

CS7 Industrial Control Relays

Reliable, general
purpose relays for heavy
duty applications

CS7 Industrial Control Relays share the same design as our modern CA7 contactor range. They are compact and designed for heavy duty industrial control applications where reliability and versatility are essential.

Introducing Three CS7 Models for any Control Application

The standard CS7 relay utilizes x-stamped contact technology that reliably switches typical control circuits up to 10A (AC-15). For master relay circuits requiring higher amp capacity, the CS7-M Master Relay is designed for control circuits up to 15A (AC-15).



For applications requiring low energy switching such as PLC's or other electronic circuits, the CS7-B relay with bifurcated contacts is designed for 20 million operations down to a signal level of 5V @ 3mA.

The bifurcated H-bridge design divides each movable gold contact into two sections at the tip of the spanner which provides a higher degree of reliability for low signal applications.

Auxiliary components provide a range of options

CS7 auxiliary components convert the basic four pole relay into a:

- 5, 6, 7, 8, 9, 10, 11 or 12 pole relay
- 4, 5, 6, 7 or 8 pole latched relay
- 4, 5, 6, 7 or 8 pole relay with two pneumatic time delay contacts
- Mechanically latched 4, 5, 6, 7 or 8 pole relay
- Also available are top mounted bifurcated auxiliary contacts which operate down to 5V @ 3mA.

Since the CS7 uses the same auxiliary components as our CA7 contactors, inventory is reduced.



Mechanically linked contacts for safety

CS7 control relays are perfect for fail-safe control circuits. An interlock contact design, which maintains minimum 0.3mm clearance, prevents the NC contact from reclosing if the NO contact is welded when in operation. This feature not only includes the base contact poles, but extends to the front and/or side mounted auxiliary contacts. This is a requirement in safety circuits and is backed by SUVA-PRO certification.

Maximum convenience and safety

CS7 relays are designed for fast and trouble free installation and maintenance. All components are modular and snap-on without the use of tools. The relays are DIN-rail mountable so they can be installed, moved or replaced quickly. All terminals are "captive" and are shipped in the open position, saving you an operation. The entire line is UL Listed, CSA Certified and CE marked and offers finger and back of hand protection to the strictest international standards.


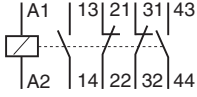
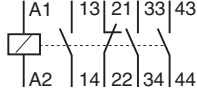
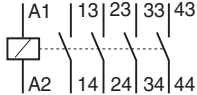
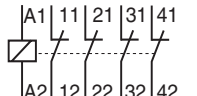
Effortless installation

CS7 relays are DIN-rail mountable for instant installation and modification. Fittings are also included for base mounting. All terminals are clearly marked and ready for installation with either manual or power screwdrivers. A complete identification system is also available using self-adhesive labels, paper tags or plastic clip-on tags.



The base four pole CS7 relay can be expanded up to twelve poles with the addition of front and side mount auxiliaries

Series CS7 Control Relays - 4 Pole, AC Control ①④

CS7 Relay	Contact Arrangement and Numbering	Contacts ①		AC Operation
		NO	NC	Catalog Number
 <p>CS7-31E</p>		2	2	CS7-22E-*
		3	1	CS7-31E-*
		4	0	CS7-40E-*
		0	4	CS7-04E-*

Contact Ratings (Per UL508/NEMA A600 & P600)

Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	10
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
P600	125DC ②	1.1A/138VA	1.1A/138VA	5
	250DC ②	0.55A/138VA	0.55A/138VA	
	301-600DC ②	0.2A/138VA	0.2A/138VA	

Other UL Ratings

Maximum Voltage
General Purpose Amps

600 volts AC or DC

CS7
Auxiliaries (@ 40°C)
Auxiliaries (@ 60°C)

25 amps
10 amps
6 amps

AC Coil Codes ③


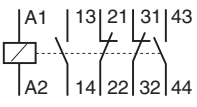
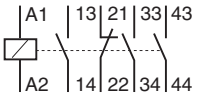
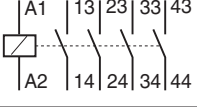
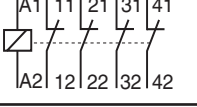
AC Coil Code	Voltage Range	
	50 Hz	60 Hz
24Z	24V	24V
120	110V	120V
208	~	208V
220W	~	208V-240V
240	220V	240V
277	240V	277V
380	380V-400V	440V
480	440V	480V
600	550V	600V

Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page

- ① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.
- ② DC rating for CS7 base control relay.
- ③ Other voltages available, see page G16. *Non-standard coil voltages not listed here must be ordered and installed separately as renewal parts.*
- ④ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles.

