Product data sheet
Characteristics

CAD50ED
Control relay, TeSys Deca, 5NO, <=690V, 48V DC standard coil, screw clamp terminals



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	AC-14 DC-13 AC-15
Pole contact composition	5 NO
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz
Control circuit type	DC standard
[Uc] control circuit voltage	48 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	Plate Rail
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 Philips 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
Control circuit voltage limits	0.1...0.25 Uc (-40…70 °C):drop-out DC 0.7...1.25 Uc (-40…60 °C):operational DC 1...1.25 Uc (60…70 °C):operational DC
Operating time	53...72 ms coil energisation and NO closing 16...24 ms coil de-energisation and NO opening
Mechanical durability	30 Mcycles

Maximum operating rate	180 Cyc/Mn
Time constant	28 Ms
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W 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	93 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[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]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	5.100 Cm
Package 1 Width	8.600 Cm
Package 1 Length	10.500 Cm
Package 1 Weight	526.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	8.044 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	120
Package 3 Height	45.000 Cm
Package 3 Width	60.000 Cm
Package 3 Length	80.000 Cm
Package 3 Weight	74.280 Kg

Offer Sustainability

Recyclability potential, in %	75
Total lifecycle Carbon footprint	38 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	3.1662563038543174
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.17499315126665246

Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.048458574119927315
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	32.70348648648649
Carbon footprint of the use phase [B2, B3, B4, B6]	33 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	1.5333878987247123
Carbon footprint of the end-of-life phase [C1 to C4]	2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	38
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	B67ac941-f42f-4afd-894a-0b6f9cefde62
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony tr
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 a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised