

Series CAL7 & CALV7 Contactors

Lighting and Special Use



Shown: CAL7 - Electrically Held Contactor

Sprecher + Schuh CAL7 electrically held contactors and CALV7 mechanically held contactors are cUL rated and labeled for tungsten and ballast lighting duty applications at 20, 30, and 60 amperes respectively. These contactors are well suited to handle the high inrush currents typical of this application as well as other non-motor (resistive) loads.

- **Tungsten Filament Lamps –**
 - General and special purpose incandescent
 - Infrared
 - Sodium Iodine
- **Discharge Lamps (with Ballast) –**
 - Fluorescent lamps
 - Mercury vapor
 - High/low pressure sodium,
 - Quartz,
 - Halogen metal-vapor
- **Mixed Light Lamps**



In application...

The tungsten filaments of incandescent lamps have a very low ohmic resistance when cold. As a result, the closing current is very high but also very short.

The closing current of discharge lamps (lighting with ballast) is highly inductive (due to series-connected transformers or chokes), and its duration depends on the lamp type.

In general, North Americans refer to Lighting Contactor ratings in amperes without distinction between incandescent or ballast type of load. The lighting contactor selection table provided on the following page is for North American use, so ratings are selected for mixed lamp loads which account for the higher incandescent inrush.

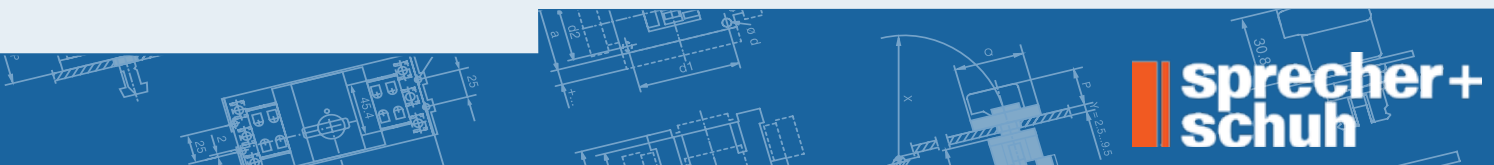
Europeans usually separate the values for incandescent from discharge (ballast) lighting. Both values are provided in the technical section of our general catalog and may be more appropriate for those applying by CE standards.

Electrically held contactors

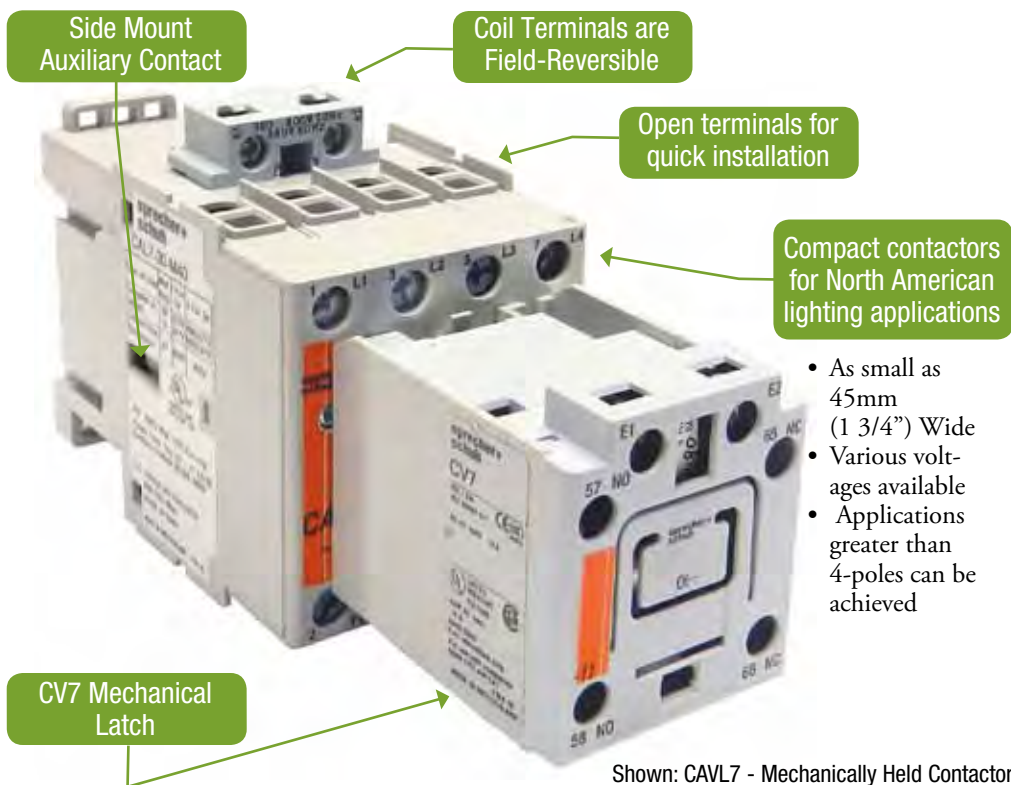
Electrically held contactors are available for use where the control signal is activated by a timer or other maintained electrical signal. The coil is energized as long as the contactor is closed. This design is well suited for applications where lights are operated frequently or where the control panel is in a remote location.

