CAD50

Instantaneous Control Relays

Terminal Type	Number of Contacts	Contact Composition		Catalog Number	Weight lb. (kg)
		Normally Open	Normally Closed		
Screw Clamp	5	5	0	**CAD50 ▲ ✳**	1.28 (0.580)
		3	2	**CAD32 ▲ ✳**	1.28 (0.580)
Spring Terminal	5	5	0	**CAD503 ▲ ✳**	1.28 (0.580)
		3	2	**CAD323 ▲ ✳**	1.28 (0.580)

CAD32

Instantaneous Auxiliary Contact Blocks (for use in normal operation environments)

Number of Contacts	Maximum Number per Device Clip-on Mounting		Termination Type	Contact Composition		Catalog Number	Weight lb. (kg)
	Front	Left Side Only		Normally Open	Normally Closed		
2	1	–	Screw Clamp	2	0	**LADN20**	0.07 (0.030)
				1	1	**LADN11**	0.07 (0.030)
				0	2	**LADN02**	0.07 (0.030)
			Spring Terminal	2	0	**LADN203**	0.07 (0.030)
				1	1	**LADN113**	0.07 (0.030)
				0	2	**LADN023**	0.07 (0.030)
	–	1	Screw Clamp	2	0	**LAD8N20**	0.07 (0.030)
				1	1	**LAD8N11**	0.07 (0.030)
				0	2	**LAD8N02**	0.07 (0.030)
4 ✚	1	–	Screw Clamp	4	0	**LADN40**	0.11 (0.050)
				3	1	**LADN31**	0.11 (0.050)
				2	2	**LADN22**	0.11 (0.050)
				1	3	**LADN13**	0.11 (0.050)
				0	4	**LADN04**	0.11 (0.050)
			Spring Terminal	4	0	**LADN403**	0.11 (0.050)
				3	1	**LADN313**	0.11 (0.050)
				2	2	**LADN223**	0.11 (0.050)
				1	3	**LADN133**	0.11 (0.050)
				0	4	**LADN043**	0.11 (0.050)
4 ✚	1	–	Screw Clamp	2 ■	2 ■	**LADC22**	0.11 (0.050)
			Spring Terminal	2 ■	2 ■	**LADC223**	0.11 (0.050)

CAD503

CAD323

Instantaneous Auxiliary Contacts
With Dust and Damp Protected Contacts (for use in particularly harsh industrial environments)

Number of Contacts	Maximum Number per Device	Contact Composition					Catalog Number	Weight lb. (kg)
	Front Mounting	Sealed		❖	Normal			
2	1	2	–	–	–	–	**LA1DX20**	0.09 (0.040)
		–	2	–	–	–	**LA1DX02**	0.09 (0.040)
		2	–	2	–	–	**LA1DY20**	0.09 (0.040)
4 ✚	1	2	–	–	2	–	**LA1DZ40**	0.11 (0.050)
		2	–	–	1	1	**LA1DZ31**	0.11 (0.050)

Common Coil Voltage Codes

ac 50/60 Hz Coil (for additional voltage code options see page 7).

Volts	12	24	48	120	208	240	277	480	600
Code	J7	B7	E7	G7	LE7	U7	W7	T7	X7

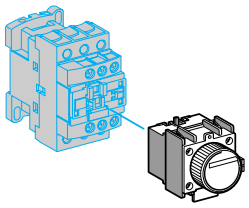
dc Coil (coils have built in suppression as standard)

Volts	12	24	36	48	60	72	110	125	220	250	440
Code	JD	BD	CD	ED	ND	SD	FD	GD	MD	UD	RD

dc Low Consumption Coil (coils have built in suppression as standard)

Volts	5	12	24	48	72
Code	AL	JL	BL	EL	SL

❖ Grounding terminal points (2 terminals jumpered together; see diagram on page 8).
✚ Auxiliary contact blocks with four contacts cannot be used on relays with low consumption coils.
▲ Add proper voltage code to end of catalog number.
■ Includes 1 N/O and 1 N/C overlapping contact.
✳ For ring terminal configuration add “6” before coil voltage suffix. For example CAD32B7 becomes CAD32**6**B7.

