Product data sheet
Characteristics

LC1E500U7
Contactor,Easy TeSys Control,LC1E,3P(3NO),AC-3,<=440V,500A,240V AC coil



Main

Range	Easy TeSys
Range of produc	Easy TeSys Control
Product or component type	Contactor
Device short name	LC1E
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	500 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 700 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	240 V AC 50/60 Hz

Complementary

Motor power kW	147 KW at 220...230 V AC 50/60 Hz 250 KW at 380...400 V 280 KW at 415 V 295 KW at 440 V 335 KW at 500 V 355 kW at 660...690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	700 A (at 40 °C) for power circuit
Irms rated making capacity	5000 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	4000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	4200 A 40 °C - 10 s for power circuit
Associated fuse rating	10 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 800 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.18 mOhm - Ith 700 A 50 Hz for power circuit
Power dissipation per pole	45 W AC-3 88 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	4000000 cycles
Electrical durability	250000 Cycles AC-1 600000 cycles AC-3
Control circuit type	AC at 50/60 Hz
Control circuit voltage limits	0.85...1.1 Uc (55 °C):operational 50/60 Hz 0.35...0.5 Uc (55 °C):drop-out 50/60 Hz

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Inrush power in VA	1100 VA 50 Hz cos phi 0.9 (at 20 °C) 1100 VA 60 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	18 VA 50 Hz cos phi 0.9 (at 20 °C) 18 VA 60 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	18 W for control circuit 18 W
Operating time	100...170 ms on opening 40...75 ms on closing
Maximum operating rate	2400 cyc/h 55 °C
Connections - terminals	Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: cable with lug 2 - external diameter: 240 mm Power circuit: bars 2 - busbar cross section: 40 x 5 mm
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 Ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
Mounting support	Plate

Environment

Standards	IEC 60947-1 IEC 60947-4-1 IEC 60947-5-1
Product certifications	EAC[RETURN]CE
IP degree of protection	IP00 conforming to IEC 60529
Permissible ambient air temperature around the device	-20…70 °C at Uc -60…80 °C storage -5…55 °C operation
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (9 Gn for 11 ms)
Height	400 mm
Width	233 mm
Depth	232 mm
Net weight	11.35 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.5 cm
Package 1 Width	28.5 cm
Package 1 Length	28.5 cm
Package 1 Weight	12.25 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
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