

# Product datasheet

Specifications



## TeSys D control relay - 5 NO - <= 690 V - 220 V DC standard coil

CAD50MD

### 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-15 AC-14
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	DC standard
[Uc] control circuit voltage	220 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	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 <sup>2</sup> flexible without cable end Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> 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

<b>Control circuit voltage limits</b>	0.1...0.25 U <sub>c</sub> (-40...70 °C):drop-out DC 0.7...1.25 U <sub>c</sub> (-40...60 °C):operational DC 1...1.25 U <sub>c</sub> (60...70 °C):operational DC
<b>Operating time</b>	53...72 ms coil energisation and NO closing 16...24 ms coil de-energisation and NO opening
<b>Mechanical durability</b>	30 Mcycles
<b>Maximum operating rate</b>	180 cyc/mn
<b>Time constant</b>	28 ms
<b>Inrush power in W</b>	5.4 W (at 20 °C)
<b>Hold-in power consumption in W</b>	5.4 W at 20 °C
<b>Minimum switching voltage</b>	17 V
<b>Minimum switching current</b>	5 mA
<b>Non-overlap time</b>	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm
<b>Mechanical robustness</b>	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
<b>Height</b>	77 mm
<b>Width</b>	45 mm
<b>Depth</b>	93 mm
<b>Net weight</b>	0.58 kg

## Environment

<b>Standards</b>	BS 4794 EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1
<b>Product certifications</b>	CSA UL UKCA
<b>IP degree of protection</b>	IP2x front face conforming to VDE 0106
<b>Protective treatment</b>	TH conforming to IEC 60068
<b>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	501.0 g
<b>Package 1 Height</b>	11.2 cm
<b>Package 1 width</b>	9.1 cm
<b>Package 1 Length</b>	5.0 cm
<b>Unit Type of Package 2</b>	P06
<b>Number of Units in Package 2</b>	120

Package 2 Weight	73.82 kg
Package 2 Height	45.0 cm
Package 2 width	80.0 cm
Package 2 Length	60.0 cm
Unit Type of Package 3	S02
Number of Units in Package 3	15
Package 3 Weight	7.816 kg
Package 3 Height	15.0 cm
Package 3 width	30.0 cm
Package 3 Length	40.0 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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