C600/N.C. B600<br>(AC) N.O./N.C. R300 (DC) |
| <b>Available Mounting Types</b>     | Direct and Pass-Thru           | Direct and Pass-Thru           | Direct and Pass-Thru                            | Direct and Pass-Thru                            |

## Migration Options & Application

The CEP7-1 Electronic Overload Relay is the newest technology for overload protection and supports both single- and three-phase operation in a single component.

| 3rd gen 'Basic' model CEP7-1EE |  |
|--------------------------------|--|
| Current Range                  | 0.1...100 A  |
| Trip Class                     | 10, 20 Adjustable  |
| Reset Mode                     | Manual Only  |
| Accessories                    | Reset Adapter, Anti-Tamper Shield, Remote Reset Solenoid, DIN Rail/Panel Adapter |

| 3rd gen 'Advanced' model CEP7-1EF |   |
|-----------------------------------|---|
| Current Range                     | 0.1...100 A   |
| Trip Class                        | 10, 15, 20, 30 Adjustable   |
| Reset Mode                        | Automatic and Manual  |
| Accessories                       | Reset Adapter, Anti-Tamper Shield, Remote Reset Solenoid, DIN Rail/Panel Adapter, Electronic Remote Reset Accessory, GF and Jam Accessory |

### Ideal Applications

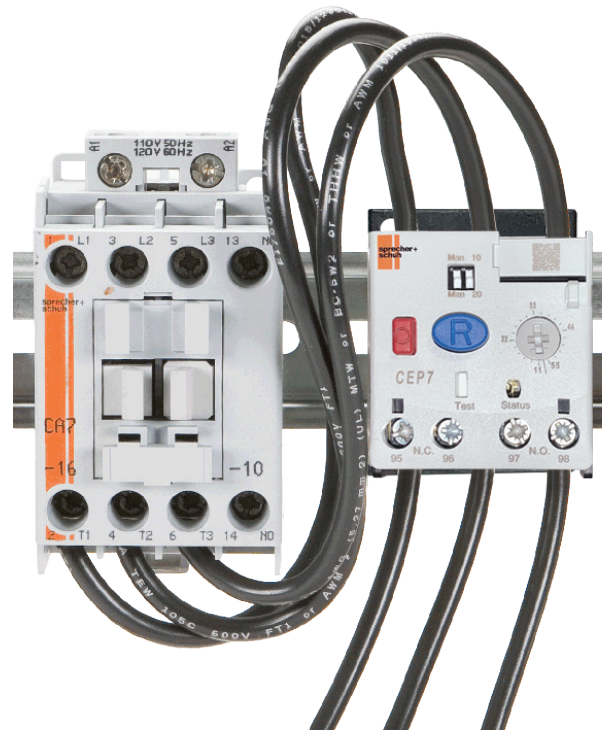
- Conveyors
- Pumps
- Fans
- Process

### Usability

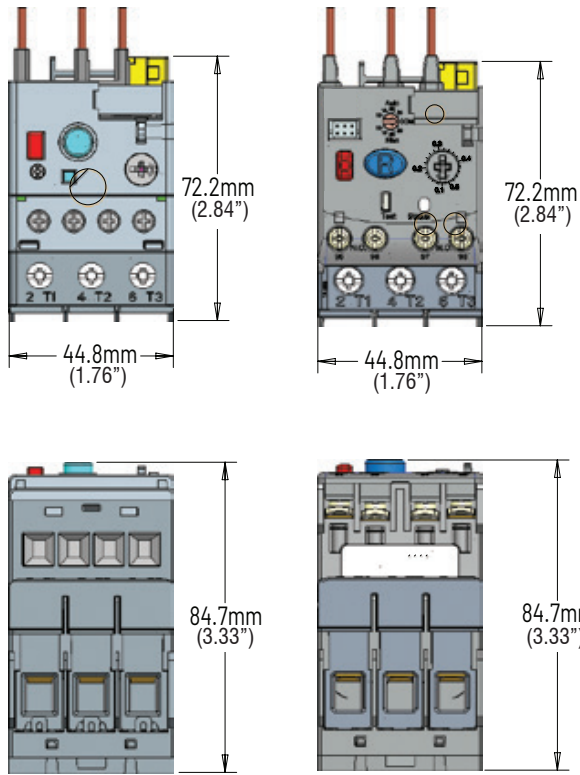
- Multiple trip class options
- Selectable reset modes
- Wide current range
- Additional modules for enhanced functionality

