Product data sheet Characteristics

LC1K09105E7

Contactor, TeSys K, 3P, AC-3/AC-3e,440V 9A, aux. 1NO, 48V AC coil,faston connectors





Main		
Range	TeSys	
Product or component type	Contactor	
Device application	Control	
Contactor application	Motor control Resistive load	

Utilisation category	AC-3	
	AC-3e	
	AC-1	
	AC-4	
Poles description	3P	
Power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: <= 690 V AC <= 400 Hz	
	Signalling circuit: <= 690 V AC <= 400 Hz	
[le] rated operational current	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
	9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
	20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	48 V AC 50/60 Hz	
Motor power kW	2.2 KW at 220230 V AC 50/60 Hz AC-3	
	4 KW at 380415 V AC 50/60 Hz AC-3	
	4 KW at 440/690 V AC 50/60 Hz AC-3	
	2.2 KW at 220230 V AC 50/60 Hz AC-3e	
	4 KW at 380415 V AC 50/60 Hz AC-3e	
	4 KW at 440/690 V AC 50/60 Hz AC-3e	
	2.2 KW at 220230 V AC 50/60 Hz AC-4	
	4 KW at 380415 V AC 50/60 Hz AC-4	
	4 kW at 440/690 V AC 50/60 Hz AC-4	
Auxiliary contact composition	1 NO	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[Ith] conventional free air thermal current	20 A (at 60 °C) for power circuit	
•	10 A (at 50 °C) for signalling circuit	
Irms rated making capacity	110 A AC for power circuit conforming to IEC 60947	
5 . ,	110 A AC for signalling circuit conforming to IEC 60947	
Rated breaking capacity	110 A at 220230 V conforming to IEC 60947	
	110 A at 380400 V conforming to IEC 60947	
	110 A at 415 V conforming to IEC 60947	
	110 A at 440 V conforming to IEC 60947	
	80 A at 500 V conforming to IEC 60947	
	70 A at 660690 V conforming to IEC 60947	

[lcw] rated short-time withstand current	90 A 50 °C - 1 s for power circuit 85 A 50 °C - 5 s for power circuit
	80 A 50 °C - 10 s for power circuit
	60 A 50 °C - 30 s for power circuit
	45 A 50 °C - 1 min for power circuit
	40 A 50 °C - 3 min for power circuit
	20 A 50 °C - >= 15 min for power circuit
	80 A - 1 s for signalling circuit
	90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit
Associated from rating	
Associated fuse rating	25 A gG at <= 440 V for power circuit 25 A aM for power circuit
	10 A gG for signalling circuit conforming to IEC 60947
	10 A gG for signalling circuit conforming to VDE 0660
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in VA	30 VA (at 20 °C)
Hold-in power consumption in VA	4.5 VA (at 20 °C)
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.81.15 Uc (at <50 °C)
	Drop-out: >= 0.20 Uc (at <50 °C)
Connections - terminals	Solder pins (external diameter: 0.035 mm)
Maximum operating rate	3600 cyc/h
Auxiliary contacts type	Type instantaneous 1 NO
Signalling circuit frequency	<= 400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Operating time	1020 ms coil de-energisation and NO opening 1020 ms coil energisation and NO closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO
	13849-1
	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISC 13849-1
Non overlap distance	0.5 mm
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 9 A AC-3 at Ue <= 440 V
· · · · · · · · · · · · · · · · · ·	1.3 Mcycles 9 A AC-3e at Ue <= 440 V
	0.16 Mcycles 20 A AC-1 at Ue <= 690 V
	0.02 Mcycles 54 A AC-4 at Ue <= 440 V
Mechanical robustness	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 Vibrations contactor closed: 4 Cp. 5, 300 Hz conforming to IEC 60068-2 6
	Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6
Height	58 mm
Width	45 mm
Depth	57 mm
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Environment

Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product certifications	CB Scheme[RETURN]CCC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]CE[RETURN]UŁ
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Operating altitude	2000 m without derating
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.8 cm
Package 1 Width	6.2 cm
Package 1 Length	6.8 cm
Package 1 Weight	202.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.526 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	[™] China RoHS Declaration
RoHS exemption information	€Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life 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