

Product data sheet

Characteristics

LC1D95FW

TeSys D, Contactor, 3P(3 NO), AC-3, <= 440V, 95A, 110V DC coil



Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	95 A (at <60 °C) at <= 440 V AC-3 for power circuit 125 A (at <60 °C) at <= 690 V AC-1 for power circuit
[Uc] control circuit voltage	110 V DC

Complementary

Motor power kW	25 kW at 220...230 V AC 50 Hz (AC-3) 45 kW at 380...400 V AC 50 Hz (AC-3) 45 kW at 415...440 V AC 50 Hz (AC-3) 55 kW at 500 V AC 50 Hz (AC-3) 45 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 400 V AC 50 Hz (AC-4) 25 kW at 220...230 V AC 50 Hz (AC-3e) 45 kW at 380...400 V AC 50 Hz (AC-3e) 45 kW at 415...440 V AC 50 Hz (AC-3e) 55 kW at 500 V AC 50 Hz (AC-3e) 45 kW at 660...690 V AC 50 Hz (AC-3e)
Motor power hp	7.5 Hp at 115 V AC 60 Hz for 1 phase motors 15 Hp at 230/240 V AC 60 Hz for 1 phase motors 25 Hp at 200/208 V AC 60 Hz for 3 phases motors 30 Hp at 230/240 V AC 60 Hz for 3 phases motors 60 Hp at 460/480 V AC 60 Hz for 3 phases motors 60 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M9
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 125 A (at 60 °C) for power circuit
Irms rated making capacity	1100 A at 440 V AC 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	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	1100 A 40 °C - 1 s for power circuit 800 A 40 °C - 10 s for power circuit 400 A 40 °C - 1 min for power circuit 135 A 40 °C - 10 min for power circuit 140 A - 100 ms for signalling circuit 120 A - 500 ms for signalling circuit 100 A - 1 s for signalling circuit

Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 160 A gG at ≤ 690 V coordination type 2 for power circuit 200 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	0.8 Ohm - lth 125 A 50 Hz for power circuit
Power dissipation per pole	12.5 W AC-1 7.2 W AC-3
[Ui] rated insulation voltage	Power circuit: 1000 V conforming to IEC 60947-1 Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 1.3 Mcycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20 Mcycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Electrical durability	1.2 Mcycles 95 A AC-3 1.3 Mcycles 125 A AC-1
Control circuit type	DC wide range
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.75...1.2 Uc (-40...55 °C):operational DC 1...1.2 Uc (55...70 °C):operational DC
Inrush power in W	22 W (at 20 °C)
Hold-in power consumption in W	22 W at 20 °C
Operating time	20...35 ms opening 95...130 ms closing
Time constant	75 ms
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 1 4...50 mm² - cable stiffness: rigid Power circuit: screw terminals 2 4...25 mm² - cable stiffness: rigid Power circuit: screw terminals 1 4...50 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 2 4...25 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 1 4...50 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 2 4...16 mm² - cable stiffness: flexible with cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 12 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on screw terminal - with screwdriver hex (Allen key) 4 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
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
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling 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
Mounting support	Plate Rail

Environment

Standards	EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-5-1 GB/T 14048.4
Product certifications	IECEE CB Scheme[RETURN]CCC[RETURN]EAC[RETURN]LROS (Lloyds register of shipping)[RETURN]RINA[RETURN]BV[RETURN]DNV-GL
IP degree of protection	IP20 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
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 opened (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	186 mm
Net weight	2.61 kg

Packing Units

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

Offer Sustainability

EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)  EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	 China RoHS Declaration
RoHS exemption information	 Yes
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
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