

## Product data sheet

### Characteristics

# LC1D65SW

contactor TeSys LC1-D - 3 poles - AC-3 440V  
65 A - coil 72 V DC

EAN Code: 3389110437737



### Main

Range	TeSys
Range of product	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contactor application	Resistive load Resistive load
Utilisation category	AC-1 AC-4 AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 690 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit 65 A (at <60 °C) DC AC-3 for power circuit 80 A (at <60 °C) DC AC-1 for power circuit
[Uc] control circuit voltage	480 V DC

### Complementary

Motor power kW	30 kW at 380...400 V AC 50 Hz 37 kW at 500 V AC 50 Hz 37 kW at 660...690 V AC 50 Hz 18.5 kW at 220...230 V AC 50 Hz 30 kW at 415 V AC 50 Hz 37 kW at 1000 V AC 50 Hz
Motor power hp	10 Hp at 230/240 V AC 60 Hz for 1 phase motors 20 Hp at 200/208 V AC 60 Hz for 3 phases motors 20 Hp at 230/240 V AC 60 Hz for 3 phases motors 40 Hp at 460/480 V AC 60 Hz for 3 phases motors 50 Hp at 575/600 V AC 60 Hz for 3 phases motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit
Irms rated making capacity	1000 A at 440 V DC for power circuit conforming to IEC 60947 1000 A at 440 V for power circuit conforming to IEC 60947 250 A DC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit
Associated fuse rating	125 A gG at ≤ 690 V coordination type 2 for power circuit 160 A gG at ≤ 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Average impedance	1.5 Ohm - Ith 80 A 50 Hz for power circuit

Power dissipation per pole	6.4 W AC-1 6.3 W AC-3 9.6 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified conforming to IEC 60947-1 Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1 Power circuit: 1000 V CSA certified conforming to IEC 60947-4-1 Control circuit: 600 V CSA certified
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10000000 cycles
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.75...1.25 U <sub>c</sub> (-40...60 °C):operational DC 1...1.25 U <sub>c</sub> (60...70 °C):operational DC 0.1...0.3 U <sub>c</sub> (-40...70 °C):drop-out DC
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in W	7.4 W at 20 °C
Heat dissipation	4...5 W at 50/60 Hz for control circuit
Operating time	50 ms closing 12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/mn 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: rigid Power circuit: screw terminals 2 2.5...16 mm <sup>2</sup> - cable stiffness: rigid without cable end Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw terminals 2 2.5...16 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw terminals 1 2.5...25 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: rigid Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: rigid
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mirror contact 1 NC conforming to IEC 60947-4-1 Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
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 between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting support	Rail Rail

## Environment

Standards	UL 508 EN 60947-4-1 EN 60947-5-1 CSA C22.2 No 14 IEC 60947-5-1
Product certifications	RINA[RETURN]LROS (Lloyds register of ship- ping)[RETURN]CCC[RETURN]GOST[RETURN]UL[RETURN]GL[RETURN]BV[RETURN]DNV[
IP degree of protection	IP2X conforming to VDE 0106 IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30
Climatic withstand	Conforming to IACS E10 exposure to damp heat
Permissible ambient air temperature around the de- vice	-60...80 °C storage -40...60 °C operation 60...70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor closed (15 gn) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor opened (10 Gn)
Height	122 mm
Width	70 mm
Depth	118 mm
Net weight	2.185 kg
Quantity per set	Set of 1

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

## Contractual warranty

Warranty	18 months
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