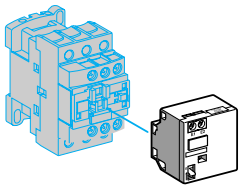


LADT

Time Delay Auxiliary Contact Blocks

Number and Type of Contacts	Maximum Number per Device Front Mounting	Time Delay Type	Termination Type	Range	Catalog Number	Weight lb. (kg)
1 N/C and 1 N/O	1	On-Delay	Screw Clamp	0.1 to 3 sec. ✚	**LADT0**	0.13 (0.060)
				0.1 to 30 sec.	**LADT2**	0.13 (0.060)
				10 to 180 sec.	**LADT4**	0.13 (0.060)
				1 to 30 sec. ■	**LADS2**	0.13 (0.060)
			Spring Terminal	0.1 to 3 sec. ✚	**LADT03**	0.13 (0.060)
				0.1 to 30 sec.	**LADT23**	0.13 (0.060)
				10 to 180 sec.	**LADT43**	0.13 (0.060)
				1 to 30 sec. ■	**LADS23**	0.13 (0.060)
		Off-Delay	Screw Clamp	0.1 to 3 sec. ✚	**LADR0**	0.13 (0.060)
				0.1 to 30 sec.	**LADR2**	0.13 (0.060)
				10 to 180 sec.	**LADR4**	0.13 (0.060)
			Spring Terminal	0.1 to 3 sec. ✚	**LADR03**	0.13 (0.060)
				0.1 to 30 sec.	**LADR23**	0.13 (0.060)
(Lockout Cover, See page 7)				10 to 180 sec.	**LADR43**	0.13 (0.060)

✚ With extended scale from 0.1 to 0.6 s.
■ With switching time of 40 ms ± 15 ms between opening of the N/C contact and closing of the N/O contact.

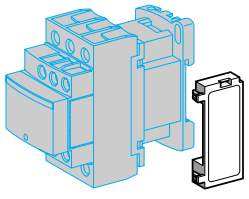


LA6DK

Mechanical Latch Blocks ★

Unlatching Control	Maximum Number per Device Front mounting	Catalog Number	Weight lb. (kg)
Manual or electrical	1	**LA6DK10** ▲	0.15 (0.070)
		LAD6K10 ▲	0.15 (0.070)

★ Power should not be simultaneously applied or maintained to the mechanical latching block and the CAD relay. The duration of the control signal to the mechanical latching block and the CAD relay should be ≥ 100 ms.



LAD4

Coil Suppressor Modules

These modules clip onto the right hand side of the control relay and the electrical connection is instantly made. Adding an input module is still possible.

RC Circuits (Resistor-Capacitor)

- Effective protection for circuits highly sensitive to “high frequency” interference.
- Voltage limited to 3 Uc maximum and oscillating frequency limited to 400 Hz maximum.
- Slight increase in drop-out time (1.2 to 2 times the normal time).

For Mounting On:	Operational Voltage	Catalog Number	Weight lb. (kg)
CAD (Vac)	24 to 48 Vac	**LAD4RCE**	0.03 (0.012)
	110 to 240 Vac	**LAD4RCU**	0.03 (0.012)

Varistors (Peak Limiting)

- Protection provided by limiting the transient voltage value to 2 Uc maximum.
- Maximum reduction of transient voltage peaks.
- Slight increase in drop-out time (1.1 to 1.5 times the normal time).

CAD (Vac)	24 to 48 Vac	**LAD4VE**	0.03 (0.012)
	50 to 127 Vac	**LAD4VG**	0.03 (0.012)
	110 to 250 Vac	**LAD4VU**	0.03 (0.012)

Bidirectional Peak Limiting Diode

- Protection provided by limiting the transient voltage value to 2 Uc maximum.
- Maximum reduction of transient voltage peaks.

CAD (Vac)	24 Vac	**LAD4TB**	0.03 (0.012)
	72 Vac	**LAD4TS**	0.03 (0.012)

▲ Standard coil voltage codes.

