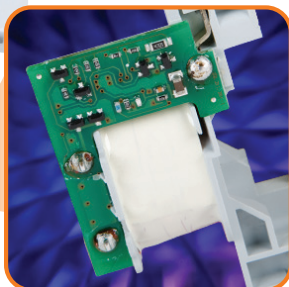


# Series CA7 Contactors with Electronic DC Coils



Typical for 12 V & 24 V DC models



Sprecher + Schuh's line of CA7 industrial contactors are also available with a low consumption electronic coil. The electronic DC coil with low power consumption is integrated in a small contactor body and draws less than 1.7W/70mA holding power. The electronic design results in a smaller and more energy efficient contactor versus previous DC versions. This design eases wiring and promotes a uniform panel appearance.

- Electronic DC Coil with integrated (built-in) diode
- Extremely low inrush
- Coil selections 12V and 24V are same size as AC coil contactors
- Coil selections 36-250V DC have an added power module of only 24mm
- Draws less than 1.7W/70mA
- RoHS compliant
- NEMA labeled contactors available
- IP2X finger protection

## Advantages of Electronic DC Coil

CA7-9E through CA7-55E DC contactors are provided with electronic coils that dramatically decrease wattage consumption during pull-in. This allows the use of smaller power supplies. The electronic DC coil design are the same size as the AC version for 12V or 24V. The 36V...250V versions are only slightly taller due to the power module "backpack".

## Advanced safety and reliability features

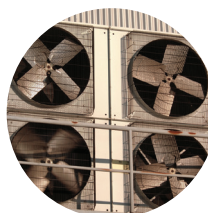
The entire CA7 line features mechanically linked contacts, sometimes referred to as "positively guided contacts" or "force guided contacts." If a main power pole welds, adequate clearances exist ( $\geq 0.3\text{mm}$ ) to ensure that the auxiliary contacts do not change state when coil power is removed 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.

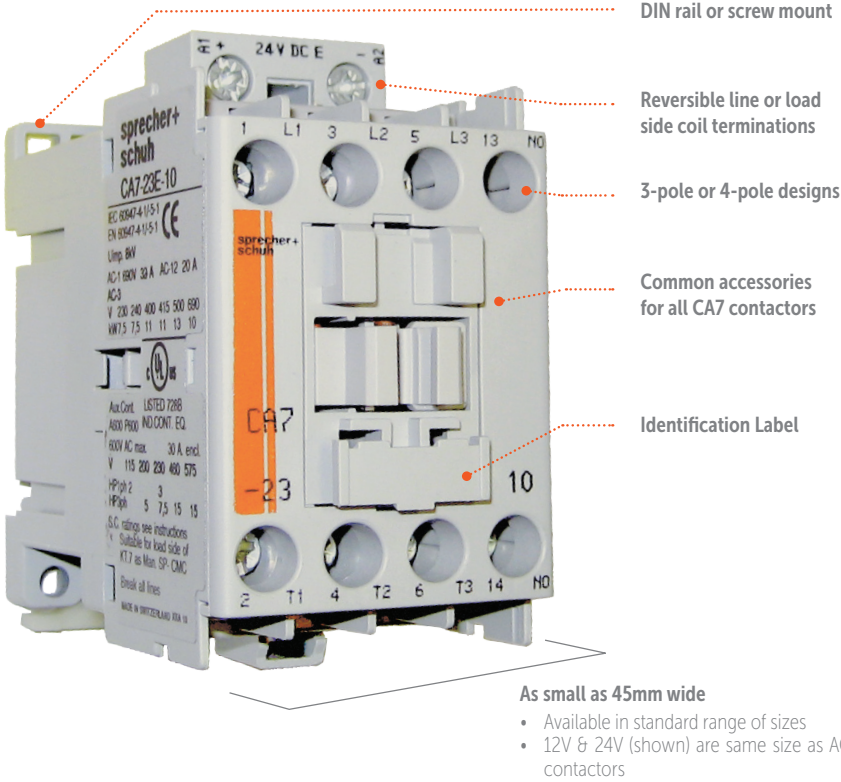
## Direct Control from PLC

The low power consumption contactor designed to control motors and other loads is especially aligned to the specific requirement of electronic control circuits. The low power consumption allows direct control through PLC's without the need for interposing relays. This means smaller power supplies which reduce panel space and cost.

