Product data sheet Characteristics

LC1K1201M7

Contactor, TeSys K, 3P, AC-3/AC-3e,440V 12A, aux. 1NC, 220...230V AC coil, screw clamp terminals





Main

Range	TeSys
Product or component type	Contactor
Device short name	LC1K
Device application	Control
Contactor application	Resistive load Motor control

Complementary

Complementary		
Utilisation category	AC-3	
	AC-3e AC-1	
	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	12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
	12 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	220230 V AC 50/60 Hz	
Motor power kW	3 KW at 220230 V AC 50/60 Hz AC-3	
	5.5 KW at 380415 V AC 50/60 Hz AC-3	
	5.5 KW at 440 V AC 50/60 Hz AC-3	
	4 KW at 690 V AC 50/60 Hz AC-3	
	3 KW at 220230 V AC 50/60 Hz AC-3e	
	5.5 KW at 380415 V AC 50/60 Hz AC-3e	
	5.5 KW at 440 V AC 50/60 Hz AC-3e	
	4 KW at 690 V AC 50/60 Hz AC-3e	
	3 KW at 220230 V AC 50/60 Hz AC-4	
	5.5 KW at 380415 V AC 50/60 Hz AC-4	
	5.5 KW at 440 V AC 50/60 Hz AC-4	
	4 kW at 690 V AC 50/60 Hz AC-4	
Auxiliary contact composition	1 NC	
[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	144 A AC for power circuit conforming to IEC 60947	
	110 A AC for signalling circuit conforming to IEC 60947	
Rated breaking capacity	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	

[Icw] rated short-time withstand current	115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 A 50 °C - 3 min for power circuit 25 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 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	Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts type	Type instantaneous 1 NC
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 12 A AC-3 at Ue <= 440 V 1.3 Mcycles 12 A AC-3e at Ue <= 440 V 0.3 Mcycles 20 A AC-1 at Ue <= 690 V 0.02 Mcycles 72 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 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 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

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]UI
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

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.800 cm
Package 1 Width	6.200 cm
Package 1 Length	6.500 cm
Package 1 Weight	177.700 g
Unit Type of Package 2	S02
Number of Units in Package 2	50
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.143 kg
Unit Type of Package 3	P06
Number of Units in Package 3	800
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	154.294 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EPEU RoHS Declaration
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