## Dimensional Comparison of CEP7 to CEP7-1

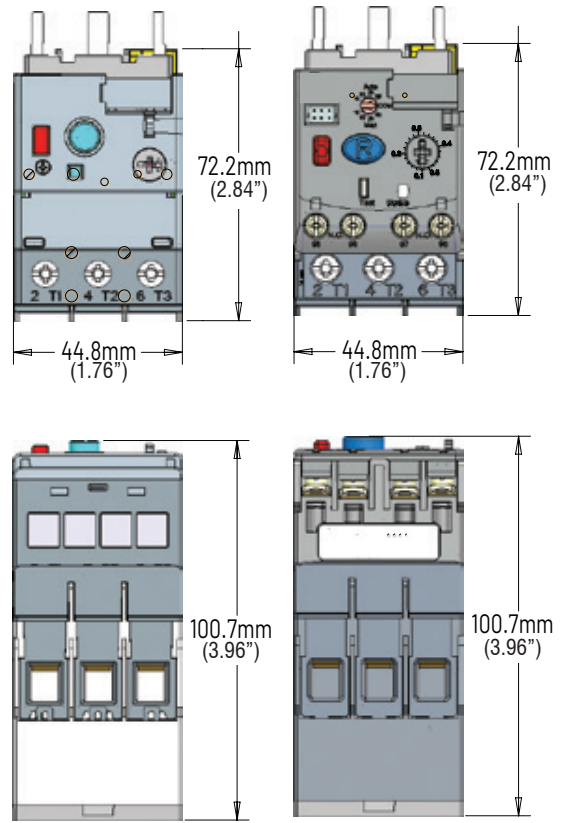
The mounting footprint of the CEP7 as compared to the CEP7-1 is identical for direct-mount configurations with CA7/CAN7 contactors. The mounting footprint of the CEP7 and CEP7-1 pass-thru versions is also relatively the same however the CEP7-1 offers an extended current sensing range by comparison. In addition, the CEP7-1 offers its own dedicated selection of DIN rail/panel-mount adapters.



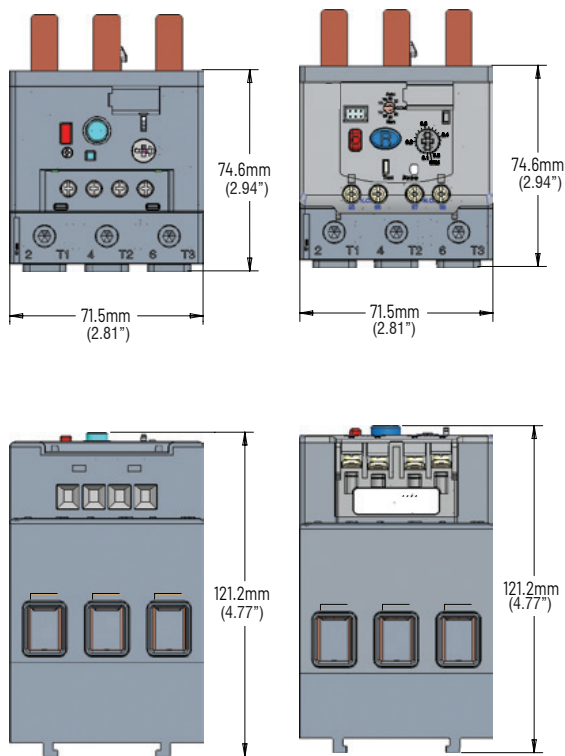
**CEP7 vs CEP7-1 – for CEP7-1 \_\_\_ B**



