

Bulletin 700-K Control Relays






		700-K	700-KR
AC-12 Rated Thermal Current			
Ambient temperature 40 °C			
I_{th}	24...240V	[A]	10
	230...500V	[A]	10
	230...690V	[A]	10
Ambient temperature 60 °C			
I_{th}	24...240V	[A]	6
	230...500V	[A]	6
	230...690V	[A]	6
AC-15/B600			
Switching of Solenoids and contactors			
I_e	24V	[A]	3
	48V	[A]	3
	120V	[A]	3
	230V	[A]	2
	240V	[A]	2
	400V	[A]	1.2
	480V	[A]	1
	500V	[A]	1
	600V	[A]	0.6
	690V	[A]	0.6
Short-circuit Protection			
"gG" Fuse acc. to IEC 60947-5-1, no welding of contacts			
	Fuse gG	[A]	10
Min. Switching Capacity 15V			
For bifurcated contacts (control relays and auxiliary contact blocks)			
		[mA]	2
Resistance and Power Dissipation			
Main current circuit resistance, 1 pole		[mΩ]	6.5
Power dissipation, 4 poles		[W]	2.6
Total power dissipation			
	AC control, warm	[W]	4.4
	DC control, warm	[W]	5.2
Lifespan			
Mechanical		[Mio. op.]	15
Electrical AC-15 (240V / 2 A)		[Mio. op.]	0.7
Weight			
	AC control	kg (lbs.)	0.16 (0.35)
	DC control	kg (lbs.)	0.2 (0.44)
Load Carrying Capacity per UL/CSA			
Rated voltage	AC	[V]	max. 600
Continuous rating	40 °C	[A]	10 6
Switching capacity	AC	[A]	B 600
Rated voltage	DC	[V]	max. 600
Switching capacity	DC	[A]	Q 600

700-K

DC-13/Q600

1 pole	24V	[A]	2.3
	48V	[A]	1
	110V	[A]	0.55
	125V	[A]	0.55
	220V	[A]	0.27
	250V	[A]	0.27
	400V	[A]	0.15
	440V	[A]	0.15
	600V	[A]	0.1

Cross Sections

Conductor Cross Sections - Main Contacts, Auxiliary Contacts, and Coil Terminals				700-K	700-KR
Terminal type				*	
					
	Fine stranded with ferrule	(1) Conductor (2) Conductors	[mm ²] [mm ²]	0.75...2.5 0.75...2.5	0.50...2.5 0.50...2.5
	Solid or coarse stranded	(1) Conductor (2) Conductors	[mm ²] [mm ²]	1...4 1...2.5 + 1...4	0.75...2.5 ♣ 0.75...2.5 ♣
					
Recommended torque			[Nm]	1.2	—
Cross section per UL/CSA			[AWG]	18...12 ‡	18...14 ♣
Recommended torque			[lb-in]	10.6	—

* Pozidriv No. 2 / Blade No. 3 screw

‡ Use same cross sections

♣ Stranded wire only

Coil Data

700-K			
Operating Limits			
AC control 50 Hz, 60 Hz, 50/60 Hz	pick-up	[x U _s]	0.85...1.1
	dropout	[x U _s]	0.2...0.75
DC control	pick-up	[x U _s]	0.8...1.1 9, 12, 24, 110V DC: 0.7...1.25
	dropout	[x U _s]	0.1...0.75
Coil Consumption			
AC control 50 Hz, 60 Hz, 50/60 Hz	pick-up	[VA/W]	35/32
	hold-in	[VA/W]	5/1.8
DC control	pick-up	[W]	cold 3.0, warm 2.6
	hold-in	[W]	cold 3.0, warm 2.6
Operating Times			
AC	closing delay	[ms]	15...40
	opening delay	[ms]	15...33
With RC module	opening delay	[ms]	15...28
DC	closing delay	[ms]	18...40
	opening delay	[ms]	6...12
With integrated diode	opening delay	[ms]	8...12
With external diode	opening delay	[ms]	35...50

General Data

		700-K
Rated Isolation Voltage U_i		
IEC	[V]	690
UL, CSA	[V]	600
1 minute acc. to IEC 60947-5-1	[V]	—
Rated Impulse Voltage Withstand U_{imp}	[kV]	6
Rated Operating Voltage U_e		
AC 50/60 Hz	[V]	24, 48, 120, 230, 400, 500, 600, 690
DC	[V]	24, 48, 110, 220, 440
Rated Coil Frequency		AC 50/60 Hz, DC
Ambient Temperature		
Storage	[°C]	-55...+80
Operation at rated voltage	[°C]	-25...+60
at 70 °C		15% current reduction against 60 °C values
Climatic Withstand		—
Max. Altitude of Installation Site	[m]	2000 NN
Protection Class		IP2X
Auxiliary contact		—
Standards		IEC/EN 60947-1, -5-1, -5-4, UL 508, CSA 22.2. No. 14
Approvals		CE, cULus