Series CS7 Control Relays - 4 Pole, DC Control ①②⑤

CS7 Relay	Contact Arrangement and Numbering	Contacts ①		True DC Coil	Two Winding DC Coil ②
		NO	NC	Catalog Number	Catalog Number
 <p>CS7C-31E</p>		2	2	CS7C-22E-*	CS7-22EY-D10-*
		3	1	CS7C-31E-*	CS7-31EY-D10-*
		4	0	CS7C-40E-*	CS7-40EY-D10-*
		0	4	CS7C-04E-*	Not Available

Contact Ratings (Per UL508/NEMA A600 & P600)

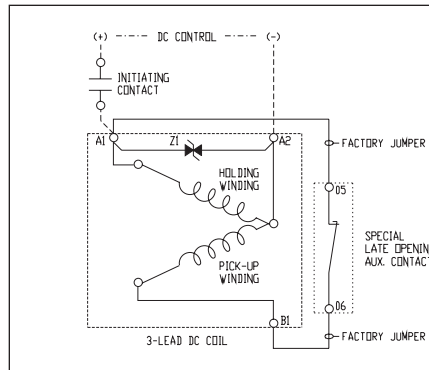
Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	10
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
P600	125DC ③	1.1A/138VA	1.1A/138VA	5
	250DC ③	0.55A/138VA	0.55A/138VA	
	301-600DC ③	0.2A/138VA	0.2A/138VA	

Other UL Ratings

Maximum Voltage	600 volts AC or DC
General Purpose Amps	
CS7C	25 amps
Auxiliaries (@ 40°C)	10 amps
Auxiliaries (@ 60°C)	6 amps

DC Coil Codes ④

DC Coil Code	Voltage
24D	24VDC
110D	110VDC



CS7 Relays with Two Winding, 3-lead Coils

- 1) The two winding, 3-lead DC coil consists of a "pick-up" winding and a "hold-in" winding.
- 2) The relay pulls-in through the lower resistance pick-up winding and holds-in through a higher resistance holding winding.
- 3) The pick-up winding is not designed for continuous operation and must be disconnected by the special late opening auxiliary contact immediately after the contactor pulls-in and seals.
- 4) Z1 is a built-in bidirectional diode (surge suppressor) for voltages up to 220V, which is located below the coil terminal cover at A1 & A2. For coil voltages 230/250V, an externally mounted CRD7-250 must be used for surge suppression.


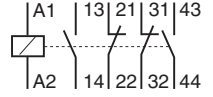
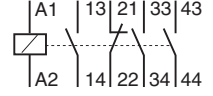
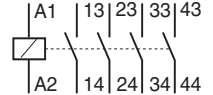
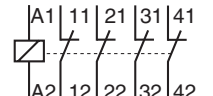
Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page

- ① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.
- ② CS7C relays with Two Winding coil are supplied with an extra right side mounted block that includes one additional NO auxiliary available for customer use, in addition to a 50ms NC timed contact for transition from a pick-up winding to a hold-in winding. (Relays ending in ...D01-* come with an additional NC auxiliary).
- ③ DC rating for CS7C base control relay.

- ⑤ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles.