**CEP7 vs CEP7-1 – for CEP7-1 \_\_\_ D**



**CEP7 vs CEP7-1 – for CEP7-1 \_\_\_ E**

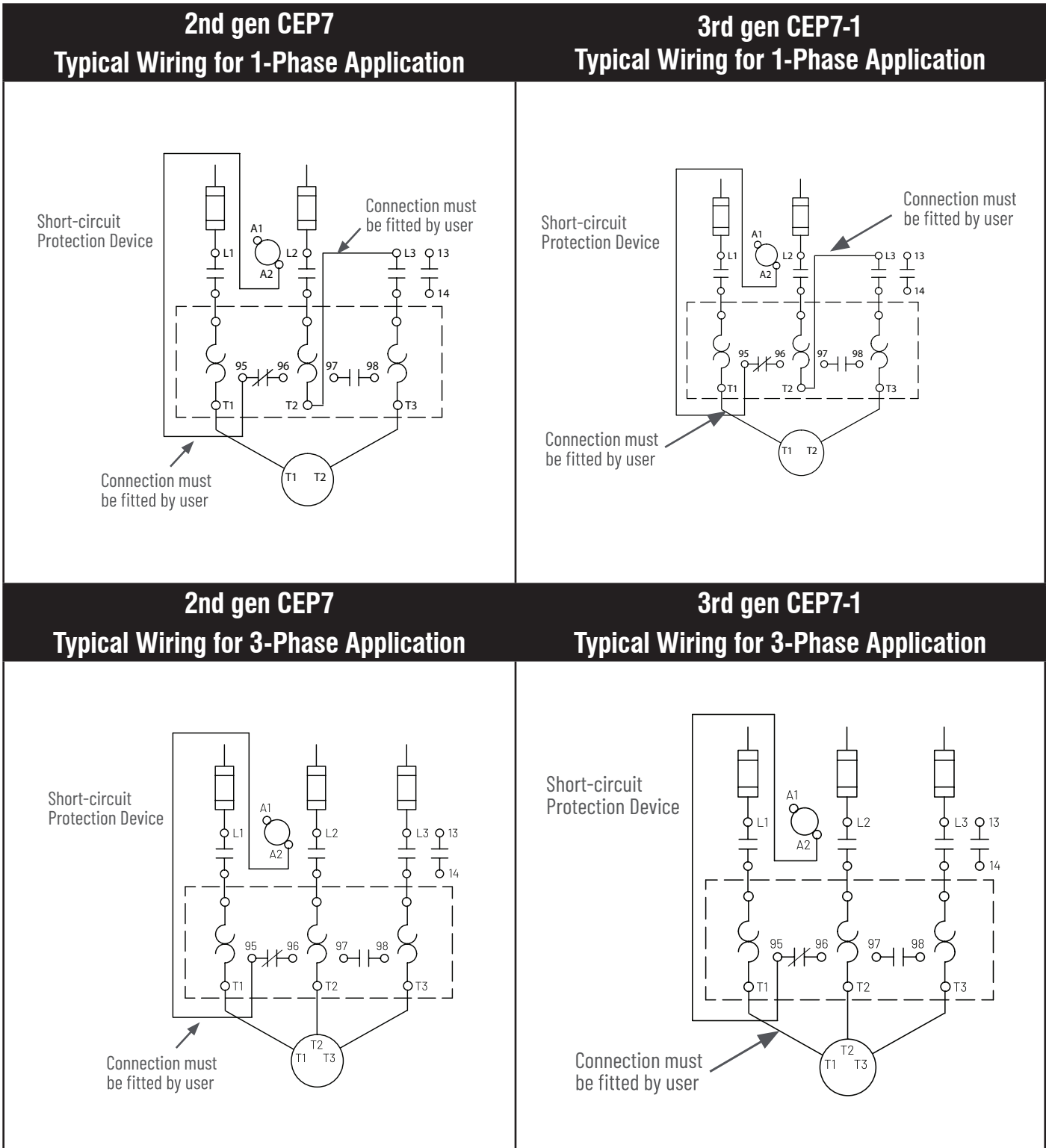


Dimensions are shown in millimeters (inches). Drawing scales vary by size of contactors and are intended to provide approximate visual comparisons only.

### Electrical Comparison of CEP7 to CEP7-1

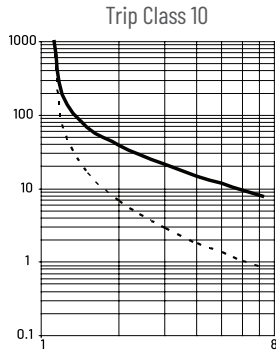
The terminal layout of the CEP7-1 is identical to that of the 2nd gen CEP7 overload. In addition, the CEP7-

1 offers a front-mounted communication port to connect optional accessory modules.

