Product data sheet

Specifications



Control relay, TeSys K S207 railway, 3NO+1NC, <= 690V, 110V DC low consumption coil

CAK316FLS207

Main

Range	TeSys
Product name	TeSys CAK
Product or component type	Control relay
Device short name	CAK
Contactor application	Control circuit
Utilisation category	DC-13 AC-15
Poles description	4P
Pole contact composition	3 NO + 1 NC
[Ue] rated operational voltage	<= 690 V <= 400 Hz
Control circuit type	DC low consumption
[Uc] control circuit voltage	110 V DC

Complementary

Coil technology	With integral suppression device
[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	20 A (at 50 °C)
Irms rated making capacity	110 A at 690 V conforming to IEC 60947 110 A at 690 V conforming to NF C 63-110
[Icw] rated short-time withstand current	90 A 50 °C - 1 s 85 A 50 °C - 5 s 80 A 50 °C - 10 s 60 A 50 °C - 30 s 45 A 50 °C - 1 min 40 A 50 °C - 3 min 20 A 50 °C - >= 15 min
Associated fuse rating	10 A gG conforming to IEC 60947 10 A gG conforming to VDE 0660
[Ui] rated insulation voltage	690 V conforming to IEC 60947 750 V conforming to VDE 0110 group C 690 V conforming to BS 5424
Mounting support	Plate Rail
Connections - terminals	Lugs-ring terminals (external diameter: 7 mm)
Tightening torque	Power circuit: 1.1 N.m - on lugs-ring terminals - with screwdriver Philips No 23.2 mm Power circuit: 1.1 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm3.2 mm Power circuit: 1.1 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2
Control circuit voltage limits	Operational: 0.7...1.3 Uc (at <50 °C) Drop-out: <= 0.1 Uc (at <50 °C)

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

Operating time	10...20 ms coil de-energisation and NO opening 15...25 ms coil de-energisation and NC closing 30...40 ms coil energisation and NO closing 25...35 ms coil energisation and NC opening
Mechanical durability	30 Mcycles
Maximum operating rate	6000 cyc/h
Immunity to microbreaks	2 ms
Inrush power in W	1.8 W (at 20 °C)
Hold-in power consumption in W	1.8 W at 20 °C
Heat dissipation	1.8 W
Minimum switching voltage	17 V
Minimum switching current	5 mA
Non overlap distance	0.5 mm
Insulation resistance	> 10 MOhm
Height	58 mm
Width	45 mm
Depth	57 mm
Net weight	0.235 kg

Environment

Standards	BS 5424 IEC 60947 VDE 0660 IEC 60077-1 IEC 60077-2 EN 45545: R22 HL3 NF C 63-110 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
IP degree of protection	IP20 conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-25…50 °C
Ambient air temperature for storage	-50…80 °C
Operating altitude	2000 m without derating
Flame retardance	V0 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.7 cm
Package 1 Width	4.8 cm
Package 1 Length	6.2 cm
Package 1 Weight	240.0 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	**77 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**1 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.5 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**75 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 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**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Free of Substances of Very High Concern above the threshold

Use Again

Repack and remanufacture

Recyclability potential, in %	**63**
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**