

Series CA5 Contactors

A

Contactors

CA5

The complete contactor for heavy industrial applications from 500HP to 900HP

CA5 Series contactors provide large horsepower performance with a design that is up to 40% smaller than traditional contactors of this rating. The entire line is modularly designed for easy inspection, contact replacement and coil changeout. All maintenance can be performed from the front so that mounting can be accomplished with no wasted space on the sides.

The contactor for large horsepower applications

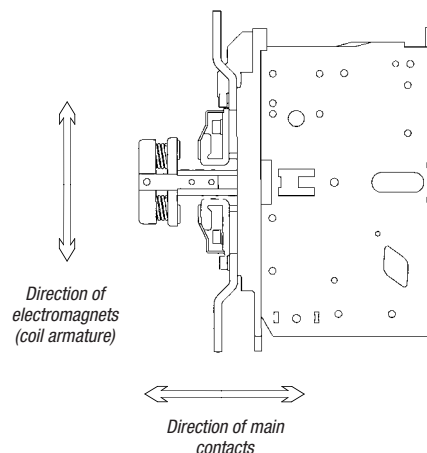
The CA5 series consists of four contactors in two frame sizes covering motors from 500 to 900 HP (at 460V/575V). This line is well suited for heavy industrial applications utilizing large machinery and equipment such as rock quarries and mines, or for any large horsepower application where a rugged and dependable contactor is needed.



Specially designed shock-free contact system

A characteristic of contactors in this size class is to transmit intense impact forces during operation. This is caused by the heavy magnetic armatures of the core, which can cause contact "bounce." CA5 contactors, however, are designed so that the operating planes of the electro-

magnets and the contacts are opposed to each other by 90°. This results in a bounce-free contact system, increasing the contactor's mechanical life and raising contact reliability.



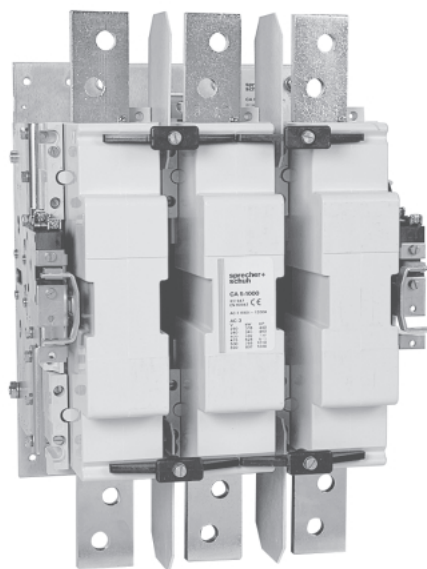
Rugged and reliable

A massive steel framework supporting the magnet system ensures high stability in all applications. Low-wear materials for bearings and sliding surfaces, as well as generously dimensioned magnet-pole faces result in above average mechanical life with a minimum of maintenance. Despite their rugged construction, overall contactor weight has been reduced considerably permitting simpler panel construction and easier assembly.



280mm
(≈11")

900A
1100A

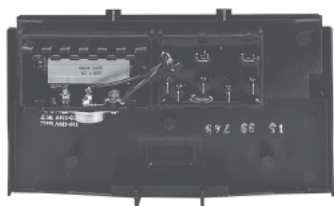


334mm
(≈13 3/16")

1200A
1350A

Unique coil “feeder group” offers many advantages

CA5-700 and 860 contactors are equipped with a special “feeder group” for the coil that accommodates AC control voltages of 50 or 60Hz, and a wide range of DC voltages.



This coil arrangement eliminates noise and provides very low pickup and hold-in current. In addition, the dropout time of the coil can be adjusted within one of three ranges.

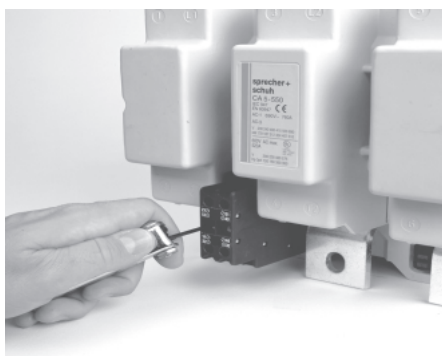
Normal Drop (150 to 200ms): for prompt reaction of contactor to a breaking command (factory setting).