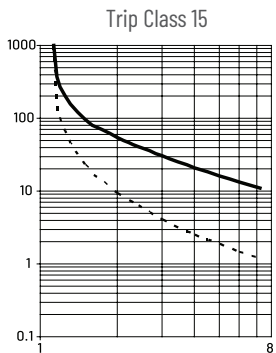


## Electrical Comparison of CEP7 to CEP7-1

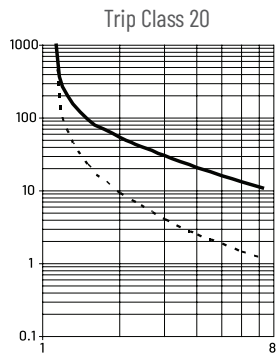
### CEP7 Overload Trip Curves



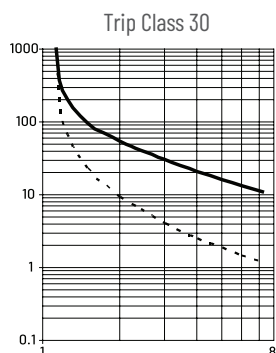
FLA Multiple



FLA Multiple



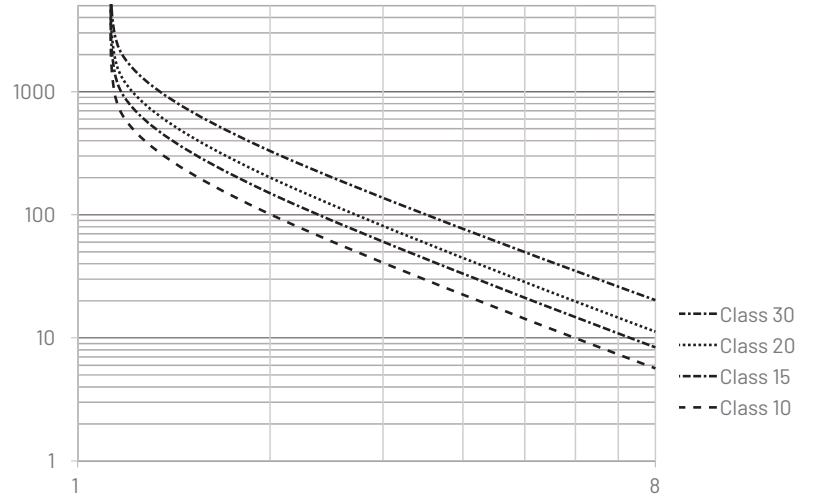
FLA Multiple



FLA Multiple

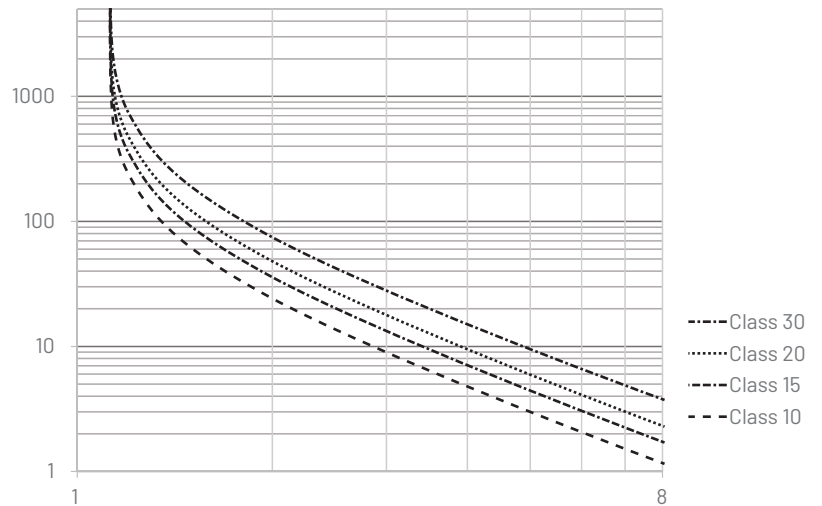
### CEP7-1 Overload Trip Curves

#### Cold Trip Curves



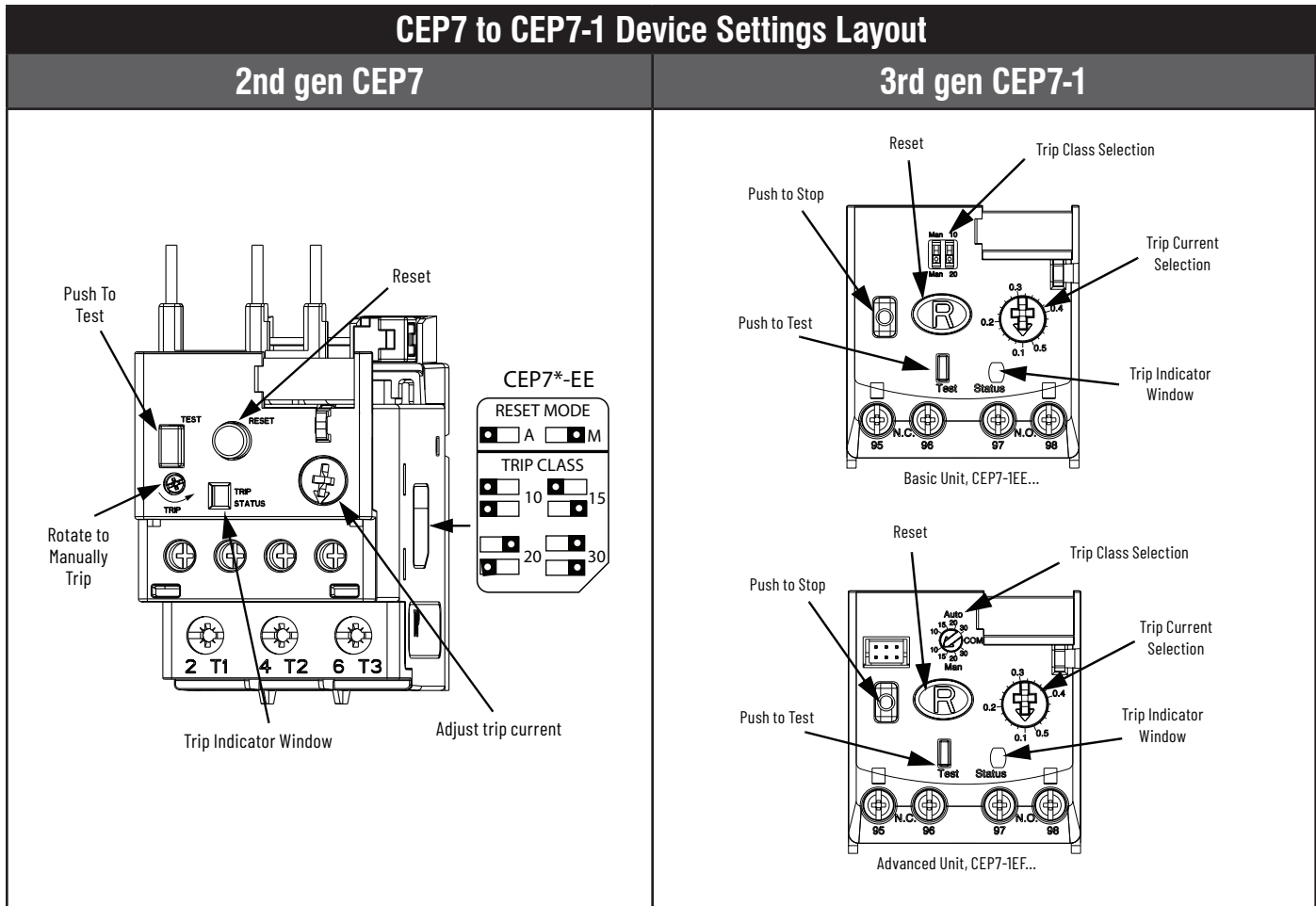
Class 30  
Class 20  
Class 15  
Class 10

#### Hot Trip Curves



Class 30  
Class 20  
Class 15  
Class 10

## Configuration Comparison of CEP7 to CEP7-1



The CEP7-1 Overload Relay used with either the optional CEP7-1EGJ ground fault/jam or CEP7-1ERR electronic remote reset accessory modules offer a diagnostic LED status indicator. Which can provide the operating state of the CEP7-1 relay and also fault/

status blink codes (note: the referenced accessory modules require externally supplied power so in the event of a fault condition, the LED status indicator will remain operational).

