

Product data sheet

Specifications



Control relay, TeSys Deca, 5NO,
<=690V, 42 VAC standard coil,
screw clamp terminals

CAD50D7

Main

Range	TeSys TeSys Deca
product name	TeSys CAD
Product or component type	Control relay
Device short name	CAD
Contactors application	Control circuit

Complementary

Utilisation category	DC-13 AC-14 AC-15
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	42 V AC 50/60 Hz
[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	600 V UL certified 600 V CSA certified 690 V conforming to IEC 60947-5-1
Mounting support	Rail Plate
Connections - terminals	Screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm ² solid without cable end
Tightening torque	1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2

Control circuit voltage limits	0.3...0.6 Uc (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40...60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40...60 °C):operational AC 60 Hz 1...1.1 Uc (60...70 °C):operational AC 50/60 Hz
Operating time	12...22 ms coil energisation and NO closing 4...12 ms coil de-energisation and NO opening
Mechanical durability	30 Mcycles
Maximum operating rate	180 cyc/mn
Inrush power in VA	70 VA 50 Hz (at 20 °C)
Hold-in power consumption in VA	8 VA 50 Hz (at 20 °C)
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non-overlap time	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm
Mechanical robustness	Shocks control relay open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations control relay open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6
Height	77 mm
Width	45 mm
Depth	84 mm
Net weight	0.58 kg

Environment

Standards	EN/IEC 60947-5-1 GB/T 14048.5 UL 60947-5-1 CSA C22.2 No 60947-5-1 JIS C8201-5-1
Product certifications	CB CCC UL CSA EAC CE UKCA
IP degree of protection	IP2X front face conforming to VDE 0106
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
Operating altitude	0...3000 m

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.800 cm
Package 1 Width	9.600 cm
Package 1 Length	11.900 cm

Package 1 Weight 352.000 g

Contractual warranty

Warranty 18 months

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) 17

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

[EU RoHS Directive](#) Compliant with Exemptions

REACH Regulation [REACH Declaration](#)

California proposition 65 **WARNING:** This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Use Again

Repack and remanufacture

Circularity Profile [End of Life Information](#)

WEEE  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Take-back No