

TeSys D control relay - 5 NO - <= 690 V - 230 V AC standard coil

CAD50P7

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

Contactor application	Control Circuit
Complementary	
Utilisation category	DC-13 AC-15 AC-14
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25400 Hz
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	230 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	Plate Rail
Connections - terminals	Screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Screw clamp terminals 1 cable(s) 14 mm²solid without cable end Screw clamp terminals 2 cable(s) 14 mm²solid 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

Description Control circuit voltage limits		
### ### ##############################	Control circuit voltage limits	0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz
Maximum operating rate 180 cyclmn 180	Operating time	
Innush power in VA 70 VA 50 Hz (at 20 °C) Hold-in power consumption in VA Within 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-	Mechanical durability	30 Mcycles
Hold-in power consumption in VA 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 1.5 ms on de-energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact Insulation resistance 2 10 MOhm Mechanical robustness Shocks control relay open: 10 Gin for 11 ms conforming to IEC 60088-2-27 Vibrations control relay open: 15 Gin for 11 ms conforming to IEC 60088-2-6 Within the Vibrations control relay open: 2 Gin, 5300 Hz conforming to IEC 60088-2-6 Height 77 mm Width 45 mm Depth 84 mm Net weight 0.58 kg Environment Standards BS 4724 BN 60817-5-1 NF G 63-140 VDE 6960 IEC 60335-1 VDE 6960 IEC 60335-1 VDE 6960 IEC 60335-1 VDE 6960 IEC 60336-1 Product certifications UL CSA UKCA UKCA URCA IP degree of protection IP 2x front face conforming to VDE 0106 Protective treatment Ambient air temperature for operation 4060 °C 6070 °C with derating Ambient air temperature for operation at temperature for operation at temperature for operation at temperature for operating attitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Height 5 cm	Maximum operating rate	180 cyc/mn
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 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 80088-2-27 Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 80088-2-27 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 80088-2-8 Width 77 mm Width 45 mm Depth 84 mm Net weight 5 sandards BS 4724 EC 80047-5 IEC 80047-5 IEC 80039-1 INF 6 63-140 VDE 6860 IEC 80339-1 Product certifications UL CSA UKCA IP degree of protection IP 2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 80088 Ambient air temperature for e080 °C 6070 °C with derating Ambient air temperature for eoperation Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 5 cm	Inrush power in VA	70 VA 50 Hz (at 20 °C)
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 MOhrm Mechanical robustness Shocks control relay open: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations control relay open: 2 Gn. 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay open: 2 Gn. 5300 Hz conforming to IEC 60068-2-6 Height 77 mm Width 45 mm Depth 84 mm Net weight 0.58 kg Environment Standards BS 4794 EN 60947-5 IEC 60947-5-1 IEC 60947-5-1 IEC 60947-5-1 IEC 60947-5-1 IEC 60935-1 IEC 60935-1 IEC 60035-1 IEC 60035-1 IEC 60035-1 IEC 60035-1 IEC 60035-1 IEC 60035-1 IEC 60068 Ambient air temperature for coperation -4080 °C 6070 °C with derating Ambient air temperature for coperation -6080 °C Operating altitude 03000 m Packing Units Unit Type of Package 1 IEC 6004 Package 1 Height 5 cm		8 VA 50 Hz (at 20 °C)
1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation	Minimum switching voltage	17 V
1.5 ms on de-energisation between NC and NO contact	Minimum switching current	5 mA
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, 3.00 Hz conforming to IEC 60068-2-6 Vibrations control relay open: 2 Gn 5, 3.00 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4	Non-overlap time	
Shocks control relay closed: 15 Gin for 11 ms conforming to IEC 60068-2-6 Vibrations control relay open: 2 Gin, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gin, 5300 Hz conforming to IEC 60068-2-6 Vibrations control relay closed: 4 Gin, 5300 Hz conforming to IEC 60068-2-6 Height 77 mm Width 45 mm Depth 84 mm Net weight 0.58 kg Environment Standards BS 4794 EN 60947-5- IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1 IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for 6070 °C with derating Ambient air temperature for 500-200 m Operation Interpretative for 500-200 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Height 5 cm	Insulation resistance	> 10 MOhm
Width	Mechanical robustness	Shocks control relay closed: 15 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations control relay open: 2 Gn, 5300 Hz conforming to IEC 60068-2-6
Depth 84 mm Net weight 0.58 kg Environment Standards BS 4794 EN 60947-5 IEG 60947-5- IEG 60947-5- IEG 60935-1 Product certifications UL CSA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation 4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Height	77 mm
Environment Standards BS 4794 EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1 Product certifications UL CSA UKCA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation Ambient air temperature for storage Operating altitude O3000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 5 cm	Width	45 mm
Environment Standards BS 4794 EN 60947-5 IEC 60947-5-1 IEC 60947-5-1 IEC 60347-5-1 IEC 60335-1 Product certifications UL CSA UKCA IP degree of protection IP 2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Depth	84 mm
Standards BS 4794 EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1 Product certifications UL CSA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Net weight	0.58 kg
Standards BS 4794 EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1 Product certifications UL CSA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 355.0 g Package 1 Height S cm		
EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660 IEC 60335-1 Product certifications UL CSA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 355.0 g Package 1 Height 5 cm		
CSA UKCA IP degree of protection IP2x front face conforming to VDE 0106 Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation Ambient air temperature for storage Operating altitude O3000 m Packing Units Unit Type of Package 1 Package 1 Weight 355.0 g Package 1 Height Fundament of VDE 0106 Protective treatment TH conforming to VDE 0106 TH conform	Standards	EN 60947-5 IEC 60947-5-1 NF C 63-140 VDE 0660
Protective treatment TH conforming to IEC 60068 Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage Operating altitude O3000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Product certifications	CSA
Ambient air temperature for operation -4060 °C 6070 °C with derating Ambient air temperature for storage -6080 °C Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	IP degree of protection	IP2x front face conforming to VDE 0106
Ambient air temperature for storage Operating altitude Omerating Units Unit Type of Package 1 Package 1 Weight Package 1 Height Formula of C with derating Omerating Common of C with derating	Protective treatment	TH conforming to IEC 60068
Operating altitude 03000 m Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm		
Packing Units Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm		-6080 °C
Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Operating altitude	03000 m
Unit Type of Package 1 PCE Number of Units in Package 1 1 Package 1 Weight 355.0 g Package 1 Height 5 cm	Packing Units	
Package 1 Weight 355.0 g Package 1 Height 5 cm		PCE
Package 1 Height 5 cm	Number of Units in Package 1	1
	Package 1 Weight	355.0 g
	Package 1 Height	5 cm
Package 1 width 9.2 cm	Package 1 width	9.2 cm

11.2 cm

S02

20

7.42 kg

Package 1 Length

Package 2 Weight

2

Unit Type of Package 2

Number of Units in Package 2

Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Weight	129.38 kg
Package 3 Height	77 cm
Package 3 width	60 cm
Package 3 Length	80 cm

Offer Sustainability

REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
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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