Mechanically held contactors

Mechanically held contactors are available for applications where quiet operation or critical lighting is required, i.e., institutions, hospitals and residential/commercial areas. After the contactor closes, the voltage is disconnected from the operating coil and the contactor is held closed by the mechanical latch. Built-in clearing interlocks allow control from either a momentary or maintained pilot device for the separate “pull-in” and “release” functions.



Series CAL7 & CAVL7 Features

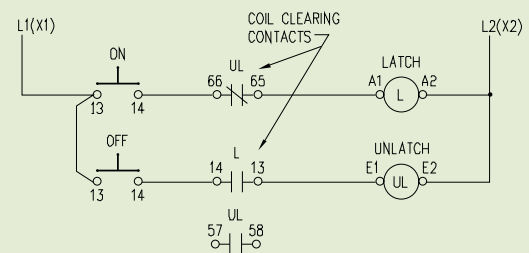


Shown: CAVL7 - Mechanically Held Contactor

CAVL7

Operation of Mechanically Held Contactor with "ON-OFF" Pushbutton

Catalog number "CAVL7" consists of a CAL7 contactor with CV7-11 mechanical latch. Depressing the "ON" button energizes the "L" coil and the contactor closes. The mechanical latch locks the contactor in the closed position. The "L" coil is then de-energized by the coil, clearing contact "UL" (Terminals 65-66) to remove voltage. Depressing the "OFF" button energizes the "UL" coil, and the mechanical latch releases the contactor. The "UL" coil is immediately de-energized by the coil clearing contact "L" (Terminals 13-14) to remove voltage. The contactor is now open.



Lighting Contactors with AC Coil

Continuous Ampere Rating	Number of Poles	Standard Auxiliary Contacts		Electrically Held	Mechanically Held
				Open Type	Open Type
		NO	NC	Catalog Number	Catalog Number
20	4	0	0	CAL7-20-M40-*	CAVL7-20-M40-*-L10
30	4	0	0	CAL7-30-M40-*	CAVL7-30-M40-*-L10
60	4	0	0	CAL7-60-M40-*	CAVL7-60-M40-*-L10
100	3	1	1	CA6-115-11-*	~
150	3	1	1	CA6-180-11-*	~
200	3	1	1	CA6-210-E1-11-*	~

The CA6 contactors shown are selections based on available technical data. These CA6 units do not bear a cUL rating for use as a lighting contactor. "-E1" designates contactor with Electronic Interface coil.

Replace (*) with Coil Code

CA(L)7 Coil Codes

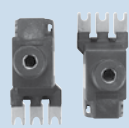
AC Coil Code	Voltage Range	
	50 Hz	60 Hz
24Z	24V	24V
120	110V	120V
208	~	208V
220W	200V-220V	208V-240V
240	220V	240V
277	240V	277V
380	380V-400V	480V
480	440V	480V
600	550V	600V

Other voltages available. Lighting contactor applications greater than 4-poles can be achieved. Contact Sprecher + Schuh representative for assistance.



Accessories

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



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 load.



Auxiliary Contact Blocks for Side Mounting –

- 1 and 2-pole
- Two way numbering for right or left mounting on the contactor
- Snap-on design - mounts without tools
- Electronic compatible contacts down to 24V, 20mA
- Late break / early make (L) available
- Mutual positive guidance to the main contactor poles (excluding L-types)

Contact your
Sprecher + Schuh
representative
for complete information
and pricing on
Enclosed CAL7 / CAVL7
contactors.

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