


**Technical Information**

		Standard Control Relay CS7	Front Mounted Standard Auxiliary Contacts	Bifurcated Control Relay CS7-B	Front Mounted Bifurcated Auxiliary Contacts	Master Relay CS7-M	Side Mounted Contacts	
<b>Electrical Contact Ratings - NEMA</b>		A600, P600	A600, Q600			2x A600, P600	A600, Q600	
<b>Min. Contact Rating</b>		17V, 10 mA	17V, 5 mA	8V, 5 mA	5V, 3 mA		17V, 10 mA	
<b>Contact Ratings - IEC AC-15 (solenoids, contactors) rated voltage IEC 60947-5-1</b>	24V	10 A	6 A	3 A	3 A	15 A	6 A	
	48V	10 A	6 A	3 A	3 A	15 A	6 A	
	120V	10 A	6 A	3 A	3 A	15 A	6 A	
	240V	10 A	5 A	3 A	3 A	15 A	5 A	
	400V	6 A	3 A	2 A	2 A	7.5 A	3 A	
	480V/500V	2.5 A	1.6 A	1.2 A	1.2 A	5 A	1.6 A	
	600V	1 A	1 A	0.7 A	0.7 A	2 A	1 A	
690V	1 A	1 A	0.7 A	0.7 A	2 A	1 A		
<b>AC-12 (Control of resistive loads) IEC 60947-5-1</b>	<b>40 °C</b>	$I_{th}$	20 A	10 A	10 A	10 A	20 A	10 A
		230V	8 kW					
		400V	14 kW					
		690V	24 kW					
	<b>60 °C</b>	$I_{th}$	20 A	6 A	6 A	6 A	20 A	6 A
		230V	8 kW					
	400V	14 kW						
	690V	24 kW						
<b>DC-12 Switching DC Loads</b> $t_{cr} < 1$ ms, Resistive Loads IEC 60947-5-1	24V	15 A	10 A	6 A	6 A	20 A	6 A	
	48V	10 A	9 A	3.2 A	3.2 A	20 A	3.2 A	
	110V	6 A	3.5 A	1.0 A	1.0 A	8 A	1.0 A	
	220V	1.0 A	0.7 A	0.5 A	0.5 A	1.5 A	0.5 A	
	440V	0.4 A	0.2 A	0.2 A	0.2 A	0.4 A	0.2 A	
<b>DC-13 IEC 60947-5-1, Solenoids and contactors</b>	24V	5 A	5 A	2.5 A	2.5 A	5 A	5 A	
	48V	3 A	3 A	1.5 A	1.5 A	3 A	2.5 A	
	110V	1.2 A	1.2 A	0.6 A	0.6 A	1.2 A	0.68 A	
	220V	0.6 A	0.6 A	0.3 A	0.3 A	0.6 A	0.32 A	
	440V	0.3 A	0.15 A	0.15 A	0.15 A	0.3 A	0.15 A	

**G**  
CS7 Control Relays

**Mechanically Linked Contacts ②**





Location of welded NO contacts	State of NC contacts if NO contact welds			
	Main	Front mount auxiliary	Left side auxiliary	Right side auxiliary
Main	Open	Open ①	Open ③	Open ③
Front auxiliary	Open	Open ①	Open ③	Open ③
Left side aux.	Open	Open ①	Open ③	Open ③
Right side aux.	Open	Open ①	Open ③	Open ③

DC Switching Ratings for CS7 Main Poles in Series (Resistive Load at 60 °C)

	1 pole	2 poles	3 poles
<b>24/48 V</b>	25/20 A	25 A	25 A
<b>125 V</b>	6 A	25 A	25 A
<b>220 V</b>	1.5 A	8 A	25 A
<b>440 V</b>	0.4 A	1 A	3 A

**Standards Compliance**

UL 508  
CSA C22.2 NO. 14  
EN/IEC 60947-1, -5-1  
Meets the material restrictions for European Directive 2002/95/EC - EU-RoHS.

	CS7 Relays		Front Mount Auxiliaries & Pneumatic Timer Contacts
<b>Mechanical</b>			
<b>Mechanical Life</b>	[Mil]	15	5
<b>Electrical Life</b>			
AC-15 (240V, 3A) AC Operations	[Mil]	1.5	1.5
<b>Weight</b>	[g]	390	-
<b>Terminal Cross-Sections</b>			
<b>Terminal Type</b>			
<b>Terminal Size per IEC 947-1</b>		2 x A4	2 x A4
	Flexible with Wire	1 Cond. [mm²]	1...4
	End Ferrule	2 Cond. [mm²]	1...4
	Solid/Stranded	1 Cond. [mm²]	1.5...6
		2 Cond. [mm²]	1.5...6
<b>Max. Wire Size per UL/CSA</b>	[AWG]	16...10	18...14
<b>Tightening Torque</b>	[Nm]	1.5...2.0	1...1.5
	[lb-in]	13.3...17.7	8.9...13.3

**Certifications**

cULus Listed (File No. E33916, Guide NKCR/NKCR7)  
CE Marked

- ① If the accessory is a Pneumatic Timer or latch, there is no positive guidance; the accessory contacts are independent.
- ② Defined in IEC 947-5-1 annex L. Mechanically linked is a relationship between contacts of opposite types (i.e., NO and NC).
- ③ Side mounted auxiliary contacts provide "mirror contact" performance with main poles only.