# Product data sheet Characteristics

# CAD32BD

TeSys D control relay - 3 NO + 2 NC - <= 690 V -24 V DC standard coil





#### N 4 - :

Range of product	TeSys D control relay	
Range	TeSys	
Product name	TeSys CAD	
Product or component type	Control relay	
Device short name	CAD	
Contactor application	Control circuit	

### Complementary

80 80 80		
22 NC 32 NC 42		
14 NO 44 NO UM		
Main		
Range of product	TeSys D control relay	
Range	TeSys	
Product name	TeSys CAD	
Product or component type	Control relay	
Device short name	CAD	
Contactor application	Control circuit	
Complementary		
Utilisation category	AC-14 AC-15	
	DC-13	
Pole contact composition	3 NO + 2 NC	
[Ue] rated operational voltage	<= 690 V AC 25400 Hz	
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	-
[Ith] conventional free air thermal current	10 A at <= 60 °C	
Irms rated making capacity	140 A AC conforming to IEC 60947-5-1	
	250 A DC conforming to IEC 60947-5-1	
[Icw] rated short-time withstand current	100 A 1 s 120 A 500 ms	
	140 A 100 ms	
Associated fuse rating	10 A gG conforming to IEC 60947-5-1	
[Ui] rated insulation voltage	690 V conforming to IEC 60947-5-1	
	600 V certifications UL	
Mar affect a second	600 V certifications CSA	
Mounting support	Plate Rail	
Connections - terminals	Screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> - cable stiffness: flexible - without cable end	
Apr 04 2018		



Tightening torque1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mmControl circuit voltage limits0.10.25 Uc drop-out 0.71.25 Uc operationalOperating time1525 ms coil de-energisation and NC closing 5372 ms coil energisation and NO closing 1624 ms coil energisation and NC opening 4763 ms coil energisation and NC openingMechanical durability30 McyclesOperating rate180 cyc/mnTime constant28 msInrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mmProduct weight0.58 kg		Screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 12.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 14 mm <sup>2</sup> - cable stiffness: solid - without cable end Screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> - cable stiffness: solid - without cable end Screw clamp terminals 2 cable(s) 14 mm <sup>2</sup> - cable stiffness: solid - without cable end
Operating time0.71.25 Uc operationalOperating time1525 ms coil de-energisation and NC closing 5372 ms coil energisation and NO opening 4763 ms coil energisation and NC opening 4763 ms coil energisation and NC openingMechanical durability30 McyclesOperating rate180 cyc/mnTime constant28 msInrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact) Vibrations control relay open 10 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Tightening torque	
5372 ms coil energisation and NO closing 1624 ms coil de-energisation and NO opening 4763 ms coil energisation and NO opening 4763 ms coil energisation and NC openingMechanical durability30 McyclesOperating rate180 cyc/mnTime constant28 msInrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Control circuit voltage limits	
Operating rate180 cyc/mnTime constant28 msInrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Operating time	5372 ms coil energisation and NO closing 1624 ms coil de-energisation and NO opening
Time constant28 msInrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Mechanical durability	30 Mcycles
Inrush power in W5.4 W at 20 °CHold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Operating rate	180 cyc/mn
Hold-in power consumption in W5.4 W at 20 °CMinimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Time constant	28 ms
Minimum switching voltage17 VMinimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Inrush power in W	5.4 W at 20 °C
Minimum switching current5 mANon-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Hold-in power consumption in W	5.4 W at 20 °C
Non-overlap time1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay open 2 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Minimum switching voltage	17 V
1.5 ms on energisation (between NC and NO contact)Insulation resistance> 10 MOhmMechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Minimum switching current	5 mA
Mechanical robustnessShocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Non-overlap time	
Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5300 Hz IEC 60068-2-6Height77 mmWidth45 mmDepth93 mm	Insulation resistance	> 10 MOhm
Width 45 mm   Depth 93 mm	Mechanical robustness	Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5300 Hz IEC 60068-2-6
Depth 93 mm	Height	77 mm
	Width	45 mm
Product weight 0.58 kg	Depth	93 mm
	Product weight	0.58 kg
Compatibility code CAD	Compatibility code	CAD

#### Environment

Standards	VDE 0660
	IEC 60947-5-1
	NF C 63-140
	BS 4794
	EN 60947-5
Product certifications	CSA
	UL
IP degree of protection	IP2x front face conforming to VDE 0106
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-4070 °C
Ambient air temperature for storage	-6080 °C
Operating altitude	3000 m without derating in temperature

## Offer Sustainability

Green Premium product
Compliant - since 0627 - Schneider Electric declaration of conformity
Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold
Reference not containing SVHC above the threshold
Available
Product environmental
Available
Pend of life manual

Contractual warranty	
Warranty period	18 months