

## Main

Product or component type	Control relay
Device short name	CAD
Contactors application	Control circuit
Utilisation category	AC-14 AC-15 DC-13
Pole contact composition	3 NO + 2 NC
[Ue] rated operational voltage	≤ 690 V AC 25...400 Hz
Control circuit type	AC 50/60 Hz
Control circuit voltage	110 V AC 50/60 Hz

## Complementary

[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	690 V conforming to IEC 60947-5-1 600 V certifications UL 600 V certifications CSA
Mounting support	Plate Rail
Connections - terminals	Spring terminals 1 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end Spring terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end Spring terminals 1 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: solid - without cable end Spring terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: solid - without cable end
Control circuit voltage limits	0.3...0.6 U <sub>c</sub> drop-out 0.8...1.1 U <sub>c</sub> operational 50 Hz 0.85...1.1 U <sub>c</sub> operational 60 Hz
Operating time	4...19 ms coil energisation and NC opening 12...22 ms coil energisation and NO closing 4...12 ms coil de-energisation and NO opening 6...17 ms coil de-energisation and NC closing
Mechanical durability	30 Mcycles
Operating rate	180 cyc/mn
Inrush power in VA	70 VA at 20 °C 50 Hz
Hold-in power consumption in VA	8 VA at 20 °C 50 Hz
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non-overlap time	1.5 ms on de-energisation (between NC and NO contact) 1.5 ms on energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm
Height	99 mm
Width	45 mm
Depth	84 mm
Product weight	0.58 kg

## Environment

Standards	BS 4794
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EN 60947-5  
IEC 60947-5-1  
NF C 63-140  
VDE 0660

Product certifications	CSA UL
IP degree of protection	IP2x front face conforming to VDE 0106
Protective treatment	TH conforming to IEC 60068
Ambient air temperature for operation	-40...70 °C
Ambient air temperature for storage	-60...80 °C
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks control relay open 10 Gn for 11 ms IEC 60068-2-27 Shocks control relay closed 15 Gn for 11 ms IEC 60068-2-27 Vibrations control relay open 2 Gn, 5...300 Hz IEC 60068-2-6 Vibrations control relay closed 4 Gn, 5...300 Hz IEC 60068-2-6