Vac and Vdc	24	32/36	42/48	60/72	100	110/127	220/240	256/277	380/415
Code	B	C	E	EN	K	F	M	U	Q

Cabling Accessory

Description			Catalog Number	Weight lb (kg)
Mounting Adaptor **For adapting existing wiring** to a new product	Without coil suppression		**LAD4BB**	0.04 (0.019)
	With coil suppression	ac 24 to 48 V	**LAD4BBVE**	0.03 (0.014)
		ac 50 to 127 V	**LAD4BBVG**	0.03 (0.014)
		ac 110 to 250 V	**LAD4BBVU**	0.03 (0.014)

Electronic Serial Timer Modules ▲

● Mounted using adaptor LAD4BB, to be ordered separately, see listing above.

On-delay Type

Operational Voltage	Time Delay	Catalog Number	Weight lb (kg)
24 to 250 Vac/Vdc	0.1 to 2 s	**LA4DT0U**	0.09 (0.040)
	1.5 to 30 s	**LA4DT2U**	0.09 (0.040)
	25 to 500 s	**LA4DT4U**	0.09 (0.040)

Off-delay Type

24 to 250 Vac/Vdc	0.1 to 2 s	**LA4DR0U**	0.11 (0.050)
	1.5 to 30 s	**LA4DR2U**	0.11 (0.050)
	25 to 500 s	**LA4DR4U**	0.11 (0.050)

Auto-Man-Stop Control Modules

For local override operation tests with two-position “Auto-Man” switch and “O-I” switch

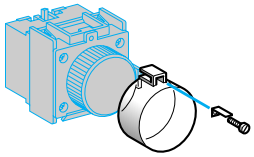
● Mounted using adaptor LAD4BB, to be ordered separately, see listing above.

Operational voltage	Catalog Number	Weight lb (kg)
24 to 100 Vac	**LA4DMK**	0.09 (0.040)

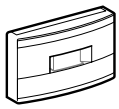
▲ For 24 V operation, the relay must be fitted with a 21 V coil (code Z7).

Accessories (to be ordered separately)

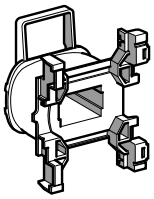
For Connection				
Description	**For Mounting On:**	**Must be Ordered in Multiplies of:**	**Catalog Number**	**Weight lb. (kg)**
For Marking				
Sheet of 64 self-adhesive blank labels 8 x 33	CAD, LAD (4 contacts), LA6DK	10	**LAD21**	0.04 (0.020)
Sheet of 112 self-adhesive blank labels 8 x 12	LAD (2 contacts), LADT	10	**LAD22**	0.04 (0.020)
Strips of blank, self-adhesive labels for printing by plotter (4 sets of 5 strips)	All products	35	**LAD24**	0.44 (0.200)
"SIS Label" label creation software for labels LAD-21 and 22	French version	1	**XBY1FR**	0.13 (0.060)
	English version	1	**XBY1EN**	0.13 (0.060)
For Protection				
Lockout cover	LADT, LADR	1	**LA9D901**	0.01 (0.005)
Relay cover preventing access to the moving contact carrier	CAD	1	**LAD9ET1**	0.008 (0.004)



LA9D901



LA9D9ET1



LXD1

Replacement Coils (Vac)

Specifications

Average consumption at 68 °F (20 °C):
- inrush (cos φ = 0.75) 50/60 Hz: 70 VA at 50 Hz
- sealed (cos φ = 0.3) 50/60 Hz: 8 VA at 60 Hz