Series CS7-B Control Relays - 4 Pole, Bifurcated Contacts for Lower Level Signals ①④

CS7-B Relay	Contact Arrangement and Numbering	Contacts ①		AC Operation	True DC Operations
		NO	NC	Catalog Number	Catalog Number
 <p>CS7-B22E</p>		2	2	CS7-B22E-*	CS7D-B22E-*
		3	1	CS7-B31E-*	CS7D-B31E-*
		4	0	CS7-B40E-*	CS7D-B40E-*
		0	4	CS7-B04E-*	CS7D-B04E-*

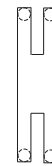
Contact Ratings (Per UL508/NEMA A600 & Q600)

Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	10
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
Q600	125DC ②	0.55A/69VA	0.55A/69VA	2.5
	250DC ②	0.27A/69VA	0.27A/69VA	
	301-600DC ②	0.1A/69VA	0.1A/69VA	

CS7-B Bifurcated Control Relay

- Gold plated bifurcated contacts for low level switching application, min 5V, 3mA
- Maximum voltage 600V AC or DC
- General purpose amps - 10 amps
- Positively guided/mechanically-linked main contacts

Principle moving contact designs:



CS7-B
Bifurcated Contacts



CS7
Standard Contacts

AC Coil Codes ③

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
120	110V	120V

DC Coil Codes

DC Coil Code	Voltage
24DD	24VDC


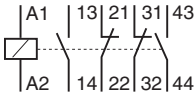
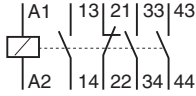
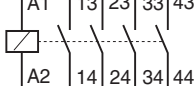
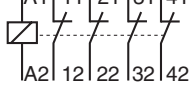
Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page

- ① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.
- ② DC rating for CS7-B base control relay.

- ④ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles.

Series CS7 Master Control Relays - 4 Pole ①④

CS7-M Relay	Contact Arrangement and Numbering	Contacts ①		AC Operation	True DC Coil
		NO	NC	Catalog Number	Catalog Number
 <p>CS7-M22E</p>		2	2	CS7-M22E-*	CS7D-M22E-*
		3	1	CS7-M31E-*	CS7D-M31E-*
		4	0	CS7-M40E-*	CS7D-M40E-*
		0	4	CS7-M04E-*	CS7D-M04E-*

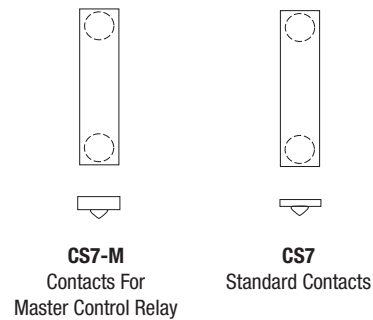
Contact Ratings (Per UL508/NEMA A600 & P600)

Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	20
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
P600	125DC ②	1.1A/138VA	1.1A/138VA	5
	250DC ②	0.55A/138VA	0.55A/138VA	
	301-600DC ②	0.2A/138VA	0.2A/138VA	

CS7-M Master Control Relays

- Excellent replacement for heavy duty NEMA master relay users.
- Maximum voltage 600V AC or DC
- General purpose rating 30 amps (2X A600 for CS7-M Base Relay)

Principle moving contact designs:



AC Coil Codes ③

AC Coil Code	Voltage Range	
	50 Hz	60 Hz
120	110V	120V

DC Coil Codes

DC Coil Code	Voltage
24DD	24VDC


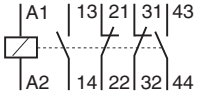
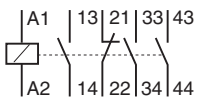
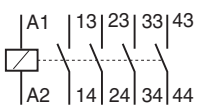
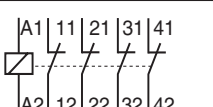
Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page

- ① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.
- ② DC rating for CS7-M base control relay.
- ④ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles.



Series CS7E Control Relays - 4 Pole, Electronic 24VDC ①③④

CS7E Relay	Contact Arrangement and Numbering	Contacts ①		Standard Relay Catalog Number	Bifurcated Contacts for Lower Level Signals Catalog Number	Master Relay Catalog Number
		NO	NC			
 <i>CS7E-22E-24E</i>		2	2	CS7E-22E-24E	CS7E-B22E-24E	CS7E-M22E-24E
		3	1	CS7E-31E-24E	CS7E-B31E-24E	CS7E-M31E-24E
		4	0	CS7E-40E-24E	CS7E-B40E-24E	CS7E-M40E-24E
		0	4	CS7E-04E-24E	CS7E-B04E-24E	CS7E-M04E-24E

Description

Low Consumption Electronic DC coils have extremely low inrush which allows the use of smaller power supplies.