| Status Indicator Color | Solid/Flashing | Description  | Solution   |
|------------------------|----------------|--|--|
| <b>Green</b>           | Flashing       | Module powered   | -  |
|                        | Solid          | Module powered and motor current present   | -  |
| <b>Amber</b>           | Flashing       | Warning  | -  |
| <b>Red</b>             | Flashing       | Fault detected and overload relay tripped  | -  |
|                        | Solid          | Hardware fault; internal hardware fault detected and overload relay trip attempted | <ul style="list-style-type: none"> <li>Recover fault by cycling overload relay</li> <li>accessory supply voltage</li> <li>Verify that the supply voltage is within limits</li> <li>Verify the wiring to the terminals is correct</li> <li>Verify that the pins that connected the accessory to the overload relay are not damaged or misaligned</li> <li>Verify the operating temperature of the devices is within specification limits</li> </ul> |



The status LED indicates the module status by flashing a red trip code. The number of flashes followed by a pause identifies the specific trip code as shown in the table.

**CEP7 to CEP7-1 Networking Options**

The 2nd gen CEP7 product family (CEP7-ED1/EE version) included a side-mount accessory module that offered the EtherNet/IP communication protocol. For customers seeking a Sprecher+Schuh’s overload solution that supports networked communication, please consider the CEP9 electronic overload relay product family.





The CEP9 Electronic Overload Relay provides a flexible design and advanced intelligence. With real-time motor diagnostic information to proactively indicate when a motor is having a problem allowing you to efficiently troubleshoot. The CEP9 Electronic Overload Relay offers EtherNet/IP connectivity which

| No. of Flashes | Trip Type             |
|----------------|-----------------------|
| 1              | Overload Trip         |
| 2              | Phase Loss            |
| 3              | Ground Fault          |
| 5              | Jam                   |
| 8              | Short Circuit         |
| 10             | COM Loss <sup>❶</sup> |
| 11             | Test Trip             |



can be effectively adapted to those applications using a legacy E1 Plus networked overload solution. The figure below provides a high-level overview of Rockwell Automation’s global tiered overload portfolio offering.

**S+S Overload Overview**

| Basic   | Performance   | Premium  |
|---|---|--|
|  <p><b>CT7N</b><br/>(Thermal Bimetallic)</p> |  <p><b>CEP7-1</b><br/>(Electronic)</p> |  <p><b>CEP9</b><br/>(Parameter)</p> |
|   |   |  <p><b>CEP9</b><br/>(Networked)</p>  |

❶ If you experience repeated COM Loss trips, this may be due to a damaged communication interface cable. To test whether this is the case, unplug the communication interface cable from the communication port and wait at least 3 seconds before re-connecting. If the issue persists, consider replacing the communication interface cable.

## Component Cross-reference Information

For this particular component migration, there are two types of replacement categories as classified by Rockwell Automation. The following table references both replacement categories depending on the overload configuration. Examples of both categories are also provided below but are for reference only. Other configurations can and will vary by application.

**Direct Replacement:** a product that can be used in place of an earlier product without any user modifications or adjustments. A direct replacement provides backwards compatible form, fit, and function by emulating the earlier product.

**Engineered Replacement:** a product or family that can be used to migrate an earlier product or family and requires engineering changes to existing applications. An engineered replacement means that there is a form, fit or function change of the application that is not backward compatible and that does not emulate the earlier product.

**Example #1 – CEP7/CEP7-1 Direct- Mount to CA7**

DIRECT REPLACEMENT

**Example #2 – CEP7 Mounted to CA6  
Contactor/CEP7-1 Pass-Thru Overload Requiring External CTs**

ENGINEERED REPLACEMENT

3rd gen CEP7-1EF\_Z also requires the inclusion of (3) CTs' (current transformers)



**Directly Mounted CEP7 Solid State Overload Relays, Manual Reset**

| For Use With                                     | 2nd Generation |             |                                  | 3rd Generation |   |
|--|----------------|-------------|----------------------------------|----------------|---|
|  | Amp Range      | Catalog No. |                                  | Amp Range      | Catalog No.                                 |
| <b>Class 10 Manual Reset for 3Ø Applications</b> |                |             | <b>Class 10/20 - Manual Only</b> |                |   |
| CA7-9...CA7-23<br>CAN7-12, CAN7-16               | 0.1...0.5      | CEP7-ED1AB  | functional replacement →         | 0.1...0.5      | CEP7-1EEAB                                  |
|  | 0.2...1.0      | CEP7-ED1BB  | functional replacement →         | 0.2...1.0      | CEP7-1EEBB                                  |
|  | 1.0...5.0      | CEP7-ED1CB  | functional replacement →         | 1.0...5.0      | CEP7-1EECB                                  |
|  | 3.2...16       | CEP7-ED1DB  | functional replacement →         | 3.2...16       | CEP7-1EEDB                                  |
|  | 5.4...27       | CEP7-ED1EB  | functional replacement →         | 5.4...27       | CEP7-1EEEB                                  |
| CA7-30...CA7-55<br>CAN7-37, CAN7-43              | 1.0...5.0      | CEP7-ED1CD  | functional replacement →         | 1.0...5.0      | <i>no direct replacement;</i><br>CEP7-1EECP |
|  | 3.2...16       | CEP7-ED1DD  | functional replacement →         | 3.2...16       | <i>no direct replacement;</i><br>CEP7-1EEDP |
|  | 5.4...27       | CEP7-ED1ED  | functional replacement →         | 5.4...27       | CEP7-1EEED                                  |
|  | 9...45         | CEP7-ED1FD  | functional replacement →         | 11...55A       | CEP7-1EEFD                                  |

