



LC1D0965RD has not been replaced. Please contact your customer care center for more information.

ⓘ Discontinued

Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Poles description	3P
Power 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	25 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit 9 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit
Motor power kW	4 kW at 380...400 V AC 50/60 Hz 2.2 kW at 220...230 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz 5.5 kW at 660...690 V AC 50/60 Hz 4 kW at 415...440 V AC 50/60 Hz
Motor power HP (UL / CSA)	0.33 hp at 115 V AC 50/60 Hz for 1 phase motors 1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	440 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overtoltage category	III
[Ith] conventional free air thermal current	25 A at ≤ 60 °C for power circuit 10 A at ≤ 60 °C for signalling circuit
Irms rated making capacity	250 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	250 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	105 A ≤ 40 °C 10 s power circuit

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

	<p>210 A <= 40 °C 1 s power circuit 30 A <= 40 °C 10 min power circuit 61 A <= 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit</p>
Associated fuse rating	<p>20 A gG at <= 690 V coordination type 2 for power circuit 25 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1</p>
Average impedance	2.5 mOhm at 50 Hz - Ith 25 A for power circuit
[U] rated insulation voltage	<p>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</p>
Electrical durability	<p>0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V</p>
Power dissipation per pole	<p>0.2 W AC-3 1.56 W AC-1</p>
Safety cover	Without
Mounting support	<p>Rail Plate</p>
Standards	<p>CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508</p>
Product certifications	<p>DNV CSA GOST GL RINA UL LROS (Lloyds register of shipping) BV CCC</p>
Connections - terminals	<p>Control circuit : lugs-ring terminals - external diameter: 8 mm Power circuit : lugs-ring terminals - external diameter: 8 mm</p>
Tightening torque	<p>Control circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 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 Ø 8 mm screw : M3.5 Power circuit : 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5</p>
Operating time	<p>53.55...72.45 ms closing 16...24 ms opening</p>
Safety reliability level	<p>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</p>
Mechanical durability	30 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	<p>0.1...0.25 Uc drop-out at 60 °C, DC 0.7...1.25 Uc operational at 60 °C, DC</p>
Time constant	28 ms
Inrush power in W	5.4 W at 20 °C
Hold-in power consumption in W	5.4 W at 20 °C
Auxiliary contacts type	<p>Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1</p>
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	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 Uc
---	-------------------

Operating altitude	3000 m without derating
--------------------	-------------------------

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	93 mm
-------	-------

Product weight	0.48 kg
----------------	---------

Contractual warranty

Warranty period	18 months
-----------------	-----------