This new design results in:

- Lighter, lower depth
- More energy efficient relays
- Easier wiring
- Uniform panel appearance

Applications

Direct control from PLC:

The low power consumption relay designed to control motors and other loads is especially aligned to the specific requirement of electronic control circuits. The low power consumption of 1.5 W/60 mA allows direct control through PLC's without the need for interposing relays. Power dissipation is greatly reduced limiting the heat effect in control panels.

Contact Ratings (Per UL508/NEMA A600 & P600)


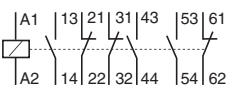
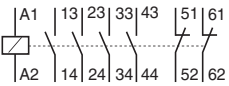
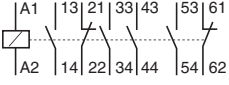
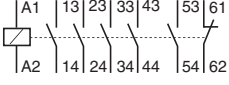
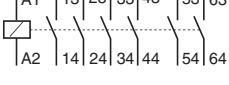
Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	10
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
P600	125DC ②	1.1A/138VA	1.1A/138VA	5
	250DC ②	0.55A/138VA	0.55A/138VA	
	301-600DC ②	0.2A/138VA	0.2A/138VA	

Other UL Ratings

<i>Maximum Voltage</i>	600 volts AC or DC
<i>General Purpose Amps</i>	
CS7E	25 amps
Auxiliaries (@ 40°C)	10 amps
Auxiliaries (@ 60°C)	6 amps

- ① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.
- ② DC rating for CS7C base control relay.
- ③ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles.
- ④ DC and AC coils are not interchangeable. CS7E is only available in 24VDC and includes internal surge suppression.

CS7 Complete Assemblies - 6 Pole, AC Control ①⑤

CS7 Relay	Contact Arrangement and Numbering	Contacts ①		AC Operation
		NO	NC	Catalog Number
 <p>CS7-33Y</p>		3	3	CS7-33Y-*
		4	2	CS7-42E-*
		4	2	CS7-42Y-*
		5	1	CS7-51E-*
		6	0	CS7-60E-*

AC Coil Codes ④

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

Contact Ratings (Per UL508/NEMA A600, P600 & Q600)

Standard	Circuit Voltage	Make (Amps/VA)	Break (Amps/VA)	Continuous Amps
A600	120AC	60A/7200VA	6A/720VA	10
	240AC	30A/7200VA	3A/720VA	
	480AC	15A/7200VA	1.5A/720VA	
	600AC	12A/7200VA	1.2A/720VA	
P600	125DC ②	1.1A/138VA	1.1A/138VA	5
	250DC ②	0.55A/138VA	0.55A/138VA	
	301-600DC ②	0.2A/138VA	0.2A/138VA	
Q600	125DC ③	0.55A/69VA	0.55A/69VA	2.5
	250DC ③	0.27A/69VA	0.27A/69VA	
	301-600DC ③	0.1A/69VA	0.1A/69VA	

Other UL Ratings

Maximum Voltage
600 volts AC or DC

General Purpose Amps

CS7 25 A
Aux. (@40°C) 10 A
Aux. (@60°C) 6 A

Ordering Instructions

Specify Catalog Number	
Replace (*) with Coil Code	See Coil Codes on this page



① Side mounted and/or top auxiliaries may be field installed to increase the number of available poles, limitations apply. Refer to page G12 for ordering and restriction details. Please note that side mount auxiliary terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.

② DC rating for CS7 base control relay.



③ DC rating for CS7 auxiliary blocks.

⑤ Positively-Guided/Mechanically-Linked Contacts per IEC 947-5-1 Annex L on 4 main poles and auxiliaries.

