



Main

Range of product	TeSys D
Range	TeSys
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Control circuit type	DC low consumption
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	18.5 kW at 380...400 V AC 50 Hz (AC-3) 18.5 kW at 500 V AC 50 Hz (AC-3) 18.5 kW at 660...690 V AC 50 Hz (AC-3) 18.5 kW at 415...440 V AC 50 Hz (AC-3) 9 kW at 220...230 V AC 50 Hz (AC-3) 7.5 kW at 400 V AC 50 Hz (AC-4)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Front cover	With
Motor power hp	2 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 hp at 200/208 V AC 60 Hz for 3 phases motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 25 hp at 575/600 V AC 60 Hz for 3 phases motors
Auxiliary contact composition	1 NO + 1 NC
[Uc] control circuit voltage	24 V DC

Control circuit voltage limits	Drop-out: 0.1...0.3 U _c (at <60 °C) Operational: 0.8...1.25 U _c (at <60 °C)
Time constant	28 ms
[Ui] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Connections - terminals	Control circuit: spring terminals 1 cable(s) 2.5 mm ² flexible without cable end Control circuit: spring terminals 2 cable(s) 2.5 mm ² flexible without cable end Power circuit: spring terminals 1 cable(s) 4 mm ² flexible without cable end Power circuit: spring terminals 2 cable(s) 4 mm ² flexible without cable end
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 50 A (at 60 °C) for power circuit
I _{rms} rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 kA at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 63 A at ≤ 690 V coordination type 1 for power circuit 63 A at ≤ 690 V coordination type 2 for power circuit
Average impedance	2 mΩ - I _{th} 50 A 50 Hz for power circuit
Power dissipation per pole	3 W AC-3 5 W AC-1
Inrush power in W	2.4 W (at 20 °C)
Hold-in power consumption in W	2.4 W at 20 °C
Operating time	25 ms closing 77 ms opening
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/ISO 13849-1
Mechanical durability	30000000 cycles
Maximum operating rate	3600 cyc/h 60 °C
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V for control circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Insulation resistance	> 10 MΩ for control circuit
Height	85 mm
Width	45 mm
Depth	101 mm
Net weight	0.54 kg

Environment

Standards	UL 508 EN/IEC 60947-4-1 EN/IEC 60947-5-1 CSA C22.2 No 14
Product certifications	LROS (Lloyds register of shipping) GOST CCC RINA BV CSA DNV GL

UL

IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at U _c
Operating altitude	3000 m without
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	15 gn contactor closed 8 gn contactor opened
Vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
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
----------	-----------