Operating rate θ ≤ 140 °F (60 °C): 0.85 at 1.1 Uc

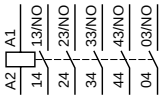
Coil Voltage Uc	Average Resistance at 68 °F (20 °C) ± 10%	Inductance of Closed Circuit	Catalog Number 50/60 Hz	Voltage Code	Weight lb. (kg)
V	**Ω**	**H**			
12	6.3	0.26	**LXD1J7**	J7	0.15 (0.070)
21 ✚	5.6	0.24	**LXD1Z7**	Z7	0.15 (0.070)
24	6.19	0.26	**LXD1B7**	B7	0.15 (0.070)
32	12.3	0.48	**LXD1C7**	C7	0.15 (0.070)
36	12.83	–	**LXD1CC7**	CC7	0.15 (0.070)
42	19.15	0.77	**LXD1D7**	D7	0.15 (0.070)
48	25	1	**LXD1E7**	E7	0.15 (0.070)
60	34.60	–	**LXD1EE7**	EE7	0.15 (0.070)
100	100.4	–	**LXD1K7**	K7	0.15 (0.070)
110	130	5.5	**LXD1F7**	F7	0.15 (0.070)
115	137.2	–	**LXD1FE7**	FE7	0.15 (0.070)
120	159	6.7	**LXD1G7**	G7	0.15 (0.070)
127	192.5	7.5	**LXD1FC7**	FC7	0.15 (0.070)
200	410.7	–	**LXD1L7**	L7	0.15 (0.070)
208	417	16	**LXD1LL7**	LL7	0.15 (0.070)
220/230	539	22	**LXD1M7** ★	M7	0.15 (0.070)
230	595	21	**LXD1P7**	P7	0.15 (0.070)
230/240	645	25	**LXD1U7** ■	U7	0.15 (0.070)
277	781	30	**LXD1W7**	W7	0.15 (0.070)
380/400	1580	60	**LXD1Q7**	Q7	0.15 (0.070)
400	1810	64	**LXD1V7**	V7	0.15 (0.070)
415	1938	74	**LXD1N7**	N7	0.15 (0.070)
440	2242	79	**LXD1R7**	R7	0.15 (0.070)
480	2300	85	**LXD1T7**	T7	0.15 (0.070)
600	3600	135	**LXD1X7**	X7	0.15 (0.070)
690	5600	190	**LXD1Y7**	Y7	0.15 (0.070)

✚ Voltage for relays with serial timer modules, with 24 V supply.
★ This coil can be used on 240 V at 60 Hz.
■ This coil can be used on 230/240 V at 50 Hz and on 240 V only at 60 Hz.

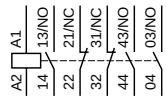
IEC Type Industrial Control Relays; TeSys D-Line, K-Line, and SK-Line
TeSys Terminal Configurations

Control Relays Instantaneous

5 N/O
CAD50



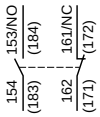
3 N.O + 2 N/C
CAD32



Instantaneous Auxiliary Contact Blocks

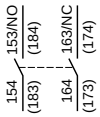
1 N/O + 1 N/C
LADN11

LAD8N11 ★

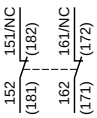


2 N/O
LADN20

LAD8N20 ★



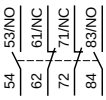
2 N/C
LAD8N02



LADN02

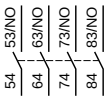
★ The figures in brackets are for the device mounted on the RH side of the relay.

2 N/O + 2 N/C
LADN22

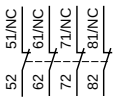


1 N/O + 3 N/C
LADN13

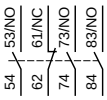
4 N/O
LADN40



4 N/C
LADN04

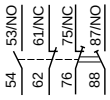


3 N/O + 1 N/C
LADN31

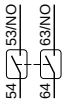


With Dust and Damp Protected Contacts

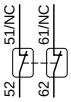
2 N/O + 2 N/C Including 1 N.O + 1 N/C
Make Before Break
LADC22



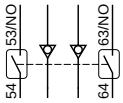
2 N/O Protected
LA1DX20



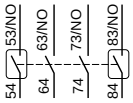
2 N/C Protected
LA1DX20



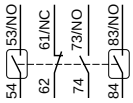
2 N/O Protected ▲
LA1DY20



2 N/O Protected +
2 N/O Non Protected
LA1DZ40



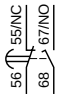
2 N/O Protected +
1 N/O + 1 N/C
Non Protected
LA1DZ31



▲ With grounding terminal points.