Side Mount Auxiliary Contact Blocks (1 & 2 Pole) ①②③

Contact Block	Description	NO	NC	Contact Arrangement	For use with...	Standard Contacts Catalog Number
 <p>1-pole (typical)</p>  <p>2-pole (typical)</p>	Auxiliary Contact Blocks for Side Mounting ②③ <ul style="list-style-type: none"> • 1 and 2-pole • Two way numbering for right or left mounting on the contactor • Snap-on design - mounts without tools • Electronic compatible contacts 17V, 10mA • Late break / early make (L) available • Mirror contact performance to control relay poles 	0	1		CS7 all	CA7-PA-01
		1	0		CS7 all	CA7-PA-10
		0	2		CS7 all	CA7-PA-02
		1	1		CS7 all	CA7-PA-11
		2	0		CS7 all	CA7-PA-20
		1L	1L		CS7 all	CA7-PA-L11

Top Mount Auxiliary Contact Blocks (2 & 4 Pole) ②

Contact Block	Description	NO	NC	Contact Arrangement	For use with...	Standard Contacts Catalog Number	Bifurcated Contacts Catalog Number
 <p>2-pole (typical)</p>  <p>4-pole (typical)</p>	Auxiliary Contact Blocks for Top Mounting ② <ul style="list-style-type: none"> • 2 and 4 pole • Snap-on design - mounts without tools • Electronic compatible standard contacts down to 17V, 5mA, bifurcated version 5V, 3mA • Mechanically linked between N.O. and N.C. poles and to the control relay poles (excluding L types). • Several terminal numbering choices even for models with equal function • Late break / early make (L) available 	0	2		CS7 all	CS7-PV-02	CS7-PVB-02
		1	1		CS7 all	CS7-PV-11	CS7-PVB-11
		2	0		CS7 all	CS7-PV-20	CS7-PVB-20
		2	2		CS7 all	CS7-PV-22	CS7-PVB-22
		3	1		CS7 all	CS7-PV-31	CS7-PVB-31
		1	3		CS7 all	CS7-PV-13	CS7-PVB-13
		4	0		CS7 all	CS7-PV-40	CS7-PVB-40
		0	4		CS7 all	CS7-PV-04	CS7-PVB-04
		1+1L	1+1L		CS7 all	CS7-PV-L22	<i>Not Available</i>

① Side mounted auxiliaries may be field installed to increase the number of available poles. Please note that terminal markings may conflict with base relay and/or top mount auxiliary terminal markings.





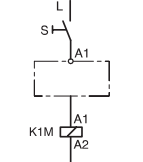

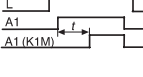
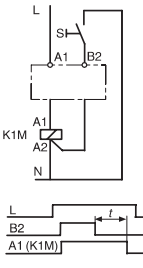

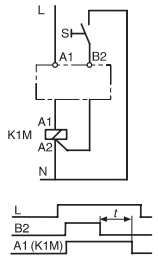
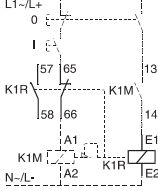
② Max. number of auxiliary contacts that may be mounted:
AC Coil relays -max. 4 N.O. contacts on the front of the contactor, 2-N.O. contacts on

the side, 4-N.C. front or side: 6 total

DC Coil relays-max. 4 N.O. contacts on the front of the contactor, or max. 2-N.O. contacts on side, 4-N.C. front or side: 4 total.

③ Only one side mount auxiliary (left side) may be field installed on a CS7 relay with Economizer DC coil.

Control Modules

Module	Description	For use with...	Connection Diagrams	Function	Catalog Number
	Pneumatic Timing Module – The contacts in the Pneumatic Timing Element switch after the delay time. The contacts on the relay continue to operate without delay. <ul style="list-style-type: none"> • Continuous adjustment range 	CS7 all		ON-Delay .3...30s 1.8...180s	CZE7-30 CZE7-180
				OFF-Delay 0.3...30s 1.8...180s	CZA7-30 CZA7-180
	Electronic Timing Module – ON-Delay The relay is energized at the end of the delay time.	CS7 all		110...240V 50/60Hz 110...250VDC. 0.1...3s 1...30s 10...180s	CRZE7-3-110/240 CRZE7-30-110/240 CRZE7-180-110/240
	Electronic Timing Module – OFF-Delay After interruption of the control signal, the relay is de-energized at the end of the delay time.	CS7 all		24...48VDC 0.1...3s 1...30s 10...180s	CRZE7-3-24/48VDC CRZE7-30-24/48VDC CRZE7-180-24/48VDC
				110...240V 50/60Hz 0.3...3s 1...30s 10...180s	CRZA7-3-110/240 CRZA7-30-110/240 CRZA7-180-110/240
	Mechanical Latch ⑤ Following relay latching, the relay coil is immediately de-energized by the NC auxiliary contact (65-66). <ul style="list-style-type: none"> • Electrical or manual release • 1 NO + 1 NC auxiliary switch • Suitable for all CS7 relays 	CS7 all (except true DC coil version)		24V AC 50/60Hz 0.3...3s 1...30s 10...180s	CRZA7-3-24VAC CRZA7-30-24VAC CRZA7-180-24VAC
				110...240V 50/60Hz 0.3...3s 1...30s 10...180s	CV7-11-* Replace * with coil code below (See Application Note)


