

Product datasheet

Specifications



Control relay, TeSys Deca, 5NO, 0 to 690V, 42VAC 50/60Hz standard coil, screw clamp

CAD50D7

⚠ Discontinued on: Sep 12, 2025 AD

⚠ End-of-service on: Dec 31, 2025 AD

⚠ Discontinued

Main

Range	TeSys TeSys Deca
Product name	TeSys CAD
Product or component type	Control relay
Device short name	CAD
Contactor 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 mm²flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm²flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm²flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm²solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm²solid without cable end
Tightening torque	1.7 N.m - on screw clamp terminals - with screwdriver Phillips No 2 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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
Product 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 (in months)	18
----------------------	----



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

Total lifecycle Carbon footprint	18 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	15 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	B67ac941-f42f-4afd-894a-0b6f9cefde62
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
--------	----

Use Again



Repack and remanufacture

Recyclability potential, in %	66
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Offer Marketing Illustration

Product benefits / Features

TeSys Deca
Technical Benefits



- Control relays for AC or DC control circuits (AC15, DC13)
- Up to 5 contacts (with different combinations of NO + NC contacts)
- Various Relay Coil Voltages: A.C, D.C. or low consumption
- Instantaneous contacts on the control relays and time delay auxiliary contact blocks
- Wide range of temperature: - 40°C – 70°C
- A full scope of accessories and spare parts

Offer Marketing Illustration

Product benefits / Features

TeSys Deca
Control Relays



Performance

Engineered to enhance performance, this solution bridges automation with advanced power architectures to significantly boost motor efficiency.



Versatile

It supports multiple connection methods, including screw clamp terminals, spring terminals, and direct PCB welding, ensuring flexible installation across various applications.



Efficient

It offers connected, efficient products and solutions for switching and protection of motors and electrical loads in compliance with all major global electrical standards.



Image of product / Alternate images

Alternative