Time Delay Auxiliary Contact Blocks

On-Delay 1 N/O + 1 N/C
LADT

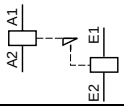


LADS

Off-Delay 1 N/O + 1 N/C
LADR

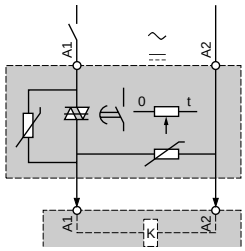
Mechanical Latch Blocks

LA6DK10

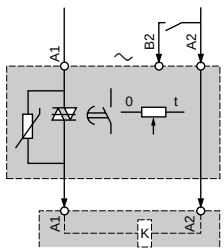


Electronic Serial Timer Modules

On-Delay
LA4DTU

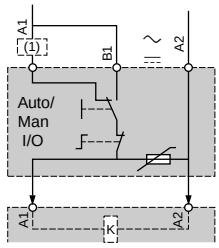


Off-Delay
LA4DRU



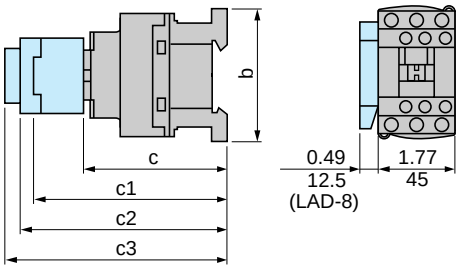
Auto-Man-Stop Modules

LA4DM



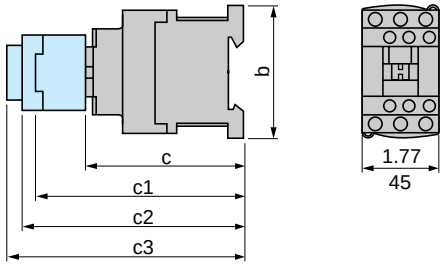
(1) PLC

CAD (Vac Coil)



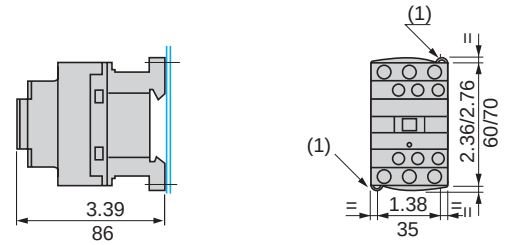
CAD -		32 50	323 503
b		3.03 (77)	3.90 (99)
c	without cover or add-on blocks	3.31 (84)	3.31 (84)
	with cover, without add-on blocks	3.39 (86)	3.39 (86)
c1	with LADN or C (2 or 4 contacts)	4.61 (117)	4.61 (117)
c2	with LA6DK10	5.08 (129)	5.08 (129)
c3	with LADT, R, S	5.39 (137)	5.39 (137)
	with LADT, R, S and sealing cover	5.55 (141)	5.55 (141)

CAD (Vdc Coil) or (Low Consumption Vdc Coil)



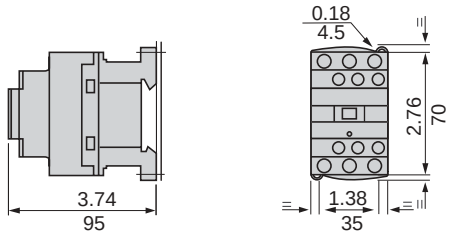
CAD -		32 50	323 503
b		3.03 (77)	3.90 (99)
c	without cover or add-on blocks	3.66 (93)	3.66 (93)
	with cover, without add-on blocks	3.74 (95)	3.74 (95)
c1	with LADN or C (2 or 4 contacts)	4.96 (126)	4.96 (126)
c2	with LA6DK10	5.43 (138)	5.43 (138)
c3	with LADT, R, S	5.75 (146)	5.75 (146)
	with LADT, R, S and sealing cover	5.91 (150)	5.91 (150)

CAD (Vac Coil)
Panel Mounted

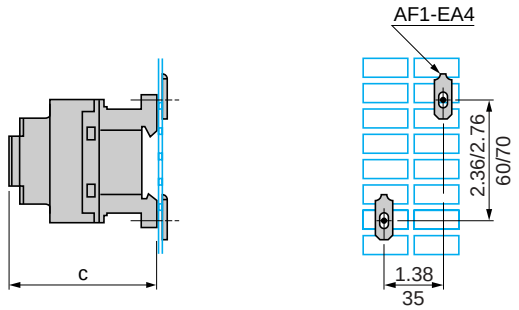


(1) Two elongated holes 0.18 x 0.35" (4.5 x 9 mm)

