



## Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactors
Device short name	LC1D
Contactors application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit: $\leq 1000$ V AC 25...400 Hz Power circuit: $\leq 460$ V DC
[Ie] rated operational current	200 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit
Control circuit type	DC standard
[Uc] control circuit voltage	48 V DC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 A (at 60 °C) for power circuit
Irms rated making capacity	1260 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	250 A 40 °C - 10 min for power circuit 550 A 40 °C - 1 min for power circuit 950 A 40 °C - 10 s for power circuit 1100 A 40 °C - 1 s for power circuit
Associated fuse rating	250 A gG at $\leq 690$ V coordination type 1 for power circuit 200 A gG at $\leq 690$ V coordination type 2 for power circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical durability	0.8 Mcycles 200 A AC-1 at Ue $\leq 440$ V

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

Power dissipation per pole	24 W AC-1
Safety cover	With
Mounting support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	CCC UL CSA RINA GOST GL LROS (Lloyds register of shipping) BV DNV
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> flexible without cable end Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> flexible without cable end Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> flexible with cable end Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> flexible with cable end Power circuit: connector 1 cable(s) 10...120 mm <sup>2</sup> solid without cable end Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> solid without cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm
Operating time	20...35 ms closing 40...75 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	8 Mcycles
Maximum operating rate	1200 cyc/h 60 °C

## Complementary

Coil technology	With integral suppression device
Control circuit voltage limits	Operational: 0.75...1.2 U <sub>c</sub> DC (at 55 °C) Drop-out: 0.15...0.4 U <sub>c</sub> DC (at 55 °C)
Time constant	25 ms
Inrush power in W	270...365 W (at 20 °C)
Hold-in power consumption in W	2.4...5.1 W at 20 °C

## Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
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 <sub>c</sub>
Operating altitude	3000 m without
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz

Shocks contactor closed: 15 Gn for 11 ms  
Shocks contactor open: 6 Gn for 11 ms

Height	158 mm
Width	150 mm
Depth	132 mm
Net weight	2.86 kg

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>

### Contractual warranty

Warranty	18 months
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