| <b>Class 10...30 Automatic or Manual Reset for 3Ø Applications</b> |           |           | <b>Class 10...30 - Automatic or Manual</b> |           |   |
|--|-----------|-----------|--|-----------|---|
| CA7-9...CA7-23<br>CAN7-12, CAN7-16                                 | 0.1...0.5 | CEP7-EEAB | functional replacement →                   | 0.1...0.5 | CEP7-1EFAB  |
|  | 0.2...1.0 | CEP7-EEBB | functional replacement →                   | 0.2...1.0 | CEP7-1EFBB  |
|  | 1.0...5.0 | CEP7-EECB | functional replacement →                   | 1.0...5.0 | CEP7-1EFCB  |
|  | 3.2...16  | CEP7-EEDB | functional replacement →                   | 3.2...16  | CEP7-1EFDB  |
|  | 5.4...27  | CEP7-EEEB | functional replacement →                   | 5.4...27  | CEP7-1EFEB  |
| CA7-30...CA7-55<br>CAN7-37, CAN7-43                                | 1.0...5.0 | CEP7-EECD | functional replacement →                   | 1.0...5.0 | <i>no direct replacement;</i><br>CEP7-1EFCP             |
|  | 3.2...16  | CEP7-EEDD | functional replacement →                   | 3.2...16  | <i>no direct replacement;</i><br>CEP7-1EFDP             |
|  | 5.4...27  | CEP7-EEED | functional replacement →                   | 5.4...27  | CEP7-1EFED  |
|  | 9...45    | CEP7-EEFD | functional replacement →                   | 11...55   | CEP7-1EFFD  |
|  | 11...55   | CEP7-EEQD | functional replacement →                   | 11...55   | CEP7-1EFFD  |
| CA7-60...CA7-97<br>CAN7-85   | 5.4...27  | CEP7-EEEE | functional replacement →                   | 5.4...27  | <i>no direct replacement;</i><br>CEP7-1EFEP             |
|  | 9...45    | CEP7-EEFE | functional replacement →                   | 11...55   | <i>no direct replacement;</i><br>CEP7-1EFFD + CEP7-1EPD |
|  | 18...90   | CEP7-EEGE | functional replacement →                   | 20...100  | CEP7-1EFGE  |
|  | 60...120  | CEP7-EEVE | functional replacement →                   | 20...100  | CEP7-1EFGE  |

| <b>Class 10...30 Automatic or Manual Reset for 1Ø Applications</b> |           |            | <b>Class 10...30 - Automatic or Manual</b> |           |            |
|--|-----------|------------|--|-----------|------------|
| CA7-9...CA7-23<br>CAN7-12...CAN7-16                                | 1.0...5.0 | CEP7S-EEPB | functional replacement →                   | 1.0...5.0 | CEP7-1EFCB |
|  | 3.2...16  | CEP7S-EERB | functional replacement →                   | 3.2...16  | CEP7-1EFDB |
|  | 5.4...27  | CEP7S-EESB | functional replacement →                   | 5.4...27  | CEP7-1EFEB |
| CA7-30...CA7-43<br>CAN7-37...CAN7-43                               | 9...45    | CEP7S-EETD | functional replacement →                   | 11...55   | CEP7-1EFFD |
| CA7-60...CA7-97<br>CAN7-85   | 18...90   | CEP7S-EEUE | functional replacement →                   | 20...100  | CEP7-1EFGE |

## Component Cross-reference Table

| For Use With                                     | 2nd Generation |             |                             | 3rd Generation |             |
|--|----------------|-------------|-----------------------------|----------------|-------------|
|  | Amp Range      | Catalog No. |                             | Amp Range      | Catalog No. |
| <b>Class 10 Manual Reset for 3Ø Applications</b> |                |             | <b>Class 10/20 - Manual</b> |                |             |
| CA8-09...12                                      | 1.0...5.0      | CEP7-ED1CP  | functional replacement →    | 1.0...5.0      | CEP7-1EECP  |
| CA7-9...CA7-23                                   | 3.2...16       | CEP7-ED1DP  | functional replacement →    | 3.2...16       | CEP7-1EEDP  |
| CAN7-12...CAN7-37                                | 5.4...27       | CEP7-ED1EP  | functional replacement →    | 5.4...27       | CEP7-1EEEP  |

| <b>Class 10...30 Automatic or Manual Reset for 3Ø Applications</b> |           |           | <b>Class 10...30 - Automatic or Manual</b> |           |            |
|--|-----------|-----------|--|-----------|------------|
| CA8-09...12  | 1.0...5.0 | CEP7-EECP | functional replacement →                   | 1.0...5.0 | CEP7-1EFCP |
| CA7-9...CA7-23   | 3.2...16  | CEP7-EEDP | functional replacement →                   | 3.2...16  | CEP7-1EFDP |
| CAN7-12...CAN7-37  | 5.4...27  | CEP7-EEEP | functional replacement →                   | 5.4...27  | CEP7-1EFEP |