CAD (Vac Coil) or (Low Consumpsion Coil)
Panel Mounted

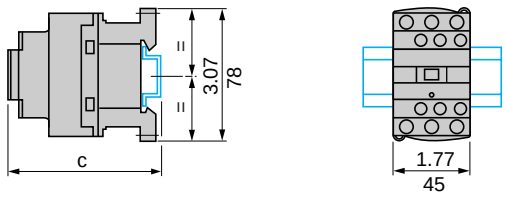


CAD
Mounted on AM1P Mounting Grid



		CAD (Vac)	CAD (Vdc or LC)
c	with cover	3.39 (86)	3.74 (95)

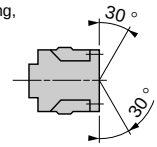
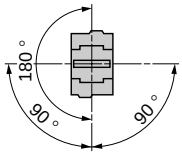
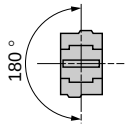
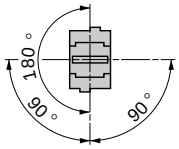
Mounted on AM1DP200 or DE200 Mounting Track



		CAD (Vac)	CAD (Vdc or LC)		
c	(AM1DP200) (1)	3.46 (88)	3.82 (97)		c
c	(AM1DE200) (1)	3.78 (96)	4.13 (105)		c

(1) With cover

Dimensions Inches / mm

Type				CAD (Vac)	CAD (Vdc)	CAD (Vdc) Low Consumption
Rated Insulation Voltage (Ui)	Conforming to IEC 60947-1-1 Overvoltage category III and degree of pollution 3		V	690	690	690
	Conforming to UL, CSA		V	600	600	600
Rated Impulse Withstand Voltage (Uimp)	Conforming to IEC 60947-1-1		kV	6	6	6
Separation of Electrical Circuits	To IEC 536 and VDE 0106			Reinforced insulation up to 400 V		
Conforming to Standards				IEC 60947-1-1, N-F C 63-140, VDE 0660, BS 4794. EN 60947-5-15		
Approvals				UL File: E164353 CCN: NKCR CSA File: LR43364 Guide: 3211 03 CE		
Protective Treatment	Conforming to IEC 68			"TH" (Tropical Finish) See page 23 for details.		
Degree of Protection	Conforming to VDE 0106			Front face protected against direct finger contact IP 2X		Protection against direct finger contact
Ambient Air Temperature Around the Device	Storage		°F (°C)	- 76 to 176 (- 60 to + 80)	- 76 to 176 (- 60 to + 80)	- 76 to 176 (- 60 to + 80)
	Operation, conforming to IEC 255 (80 to 110% UC)		°F (°C)	23 to 140 (- 5 to + 60)	23 to 140 (- 5 to + 60)	23 to 140 (- 5 to + 60)
	For operation at Uc		°F (°C)	- 40 to 158 (- 40 to + 70)	- 40 to 158 (- 40 to + 70)	- 40 to 158 (- 40 to + 70)
Maximum Operating Altitude	Without derating		ft (m)	9843 (3000)	9843 (3000)	9843 (3000)
Operating Positions	Without derating, in the following positions: 					
Shock Resistance ▲ Half sine wave for 11ms	Control relay open			10 gn	10 gn	10 gn
	Control relay closed			15 gn	15 gn	15 gn
Vibration Resistance ▲ 5 to 300 Hz	Control relay open			2 gn	2 gn	2gn
	Control relay closed			4 gn	4 gn	4 gn
Connection to Screw Clamp Terminals	Stranded wire without cable end	1 conductor	AWG (mm^2)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)
		2 conductors	AWG (mm^2)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)
	Stranded wire without cable end	1 conductor	AWG (mm^2)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)
		2 conductors	AWG (mm^2)	# 18 to # 14 (1 to 2.5)	# 18 to # 14 (1 to 2.5)	# 18 to # 14 (1 to 2.5)
	Solid wire without cable end	1 conductor	AWG (mm^2)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)
		2 conductors	AWG (mm^2)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)	# 18 to # 12 (1 to 4)
	Tightening torque		lb-in (N•m)	15 (1.7)	15 (1.7)	15 (1.7)
Connection to Spring Terminals	1 or 2 stranded or solid without cable end		AWG (mm^2)	# 18 to # 14 (1 to 2.5)	# 18 to # 14 (1 to 2.5)	# 18 to # 14 (1 to 2.5)

▲ In the least favorable direction, without change of contact state, with coil supplied at Uc.