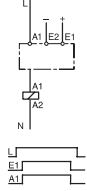




CV7 Mechanical Latch Coil Codes ①②④

Coil Code	Application Range			Latch & Contactor Coil Rating
	50 Hz	60 Hz	VDC	
24Z	24 VAC	24 VAC	12 VDC	24V 50/60 Hz
48Z	48 VAC	48 VAC	24 VDC	48V 50/60 Hz
120	110 VAC	120 VAC	~	110V50/120V60
220W	~	208...240 VAC	~	208...240V60
230Z	230 VAC	230 VAC	110 VDC	230V 50/60 Hz
240Z	240 VAC	240 VAC	125 VDC	240V 50/60 Hz
277	240 VAC	277 VAC	~	240V50/277V60
380	380...400 VAC	440 VAC	~	380...400V50/440V60
400Z	400 VAC	400 VAC	220 VDC	400V 50/60 Hz
415	400...415 VAC	~	~	400...415 V50 Hz
480	440 VAC	480 VAC	~	440V50/480V60
600 ⑤	550 VAC	600 VAC	~	550V50/600V60




APPLICATION NOTE: The CV7 Mechanical Latch for CS7 may be used for both AC and DC applications. However, when using in a DC application, both the Control Relay and Latch must still be AC, using the Coil Code Table shown. For example, if needing a latched control relay for 24 V DC, choose coil code 48Z for a CS7 Relay and Latch for 48V AC. This combination will work at 24V DC momentary due to coil clearing contacts.

- ① Other voltages available. Contact your Sprecher + Schuh representative.
- ② CV7 must be wired for momentary impulse operation only.
- ③ Cannot be used with True DC coil control relays.
- ④ Command duration 0.03...15 seconds.
- ⑤ Use 600V AC when 575 V is required.

Control Modules (continued)

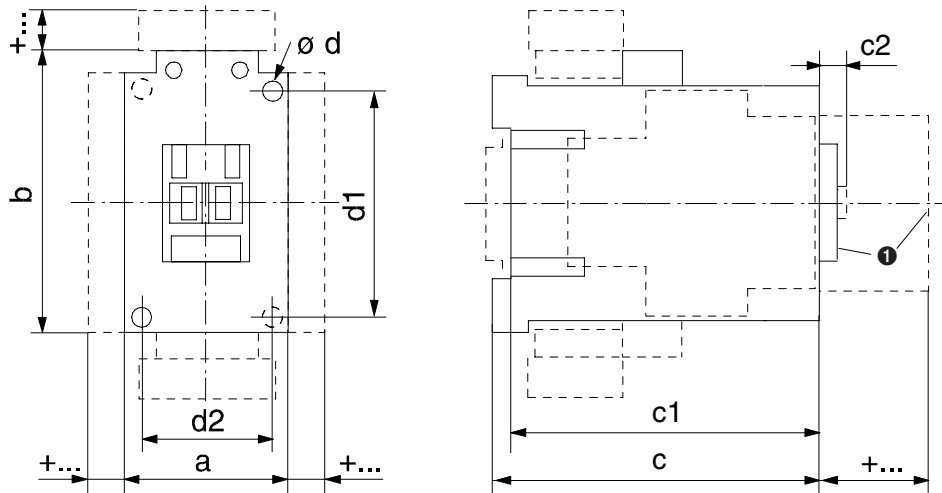
Module	Description	For use with...	Connection Diagrams	Function		Catalog Number
				Input	Output	
	<p>Electronic Interface – Interface between the DC control signal from a PLC and the AC operating mechanism of the relay.</p> <ul style="list-style-type: none"> Requires no additional surge suppression for the coils Switching capacity 200VA Suitable for all CS7 relays 	CS7 all (with AC control)		24V DC 18...30V DC 48V DC	110... 240V AC	<p>CRI7E-24 CRI7E-12 CRI7E-48 <i>Indicates special order</i></p>
	<p>Surge Suppressors - Limits coil switching transients.</p> <ul style="list-style-type: none"> Plug-in, coil mounted Suitable for all CS7 contactors 	CS7 all		<p>RC Module - AC Control (50/60Hz) 24...48V 110...280V 380...480V</p>		<p>CRC7-48 CRC7-280 CRC7-480</p>
				<p>Diode Module - DC Control 12-250VDC</p>		<p>CRD7-250</p>
				<p>Varistor Module - AC/DC Control 12...55VAC/ 12...77VDC 56...136VAC/ 78...180VDC 137...277VAC/ 181...350VDC 278...575VAC</p>		<p>CRV7-55 CRV7-136 CRV7-277 CRV7-575</p>