| <b>Class 10...30 Automatic or Manual Reset for 1Ø Applications</b> |           |            | <b>Class 10...30 - Automatic or Manual</b> |           |            |
|--|-----------|------------|--|-----------|------------|
| CA8-09...12  | 1.0...5.0 | CEP7S-EEPP | functional replacement →                   | 1.0...5.0 | CEP7-1EFCP |
| CA7-9...CA7-23   | 3.2...16  | CEP7S-EERP | functional replacement →                   | 3.2...16  | CEP7-1EFDP |
| CAN7-12...CAN7-37  | 5.4...27  | CEP7S-EESP | functional replacement →                   | 5.4...27  | CEP7-1EFEP |

| <b>Class 10...30 Automatic or Manual Reset for 1Ø Applications</b> |           |                | <b>Class 10...30 - Automatic or Manual</b> |  |   |
|--|-----------|----------------|--|--|---|
| CA6-115...CA6-180<br>CA6-115-EI...CA6-180-EI<br>CAN6-180(EI)       | 30...150  | CEP7-EEHF      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-_-300 +<br>CEP7-1EFHZ                        |
|  | 40...200  | CEP7-EEJF      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-_-300 +<br>CEP7-1EFJZ                        |
| CA6-210-EI...CA6-420-EI<br>CA6-300-EI                              | 40...200  | CEP7-EEJG      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-_-300 +<br>CEP7-1EFJZ                        |
|  | 60...300  | CEP7-EEKG      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-_-300 +<br>CEP7-1EFKZ                        |
|  | 100...500 | CEP7-EELG      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-_-400/600 +<br>CEP7-1EFLZ                    |
| CA6-630-EI...CA6-860-EI  | 120...600 | CEP7-EEMH      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP7-CT-UL-600 +<br>CEP7-1EFMZ                       |
|  | 160...800 | CEP7-EENH      | functional replacement →                   |  | <i>no direct replacement</i>  |
| CA9-116...146(-EI)   | 30...150  | CEP7-EEHJ      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP9-ESM-I-146-200 +<br>CEP9-EIO...<br>+ CEP9-ECM... |
| CA9-190...205(-EI)   | 40...200  | CEP7-EEJJ      | functional replacement →                   |  | <i>no direct replacement;</i><br>CEP9-ESM-I-205-200 +<br>CEP9-EIO... +<br>CEP9-ECM... |
| CA9-265...370  |           | CEP7-CT-UL-300 | functional replacement →                   |  | <i>still current</i>  |
|  |           | CEP7-CT-CE-300 | functional replacement →                   |  | <i>still current</i>  |
| CA9-400...580  |           | CEP7-CT-UL-600 | functional replacement →                   |  | <i>still current</i>  |
|  |           | CEP7-UL-CE-400 | functional replacement →                   |  | <i>still current</i>  |

| <b>Load Side Lugs &amp; Accessories for Use with Contactors Only</b> |  |           |                          |  |                              |
|--|--|-----------|--------------------------|--|------------------------------|
| CEP7-EEHF, CEP7-EEJF   |  | CA6-HB2   | functional replacement → |  | <i>no direct replacement</i> |
| CEP7-EEJG, CEP7-EEKG,<br>CEP7-EELG, CEP7-EEHJ                        |  | CA6-HB3   | functional replacement → |  | <i>no direct replacement</i> |
| CEP7-EEHF...EP7-EEJF   |  | CA6-L180  | functional replacement → |  | <i>no direct replacement</i> |
| CEP7-EEJG, CEP7-EEKG,<br>CEP7-EELG, CEP7-EEJJ                        |  | CA6-L420  | functional replacement → |  | <i>no direct replacement</i> |
| CEP7-EEMH, CEP7-EENH   |  | CA6-L630  | functional replacement → |  | <i>no direct replacement</i> |
| CEP7-EEMH, CEP7-EENH   |  | CA6-L860  | functional replacement → |  | <i>no direct replacement</i> |
| CA6-115(-EI) to 180(-EI)   |  | CA6-TC180 | functional replacement → |  | <i>no direct replacement</i> |
| CA6-210-EI to 420-EI   |  | CA6-TC420 | functional replacement → |  | <i>no direct replacement</i> |
| CA6-630-EI to 860-EI   |  | CA6-TC860 | functional replacement → |  | <i>no direct replacement</i> |