Control Circuit Characteristics

Type				CAD (Vac)	CAD (Vdc)	CAD (Vdc) Low Consumption
Rated Control Circuit Voltage (Uc)			V	12 to 690	12 to 440	5 to 72
Control Voltage Limits						
Operation	With coil type:	Vac 50/60 Hz		80 to 110% Uc at 50 Hz	-	-
				85 to 110% Uc at 60 Hz	-	-
		Vdc standard, wide range		-	70 to 125% Uc	70 to 125% Uc
Drop-out				30 to 60% Uc	10 to 25% Uc	10 to 25% Uc
Average Consumption at 68 °F (20 °C) and at Uc	Vac Coil 50/60 Hz		VA	Inrush: 70	-	-
				Hold-in: 8	-	-
	Vdc Coil with standard coil		W	-	Inrush or hold-in: 5.4	Inrush or hold-in: 2.4
Operating Time	Between coil energization and					
(at rated control circuit voltage	- opening of the N/C contacts		ms	4 to 19	35 to 45	45 to 55
and at 68 °F (20 °C)	- closing of the N/O contacts		ms	12 to 22	50 to 55	60 to 70
	Between coil de-energization and					
	- opening of the N/O contacts		ms	4 to 12	6 to 14	10 to 15
	- closing of the N/C contacts		ms	6 to 17	20	25
Short Supply Failures	Maximum duration without affecting hold-in of the device		ms	2	2	2
Maximum Operating Rate	In operating cycles per second			3	3	3
Mechanical Durability	With coil type:	Vac 50/60 Hz		15	-	-
(in millions of operating cycles) ✚		Vdc standard, wide range		-	30	30
Time Constant L/R			ms	-	28	40

✚ The product life expressed above is based on average usage and normal operating conditions. Actual operating life will vary with conditions. The above statements are not intended to, nor shall they create any expressed or implied warranties as to product operation or life. For information on the listed warranty offered on this product, refer to the Square D terms and conditions of sale found in the Square D Digest.

Characteristics of Instantaneous Contacts incorporated in the Control Relay

Number of Contacts				5
Rated Operational Voltage (Ue)	Up to		V	690
Rated Insulation Voltage (Ui)	Conforming to IEC 60947-1-1		V	690
	Conforming to UL, CSA		V	600
Rated Conventional Thermal Current (Ith)	For ambient temperature ≤ 104 °F (40 °C)		A	10
Frequency of Operational Current			Hz	25 to 400
Minimum Switching Capacity	U min.		V	17
	I min.		mA	5
Short-circuit Protection	Conforming to IEC 60947-1-1			gG fuse: 10 A (10 Amp Class J Time delay)
Rated Making Capacity	Conforming to IEC 60947-1-1 I rms			140 Aac, 250 Adc
Short Time Rating	Permissible for	1 s	A	100
		500 ms	A	120
		100 ms	A	140
Insulation Resistance			MΩ	> 10
Non-overlap time	Guaranteed between N/O and N/C contacts		ms	1.5 (on energization and on de-energization)
Tightening Torque	Phillips n°2 and ∅ 6		lb-in (N●m)	10.6 (1.2)
Non-overlap Distance				Linked contacts in association with auxiliary contacts LADN
Linked Contacts	According to draft standard IEC 60947-4-5			The three “N/O” contacts and the two “N/C” contacts of CADN32 are linked mechanically by one mobile contact holder.

Contact Ratings

AC Ratings								DC Ratings			
Volts	Inductive 35% Power Factor						Resistive 75% Power Factor	Volts	Inductive		
	UL Rating	Make		Break		Cont. Amps	Make, Break & Cont. Amps		UL Rating	Make & ▲ Break Amps	Cont. Amps
		Amps	VA	Amps	VA						
120	A600	60	7200	6	720	10	10	125	Q600	0.55	2.5
240		30	7200	3	720	10	10	250		0.27	2.5
480		15	7200	1.5	720	10	10	600		0.10	2.5
600		12	7200	1.2	720	10	10				

▲ 69 VA maximum up to 300 volts.

