Product data sheet
Characteristics

LC1D32ED
IEC contactor, TeSys Deca, nonreversing, 32A, 20HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 48VDC coil, open style



Main

Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	32 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 50 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit 32 A 140 °F (60 °C)) <= 440 V AC AC-3e power circuit
[Uc] control circuit voltage	48 V DC

Complementary

Motor power kW	7.5 KW 220...230 V AC 50/60 Hz AC-3) 15 KW 380...400 V AC 50/60 Hz AC-3) 15 KW 415...440 V AC 50/60 Hz AC-3) 18.5 KW 500 V AC 50/60 Hz AC-3) 18.5 KW 660...690 V AC 50/60 Hz AC-3) 7.5 KW 400 V AC 50/60 Hz AC-4) 7.5 KW 220...230 V AC 50/60 Hz AC-3e) 15 KW 380...400 V AC 50/60 Hz AC-3e) 15 KW 415...440 V AC 50/60 Hz AC-3e) 18.5 KW 500 V AC 50/60 Hz AC-3e) 18.5 kW 660...690 V AC 50/60 Hz AC-3e)
Maximum Horse Power Rating	2 Hp 115 V at AC 50/60 Hz for 1 phase 5 Hp 230/240 V at AC 50/60 Hz for 1 phase 7.5 Hp 200/208 V at AC 50/60 Hz for 3 phase 10 Hp 230/240 V at AC 50/60 Hz for 3 phase 20 Hp 460/480 V at AC 50/60 Hz for 3 phase 30 hp 575/600 V at AC 50/60 Hz for 3 phase
Compatibility code	LC1D
Pole contact composition	3 NO
Contact compatibility	M4
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

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[Icw] rated short-time withstand current	260 A 104 °F (40 °C) - 10 s power circuit 430 A 104 °F (40 °C) - 1 s power circuit 60 A 104 °F (40 °C) - 10 min power circuit 138 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling 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
Power dissipation per pole	2 W AC-3 5 W AC-1 2 W AC-3e
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
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	30 Mcycles
Electrical durability	1.65 Mcycles 32 A AC-3 <= 440 V 1.4 Mcycles 50 A AC-1 <= 440 V 1.65 Mcycles 32 A AC-3e <= 440 V
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.25 Uc -40…158 °F (-40…70 °C) drop-out DC 0.7...1.25 Uc -40…140 °F (-40…60 °C) operational DC 1...1.25 Uc 140…158 °F (60…70 °C) operational DC
Inrush power in W	5.4 W 68 °F (20 °C))
Hold-in power consumption in W	5.4 W 68 °F (20 °C)
Operating time	53.55...72.45 ms closing 16...24 ms opening
Time constant	28 ms
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) flexible without cable end Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) flexible without cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) flexible with cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) flexible with cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) solid without cable end Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) solid without cable end Power circuit screw clamp terminals 1 0.00…0.02 in² (2.5…10 mm²) flexible without cable end Power circuit screw clamp terminals 2 0.00…0.02 in² (2.5…10 mm²) flexible without cable end Power circuit screw clamp terminals 1 0.00…0.02 in² (1…10 mm²) flexible with cable end Power circuit screw clamp terminals 2 0.00…0.01 in² (1.5…6 mm²) flexible with cable end Power circuit screw clamp terminals 1 0.00…0.02 in² (1.5…10 mm²) solid without cable end Power circuit screw clamp terminals 2 0.00…0.02 in² (2.5…10 mm²) solid without cable end
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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
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	Rail Plate

Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
Product Certifications	LROS (Lloyds register of shipping) CCC DNV RINA GOST CSA UL GL BV UKCA
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
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	3.98 in (101 mm)
Net Weight	1.18 lb(US) (0.535 kg)

Ordering and shipping details

Category	22355-CTR,TESYS D,OPEN,9-38A DC
Discount Schedule	I12
GTIN	3389110357363
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	1.93 in (4.900 cm)
Package 1 Width	4.37 in (11.100 cm)
Package 1 Length	3.50 in (8.900 cm)
Package 1 Weight	20.56 oz (583.000 g)
Unit Type of Package 2	S02

Number of Units in Package 2	15
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	20.14 lb(US) (9.134 kg)

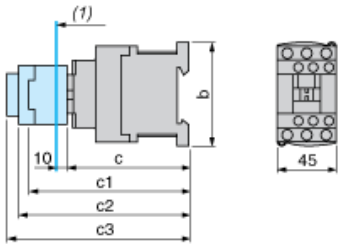
Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
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
PVC free	Yes

Contractual warranty

Warranty	18 months

Dimensions



(1) Minimum electrical clearance

LC1		D25…D38	D183…D323
b		85	99
c	without cover or add-on blocks	99	99
with cover, without add-on blocks	101	101	
c1	with LAD N or C (2 or 4 contacts)	132	132
c2	with LA6 DK10	144	144
c3	with LAD T, R, S	152	152
with LAD T, R, S and sealing cover	156	156	

Wiring