Assembly Components

Component	Description	For Use With...	Pkg. Qty.	Catalog Number
	<p>Protective Covers - Protects against unintended manual operation.</p>	CS7 all	1	CA7-SCC
	<p>Protective Covers - For front mounted auxiliary contacts, pneumatic timers and latches.</p>	CS7-PV, CA7-PV, CZE7, CZA7, CV7	1	CA7-SCF
	<p>Spade Connectors - Dual stab for coil terminals (0.250 inch)</p>	All CS7	20	CA7-SC2

Series CS7 Industrial Control Relays (AC, Electronic DC & True DC Coils)

Dimensions are in millimeters (inches). Dimensions not intended for manufacturing purposes.

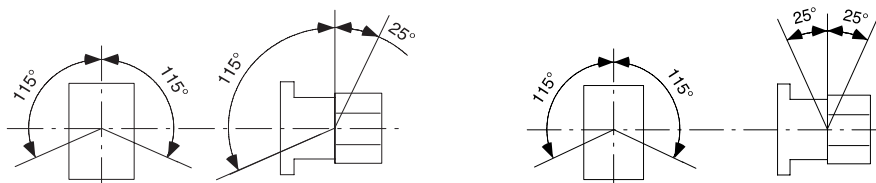


Catalog Number	a	b	c	c1	c2	Ød	d1	d2
CS7 (AC)	45 (1-25/32)	81 (3-3/16)	80.5 (3-11/64)	75.5 (3-3/32)	6 (1/4)	2 screws 4.5 (3/16)	60 (2-23/64)	35 (1-25/64)
CS7E (Electronic DC)	45 (1-25/32)	81 (3-3/16)	80.5 (3-11/64)	75.5 (3-3/32)	6 (1/4)	2 screws 4.5 (3/16)	60 (2-23/64)	35 (1-25/64)
CS7C/D (True DC)	45 (1-25/32)	81 (3-3/16)	106.5 (4-3/16)	101.5 (4)	6 (1/4)	2 screws 4.5 (3/16)	60 (2-23/64)	35 (1-25/64)

Relays & Accessories (+...)

Relays with...		Dim. [mm]	Dim. [inches]
auxiliary contact block for front mounting	2-, or 4-pole	c/c1 + 39	c/c1 + 1-37/64
auxiliary contact block for side mounting	1-, or 2-pole	a + 9	a + 23/64
pneumatic timing module		c/c1 + 58	c/c1 + 2-23/64
electronic timing module	on coil terminal side	b + 24	b + 15/16
mechanical latch		c/c1 + 61	c/c1 + 2-31/64
interface module	on coil terminal side	b + 9	b + 23/64
surge suppressor	on coil terminal side	b + 3	b + 1/8
① Labeling with...	label sheet	+ 0	+ 0
	marking tag sheet with clear cover	+ 0	+ 0
	marking tag adapter for V7 Terminals	+ 5.5	+ 7/32

Mounting Position



AC & Electronic DC control relays

True DC control relays