Delayed Drop (0.5 to 1s): where it is necessary for the contactor to be immune to short power supply interruptions or uncertain control devices.

Fast Drop (about 20ms): for safety applications where instant dropout is required.

Adjustable auxiliary contacts

CA5 contactors can be equipped with a maximum of four NO and four NC auxiliary contacts. In addition, the closing time of the auxiliary contacts (on CA5-700 & 860 contactors) can be adjusted to meet individual control requirements.

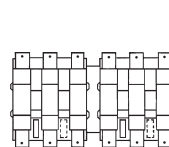


Add-on fourth pole

In many applications, the neutral also needs to be switched. All CA5 contactors can be fitted with a 4th pole on either the left or right side of the contactor. This switched neutral is available as an accessory that can easily be installed in the field.

Two choices for interlocking reversing contactors

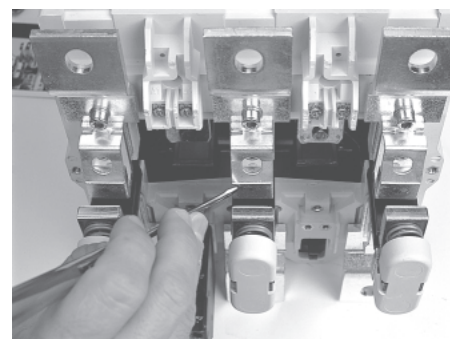
Unique to the CA5 range is the ability to mechanically interlock reversing contactors in either a horizontal or vertical orientation. This feature allows maximum flexibility when laying out panels.



Horizontal mechanical interlock



Vertical mechanical interlock

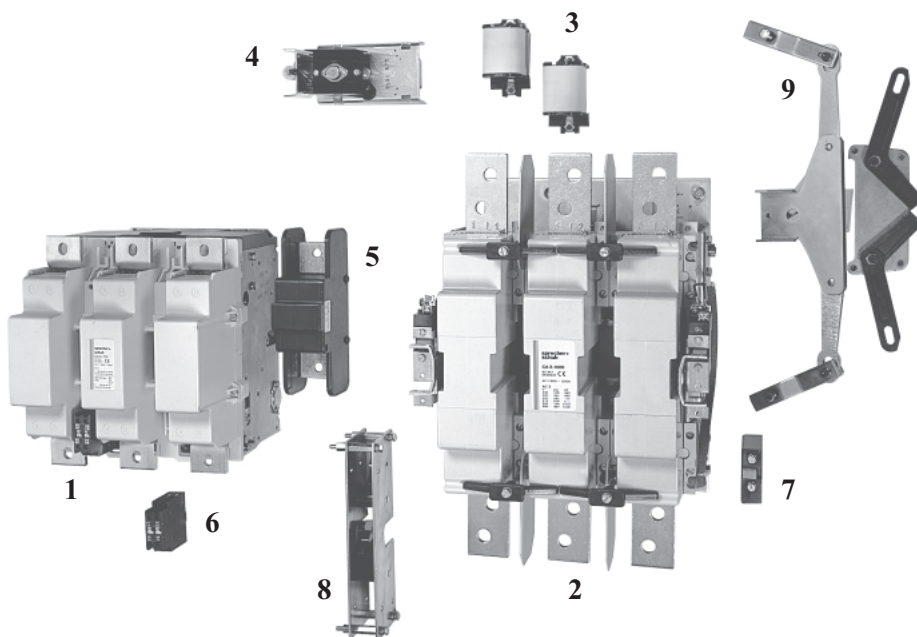


Simple main contact inspection and easy coil change

Modular, convenient design

The CA5 line is modularly designed for easy inspection, coil change and contact replacement. Maintenance can be performed from the front so that mounting requires no additional space. Even with the installation of mechanical interlocks and auxiliary contact blocks, the units can be flush mounted side by side, saving panel space.

- 1 CA5-700 Contactor
- 2 CA5-1000 Contactor
- 3 Coil Pair
- 4 Feeder Group
- 5 4th Pole (Neutral Switching)
- 6 Auxiliary Contact Block
- 7 Auxiliary Contact Block
- 8 Mechanical Interlock (horizontal)
- 9 Mechanical Interlock (vertical)



A full range of CA5 accessories is available, including a unique mechanical interlock that allows vertical mounting of contactors (see explanation above)



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