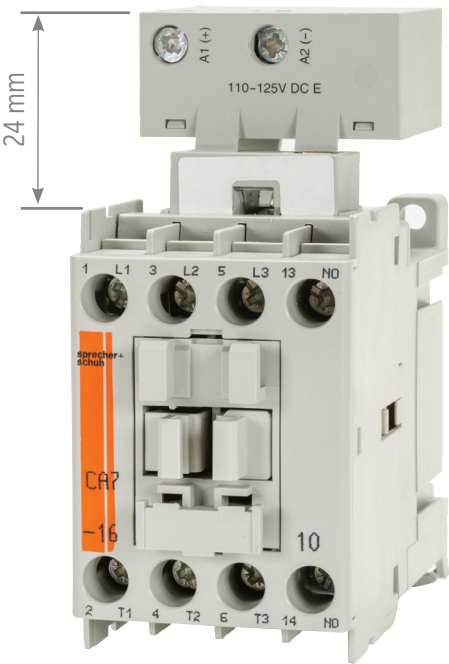
## Accessories

Most standard accessories are interchangeable among CA7 electronic coil contactors (excludes electronic timers). This minimizes inventory requirements and maximizes flexibility. Top and side mount auxiliary contacts are available. A mechanical interlock with two built-in NC auxiliaries also provides electrical interlocking if desired. Pneumatic timers, surge suppressors and electronic interface modules provide solutions for even the most complex applications.





**Power Module “Backpack”**  
Voltages of 36V DC and greater are supplied with backpack module as standard.

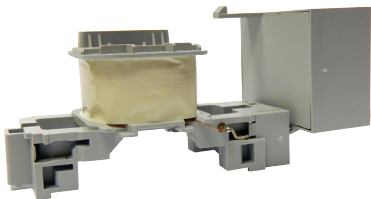


As small as 45mm wide

- Available in standard range of sizes
- 12V & 24V (shown) are same size as AC contactors

Ratings for Switching AC Motors (AC2 / AC3 / AC4)						3-Pole Open Type	Also Available	
UL/CSA HP (60 Hz)						Catalog Number Prefix	4-pole	Reversing
1 Ø		3 Ø						
115V	230V	200V	230V	460V	575V			
1/2	1 1/2	2	2	5	7-1/2	CA7-9E	✓	✓
1/2	2	3	3	7-1/2	10	CA7-12E	✓	✓
1	3	5	5	10	15	CA7-16E	✓	✓
2	3	5	7-1/2	15	15	CA7-23E	✓	✓
2	5	7-1/2	10	20	25	CA7-30E		✓
3	5	10	10	25	30	CA7-37E		✓
3	7-1/2	10	15	30	30	CA7-43E		✓
5	10	15	20	40	40	CA7-55E		✓

All CA7 contactors are stocked and delivered with the coil terminals located on the line side (top) of the contactor. This is the typical configuration when using the contactor with an overload relay. CA7 coils can easily be reversed in the field. They are also available for order with the coils reversed from the factory.



Coil Data - Electronic DC

Voltage Range			Coil Consumption & Operating Times						
Voltage Code	Nominal Voltage US (VDC)	Ratings [XU <sub>s</sub> ]	Pickup (W)		Hold-in (W)		Dropout Voltage [XU <sub>s</sub> ]	Pickup [ms]	Drop-out [ms]
			CA7-9E... CA7-37E	CA7-43E... CA7-55E	CA7-9E... CA7-37E	CA7-43E... CA7-55E			
12E	12	0.7...1.25	10/17	16/25	1.7	2.5	0.3...0.4	25...50	27...45
24E	24	0.7...1.25	10/17	16/25	1.7	2.5			
36E	36...48	0.7...1.25	10/17	16/25	1.7...1.9	2.5...2.7			
48E	48...72	0.8...1.25	10/17	16/25	1.7...1.9	2.5...2.7	0.3...0.4	25...50	23...33
110E	110...125	0.7...1.12	12/19	16/26	2.0...2.1	2.7...2.8			
220E	220...250	0.8...1.1	14/22	18/29	2.7...3.0	3.5...4.0			

See catalog for complete coil and consumption details.

For more information, or to contact your Sprecher + Schuh representative, visit [www.sprecherschuh.com](http://www.sprecherschuh.com)