

LC1D38EHE

IEC contactor, TeSys Deca Green,
nonreversing, 38A, 20HP at 480VAC, up to
100kA SCCR, 3 phase, 3 NO, 48/130VAC/VDC
coil





Main

Range	TeSys TeSys Deca
Product name	TeSys D Green TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
Contacteur application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-3e
Poles description	3P
Power pole contact composition	3 NO
[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
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)
Motor power HP (UL / CSA)	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
[Uc] control circuit voltage	48...130 V AC 50/60 Hz 48...130 V DC
Coil type	AC/DC electronic
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[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 - Ith 50 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1

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
Power dissipation per pole	5 W AC-1 3 W AC-3 3 W AC-3e
Front cover	With
Mounting Support	Plate Rail
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
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
Operating time	45...55 ms closing 20...90 ms opening
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
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

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	24 W 68 °F (20 °C)
Hold-in power consumption in VA	1.3 VA 68 °F (20 °C)) 50/60 Hz
Hold-in power consumption in W	0.8 W 68 °F (20 °C)
Heat dissipation	0.8 W 50/60 Hz
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 current	5 mA signalling circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm signalling circuit

Environment

IP degree of protection	IP20 front face IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature for Storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open8 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)
Color	Gray SE GREY 6) Green SE GREEN 2)

Ordering and shipping details

Category	22356-CTR, TESYS D, OPEN, 9-65A AC/DC GREEN
Discount Schedule	I12
GTIN	3606480987793
Nbr. of units in pkg.	1
Package weight(Lbs)	16.23 oz (460 g)
Returnability	No

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.17 in (5.5 cm)
Package 1 width	3.74 in (9.5 cm)
Package 1 Length	4.65 in (11.8 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	16.00 lb(US) (7.256 kg)
Package 2 Height	5.91 in (15 cm)

Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
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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