

LC1D38KUE

IEC contactor, TeSys Deca Green, nonreversing, 38A, 20HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 100/250VAC/VDC coil



Main

Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	50 A 140 °F (60 °C) <= 440 V AC-1 power circuit 38 A 140 °F (60 °C) <= 440 V AC-3 power circuit 38 A 140 °F (60 °C) <= 440 V AC-3e power circuit
[Uc] control circuit voltage	100...250 V AC 50/60 Hz 100...250 V DC

Complementary

Motor power kW	9 kW 220...230 V AC 50 Hz AC-3) 18.5 kW 380...400 V AC 50 Hz AC-3) 18.5 kW 415 V AC 50 Hz AC-3) 18.5 kW 440 V AC 50 Hz AC-3) 18.5 kW 500 V AC 50 Hz AC-3) 18.5 kW 660...690 V AC 50 Hz AC-3) 9 kW 220...230 V AC 50 Hz AC-3e) 18.5 kW 380...400 V AC 50 Hz AC-3e) 18.5 kW 415 V AC 50 Hz AC-3e) 18.5 kW 440 V AC 50 Hz AC-3e) 18.5 kW 500 V AC 50 Hz AC-3e) 18.5 kW 660...690 V AC 50 Hz AC-3e)
Maximum Horse Power Rating	2 Hp 115 V at AC 60 Hz for 1 phase 5 Hp 230/240 V at AC 60 Hz for 1 phase 10 Hp 200/208 V at AC 60 Hz for 3 phase 10 Hp 230/240 V at AC 60 Hz for 3 phase 20 Hp 460/480 V at AC 60 Hz for 3 phase 25 hp 575/600 V at AC 60 Hz for 3 phase
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 50 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 550 A 440 V power circuit IEC 60947
Rated breaking capacity	550 A 440 V power circuit IEC 60947

[Icw] rated short-time withstand current	100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit 60 A 104 °F (40 °C) - 10 min power circuit 150 A 104 °F (40 °C) - 1 min power circuit 310 A 104 °F (40 °C) - 10 s power circuit 430 A 104 °F (40 °C) - 1 s power circuit
Associated fuse rating	10 A gG signalling circuit IEC 60947-5-1 63 A gG ≤ 690 V type 1 power circuit 63 A gG ≤ 690 V type 2 power circuit
Average impedance	2 mOhm - lth 50 A 50 Hz power circuit
Power dissipation per pole	5 W AC-1 3 W AC-3 3 W AC-3e
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	15 Mcycles
Electrical durability	1.8 Mcycles 35 A AC-3 ≤ 440 V 0.9 Mcycles 50 A AC-1 ≤ 440 V 1.8 Mcycles 35 A AC-3e ≤ 440 V
Control circuit type	AC/DC 50/60 Hz AC/DC electronic
Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	≤ 0.1 Uc -40...158 °F (-40...70 °C) drop-out AC/DC 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC/DC 1...1.1 Uc 140...158 °F (60...70 °C) operational AC/DC
Inrush power in VA	25 VA 50/60 Hz 68 °F (20 °C))
Inrush power in W	18 W 68 °F (20 °C))
Hold-in power consumption in VA	1.6 VA 50/60 Hz 68 °F (20 °C))
Hold-in power consumption in W	1.1 W 68 °F (20 °C)
Heat dissipation	1.1 W 50/60 Hz
Operating time	45...55 ms closing 20...90 ms opening
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) solid Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²) solid Power circuit screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²) flexible without cable end Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²) flexible without cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1...10 mm ²) flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²) flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1.5...10 mm ²) solid Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²) solid
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2 M4 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 M3.5
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V signalling circuit

Minimum switching current	5 mA signalling circuit
Insulation resistance	> 10 MOhm signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Mounting Support	Plate Rail

Environment

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
Product Certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) UKCA
IP degree of protection	IP20 front face IEC 60529
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) 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 8 Gn for 11 ms)
Height	3.35 in (85 mm)
Width	1.77 in (45 mm)
Depth	3.62 in (92 mm)
Net Weight	0.97 lb(US) (0.442 kg)

Ordering and shipping details

Category	22356-CTR, TESYS D, OPEN, 9-65A AC/DC GREEN
Discount Schedule	I12
GTIN	3606480987809
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.09 in (5.3 cm)
Package 1 Width	3.74 in (9.5 cm)
Package 1 Length	4.72 in (12 cm)
Package 1 Weight	16.08 oz (456 g)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	15.77 lb(US) (7.152 kg)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Halogen content performance	Halogen free plastic parts & cables product

Contractual warranty

Warranty	18 months
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