



Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	18 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 32 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	10 kW at 500 V AC 50/60 Hz AC-3 10 kW at 660...690 V AC 50/60 Hz AC-3 4 kW at 220...230 V AC 50/60 Hz AC-3 7.5 kW at 380...400 V AC 50/60 Hz AC-3 9 kW at 415...440 V AC 50/60 Hz AC-3 4 kW at 400 V AC 50/60 Hz AC-4
Motor power hp	1 hp at 115 V AC 50/60 Hz for 1 phase motors 3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947

Overvoltage category	III
[Ith] conventional free air thermal current	32 A at $\leq 60^\circ\text{C}$ for power circuit 10 A at $\leq 60^\circ\text{C}$ for signalling circuit
Irms rated making capacity	300 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	145 A $\leq 40^\circ\text{C}$ 10 s power circuit 240 A $\leq 40^\circ\text{C}$ 1 s power circuit 40 A $\leq 40^\circ\text{C}$ 10 min power circuit 84 A $\leq 40^\circ\text{C}$ 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	35 A gG at $\leq 690\text{ V}$ coordination type 2 for power circuit 50 A gG at $\leq 690\text{ V}$ coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 32 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1.65 Mcycles 18 A AC-3 at $U_e \leq 440\text{ V}$ 1 Mcycles 32 A AC-1 at $U_e \leq 440\text{ V}$
Power dissipation per pole	0.8 W AC-3 2.5 W AC-1
Protective cover	With
Mounting support	Plate Rail
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	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Control circuit : lugs-ring terminals - external diameter: 8 mm Power circuit : lugs-ring terminals - external diameter: 8 mm
Tightening torque	Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat $\varnothing 6\text{ mm}$ screw : M3.5 Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5 Power circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat $\varnothing 8\text{ mm}$ screw : M3.5 Power circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5
Operating time	4...19 ms opening 12...22 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	15 Mcycles
Operating rate	3600 cyc/h at $\leq 60^\circ\text{C}$

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U_c drop-out at 60°C , AC 50/60 Hz 0.8...1.1 U_c operational at 60°C , AC 50 Hz 0.85...1.1 U_c operational at 60°C , AC 60 Hz
Inrush power in VA	70 VA at 20°C ($\cos \phi 0.75$) 60 Hz

	70 VA at 20 °C (cos ϕ 0.75) 50 Hz
Hold-in power consumption in VA	7.5 VA at 20 °C (cos ϕ 0.3) 60 Hz 7 VA at 20 °C (cos ϕ 0.3) 50 Hz
Heat dissipation	2...3 W at 50/60 Hz
Auxiliary contacts type	Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on energisation between NC and NO contact 1.5 ms on de-energisation between NC and NO contact
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-20...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 derating in temperature
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 open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
Height	77 mm
Width	45 mm
Depth	86 mm
Product weight	0.33 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0633 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available  Product environmental
Product end of life instructions	Available  End of life manual

Contractual warranty

Warranty period	18 months
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