# **Series CA7 Power Protection**Contactors







Compact dimensions with maximum performance! Sprecher + Schuh's CA7 contactors control motors up to 75HP, in frame sizes ranging from 45mm (1-3/4") to a maximum of 72mm (2-3/4") wide. Because of its modular design, CA7 is flexible and easy to use. All CA7 contactors use the same accessories, reducing the need to stock additional inventory. They are also mechanically and electrically compatible with Sprecher + Schuh's CEP7 electronic overload relay and KT9 motor circuit controller. This provides easy, clean installation for a variety of motor starter applications. Whether part of a system or for individual use, the CA7 is the right contactor for the job. The CA7 line includes a number of contactors designed and labeled for specific industrial applications:

- CA7 contactors meet IEC, UL and CSA standard requirements.
- CAN7 contactors are UL Listed and rated in accordance with the requirements of NEMA standards publication ICS-2 (NEMA rated).
- CNX contactors are standard CA7 contactors that have been tested, approved and labeled by UL for heating ventilation and air conditioning (HVAC) applications.
- CAL7 Lighting Contactors are used to control a wide variety of lighting loads.
- CA7Y2 hydraulic elevator wye-delta contactors are a special application that consists of a pair of mechanically linked contactors with sufficient auxiliaries for electronic interlocks.

# Advanced safety and reliability features

The entire CA7 line features mechanically linked contacts, sometimes referred to as "positively guided contacts" or "force guided contacts". If a main power pole welds, adequate clearances exist ( $\geq 0.5$ mm) to ensure that the auxiliary contacts do not change state when coil power is removed and the device tries to open. This is a requirement in safety circuits per IEC 60947-5-1.

Reliability is further assured by "cross-stamped" auxiliary contacts, which provide multi-point reliability in low current, low voltage applications.

# **Advantages of Electronic DC Coil**

- Dramatically decreased wattage consumption during pull-in.
- Coil design brings the height of the contactor back down to the same size as the AC version.
- Reduced heat dissipation and need for cooling equipment in control cabinets.
- Built-in surge suppression.

## Big performance in a small package

A wide selection of contactors in four frame sizes covers the entire CA7 horsepower range (up to 75HP @ 460/575V). Six of the contactors are only 45mm wide, an extremely small footprint for such rugged performance. A number of design features account for this efficiency, including high contact pressure and "bounce-free" contacts, allowing the devices to handle the high starting currents typical of modern motors.

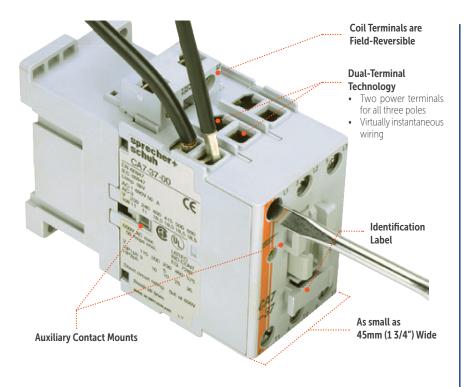
### Type 1 and Type 2 Coordination and SCCR

Whether you're designing motor circuits for use in North America, Europe or any other part of the world, all CA7 contactors have been designed and tested with respect to Type 1 and Type 2 short circuit coordination.

Starter assemblies are now required to have high fault testing of the short-circuit device + contactor + overload relay and have the UL test data and provide the SCCR label.



# **Modular Design with Universal Accessories**



#### **Accessories**

All accessories are interchangeable among all CA7 contactors and CS7 control relays. Top and side mount auxiliary contacts are available.



#### **Auxiliary Contact Blocks**

- 1- and 2-pole side-mounts and 2- and 4- pole top-mounts.
- Two way numbering for right or left side mounting on the contactor
- · Snap-on design



#### Pneumatic Timing Module

The contacts in the Pneumatic Timing Element switch after the delay time. The contacts on the main contactor continue to operate without delay.



#### Reversing Power Wiring Kit

Provides a solid "wireless" connection for reversing applications. May be used with both solid state and thermal O/L relays.



# Electronic Timing Module – Wye-Delta Transition Timer

- Switching delay at 50ms
- Continuous adjustment range
- High repeat accuracy



#### 3 Pole Paralleling Link

Allows smaller CA7 contactors to be used on single-phase resistive applications By paralleling the three power poles, the contacts see only a portion of the actual

# See Sprecher + Schuh's general catalog for complete information and pricing on CA7 contactors and accessories.

#### **CA7 Selected Horsepower Ratings**

|                   | AC-1<br>Amp Rating<br>40°C | Maximum Horsepower |       |             |       |       |       |           | [CANT]         |
|-------------------|----------------------------|--------------------|-------|-------------|-------|-------|-------|-----------|----------------|
| Catalog<br>Number |                            | Single Phase       |       | Three Phase |       |       |       | Max. Aux. | [CAN7]<br>NEMA |
|                   |                            | 115V               | 230V  | 200V        | 230V  | 460V  | 575V  | Contacts  | Rating         |
| CA7-9             | 32                         | 1/3                | 1     | 2           | 2     | 5     | 7-1/2 | 9         | ~              |
| CA7-12            | 32                         | 1/2                | 2     | 3           | 3     | 7-1/2 | 10    | 9         | 00             |
| CA7-16            | 32                         | 1                  | 3     | 5           | 5     | 10    | 15    | 9         | 0              |
| CA7-23            | 32                         | 2                  | 3     | 5           | 7-1/2 | 15    | 15    | 9         | ~              |
| CA7-30            | 65                         | 2                  | 5     | 7-1/2       | 10    | 20    | 25    | 9         | ~              |
| CA7-37            | 65                         | 3                  | 5     | 10          | 10    | 25    | 30    | 9         | 1              |
| CA7-43            | 85                         | 3                  | 7-1/2 | 10          | 15    | 30    | 30    | 8         | 2              |
| CA7-55            | 85                         | 5                  | 10    | 15          | 20    | 40    | 40    | 8         | ~              |
| CA7-60            | 100                        | 5                  | 10    | 15          | 20    | 40    | 50    | 8         | ~              |
| CA7-72            | 100                        | 5                  | 15    | 20          | 25    | 50    | 60    | 8         | ~              |
| CA7-85            | 100                        | 7-1/2              | 15    | 25          | 30    | 60    | 60    | 8         | 3              |
| CA7-97            | 130                        | 10                 | 20    | 30          | 30    | 75    | 75    | 8         | ~              |



For more information, or to contact your Sprecher + Schuh representative, visit www.sprecherschuh.com