| For Use With   | 2nd Generation |             |                          | 3rd Generation |                              |
|--|----------------|-------------|--------------------------|----------------|------------------------------|
|  | Amp Range      | Catalog No. |                          | For Use With   | Catalog No.                  |
| <b>Side Mount Modules</b>  |                |             |                          |                |                              |
| Side-mount to any CEP7-EE_, CEP7S-EE_  |                | CEP7-ERR    | functional replacement → | CEP7-1EF       | CEP7-1ERR                    |
|  |                | CEP7-EJM    | functional replacement → | CEP7-1EF       | CEP7-1EGJ                    |
|  |                | CEP7-EPT    | functional replacement → |                | <i>no direct replacement</i> |
|  |                | CEP7-ETN    | functional replacement → |                | <i>no direct replacement</i> |
| Side-mount to any CEP7-EE_CEP7S-EE_ Must used with CEP7-CBCT_ Current Sensor |                | CEP7-EGF    | functional replacement → | CEP7-1EF       | CEP7-1EGJ                    |
|  |                | CEP7-EGJ    | functional replacement → | CEP7-1EF       | CEP7-1EGJ                    |
| All modules with DIP Switches  |                | CEP7-EMC    | functional replacement → | CEP7-1EGJ      | CEP7-1EMC                    |

| <b>CEP7 Ground Fault Sensor Selection</b>           |                 |      |            |                          |                      |
|---|-----------------|------|------------|--------------------------|----------------------|
| For use with CEP7-EGF and CEP7-EGJ and contactor... | CA7-9...CA7-37  | 45A  | CEP7-CBCT1 | functional replacement → | <i>still current</i> |
|   | CA7-9...CA7-85  | 90A  | CEP7-CBCT2 | functional replacement → | <i>still current</i> |
|   | CA7-9...CA9-190 | 180A | CEP7-CBCT3 | functional replacement → | <i>still current</i> |
|   | CA7-9...CA9-400 | 420A | CEP7-CBCT4 | functional replacement → | <i>still current</i> |

| <b>Accessories</b>  |  |  |            |                          |                                     |
|---|--|--|------------|--------------------------|-------------------------------------|
| CEP7-EJM, CEP7-EGF, CEP7-EGJ, CEP7-EPT, CEP7-ERR          |  |  | CEP7-ERID  | functional replacement → | CEP7-1ERR, CEP7-1EGJ<br>CEP7-ERID   |
| CEP7-ERID   |  |  | CEP7-NCRID | functional replacement → | CEP7-1ERR, CEP7-1EGJ<br>CEP7-1ERIDN |
| CEP7-ED1...B, CEP7(S)-EE...B                              |  |  | CEP7-EPB   | functional replacement → | CEP7-1_B<br>CEP7-1EPB               |
| CEP7-ED1...D, CEP7(S)-EE...D                              |  |  | CEP7-EPD   | functional replacement → | CEP7-1_D<br>CEP7-1EPD               |
| CEP7(S)-EE...E  |  |  | CEP7-EPE   | functional replacement → | CEP7-1_E<br>CEP7-1EPE               |
| all CEP7-ED1, CEP7-EE                                     |  |  | CEP7-BC8   | functional replacement → | CEP7-1__<br>CEP7-1BC8               |
| CEP7 all  |  |  | CEP7-EMR*  | functional replacement → | CEP7-1__<br>CEP7-1EMR*              |
| CEP7-ED1(all), CEP7-EE_B, CEP7-EE_D, CEP7-EE_E, CEP7-EE_P |  |  | CEP7-ERA   | functional replacement → | CEP7-1__<br>CEP7-1ERA               |

| <b>CEP7 Intelli-button Reset kit with Side Mount Module</b> |  |  |           |                          |                              |
|---|--|--|-----------|--------------------------|------------------------------|
| Remote Reset Only   |  |  | CEP7-IB1  | functional replacement → | CEP7-1EF<br>CEP7-1IB1        |
| Jam and Remote Reset  |  |  | CEP7-IB2  | functional replacement → | CEP7-1EF<br>CEP7-1IB2        |
| Thermistor Relay and Remote Reset                           |  |  | CEP7-IB3  | functional replacement → | <i>no direct replacement</i> |
| Ground Fault and Remote Reset                               |  |  | CEP7-IB4  | functional replacement → | CEP7-1EF<br>CEP7-1IB4        |
|   |  |  | CEP7-IB5  | functional replacement → | CEP7-1EF<br>CEP7-1IB5        |
|   |  |  | CEP7-IB6  | functional replacement → | <i>no direct replacement</i> |
|   |  |  | CEP7-IB7  | functional replacement → | <i>no direct replacement</i> |
| Ground Fault and Jam and Remote Reset Module                |  |  | CEP7-IB8  | functional replacement → | CEP7-1EF<br>CEP7-1IB8        |
|   |  |  | CEP7-IB9  | functional replacement → | CEP7-1EF<br>CEP7-1IB9        |
|   |  |  | CEP7-IB10 | functional replacement → | <i>no direct replacement</i> |
|   |  |  | CEP7-IB11 | functional replacement → | <i>no direct replacement</i> |



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*Product Migration:*  
**Electronic Overload Relay  
CEP7 to CEP7-1**

PUB ID: MIGRATION-CEP7-1\_v3      02/2023

Sprecher + Schuh has provided reliable control and protection solutions for its customers since 1903.

Today, Sprecher + Schuh offers a wide range of low-voltage industrial control products, including contactors, a variety of relays, starters, push buttons, switches, terminals and controllers, to name a few. All of our products are crafted with precision and tested rigorously for performance — far exceeding industry standards. Moving forward, we continue along the path of constantly seeking innovative ways to provide solutions for our customers. It is by this philosophy that Sprecher + Schuh has come to be the industrial control manufacturer of choice for many customers around the globe seeking quality, reliability, and a name they can trust.