AC Supply, Categories AC-14 and AC-15 (conforming to IEC 60947-1-1)

Electrical durability (up to 3600 operating cycles/hours) on an inductive load such as the coil of an electromagnet: making power (cos φ 0.7) = 10 times the power broken (cos φ 0.4)

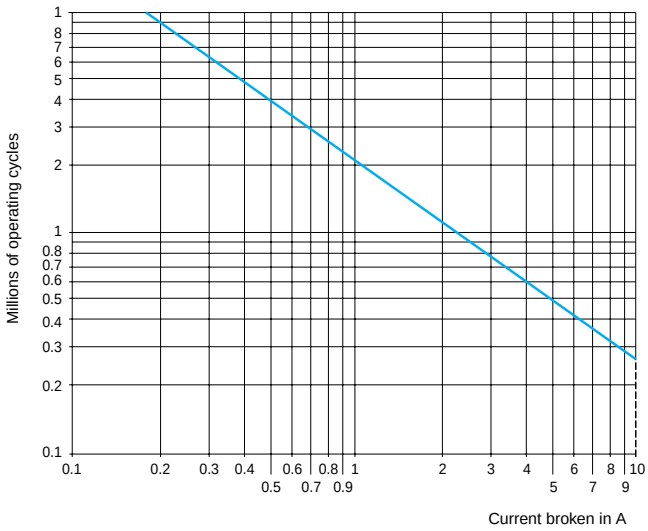
	V	24	48	115	230	400	440	600
1 million operating cycles ♠	VA	60	120	280	560	960	1050	1440
3 million operating cycles ♠	VA	16	32	80	160	280	300	420
10 million operating cycles ♠	VA	4	8	20	40	70	80	100

DC Supply, Categories DC-13

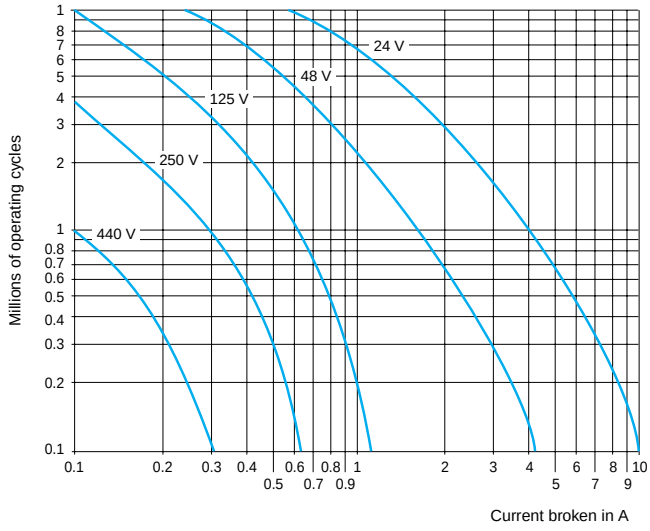
Electrical durability (up to 1200 operating cycles/hour) on an inductive load such as the coil of an electromagnet, without economy resistor, the time constant increasing with the power.

	V	24	48	125	250	440
1 million operating cycles ♠	W	120	90	75	68	61
3 million operating cycles ♠	W	70	50	38	33	28
10 million operating cycles ♠	W	25	18	14	12	10

Categories AC14 and AC15



Category DC13



Utilization Categories for Control Relays Conforming to IEC 60947-1-1

AC Applications		
	Category AC-14 (1)	This category applies to the switching of electromagnetic loads whose power drawn with the electromagnet closed is less than 72 VA. Application example: Switching the operating coil of contactors and relays.
	Category AC-15 (1)	This category applies to the switching of electromagnetic loads whose power drawn with the electromagnet closed is more than 72 VA. Application example: Switching the operating coil of contactors.
DC Applications		
	Category DC-13	This category applies to the switching of electromagnetic loads for which the time taken to reach 95% of the steady state current (T = 0.95) is equal to 6 times the power P drawn by the load (with P ≥ 50 W).

♠ The product life expressed above is based on average usage and normal operating conditions. Actual operating life will vary with conditions. The above statements are not intended to, nor shall they create any expressed or implied warranties as to product operation or life. For information on the listed warranty offered on this product, refer to the Square D terms and conditions of sale found in the Square D Digest.

(1) Replaces category AC-11