Product data sheet
Characteristics

LC1D18BNE
IEC contactor, TeSys Deca Green, nonreversing, 18A, 10HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24/60VAC/VDC coil

Main

Range	TeSys TeSys Deca
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-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	18 A 140 °F (60 °C)) <= 440 V AC-3 power circuit 32 A 140 °F (60 °C)) <= 440 V AC-1 power circuit 18 A 140 °F (60 °C)) <= 440 V AC-3e power circuit
[Uc] control circuit voltage	24...60 V AC 50/60 Hz 24...60 V DC

Complementary

Motor power kW	4 KW 220...230 V AC 50 Hz AC-3) 7.5 KW 380...400 V AC 50 Hz AC-3) 9 KW 415 V AC 50 Hz AC-3) 9 KW 440 V AC 50 Hz AC-3) 10 KW 500 V AC 50 Hz AC-3) 10 KW 660...690 V AC 50 Hz AC-3) 4 KW 220...230 V AC 50 Hz AC-3e) 7.5 KW 380...400 V AC 50 Hz AC-3e) 9 KW 415 V AC 50 Hz AC-3e) 9 KW 440 V AC 50 Hz AC-3e) 10 KW 500 V AC 50 Hz AC-3e) 10 kW 660...690 V AC 50 Hz AC-3e)
Maximum Horse Power Rating	1 Hp 115 V at AC 60 Hz for 1 phase 3 Hp 230/240 V at AC 60 Hz for 1 phase 5 Hp 200/208 V at AC 60 Hz for 3 phase 5 Hp 230/240 V at AC 60 Hz for 3 phase 10 Hp 460/480 V at AC 60 Hz for 3 phase 15 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 32 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 60947-5-1 300 A 440 V power circuit IEC 60947
Rated breaking capacity	300 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 40 A 104 °F (40 °C) - 10 min power circuit 84 A 104 °F (40 °C) - 1 min power circuit 145 A 104 °F (40 °C) - 10 s power circuit 240 A 104 °F (40 °C) - 1 s power circuit
Associated fuse rating	10 A gG signalling circuit IEC 60947-5-1 50 A gG <= 690 V type 1 power circuit 35 A gG <= 690 V type 2 power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz power circuit
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3 0.8 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	2.2 Mcycles 15 A AC-3 <= 440 V 0.9 Mcycles 32 A AC-1 <= 440 V 2.2 Mcycles 15 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 0.8...1.1 Uc -40…140 °F (-40…60 °C) operational DC 1...1.1 Uc 140…158 °F (60…70 °C) operational AC/DC
Inrush power in VA	15 VA 50/60 Hz 68 °F (20 °C))
Inrush power in W	14 W 68 °F (20 °C))
Hold-in power consumption in VA	0.9 VA 50/60 Hz 68 °F (20 °C))
Hold-in power consumption in W	0.6 W 68 °F (20 °C)
Heat dissipation	0.6 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 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 Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) solid Power circuit screw clamp terminals 1 0.00…0.01 in² (1.5…6 mm²) flexible without cable end Power circuit screw clamp terminals 2 0.00…0.01 in² (1.5…6 mm²) flexible without cable end Power circuit screw clamp terminals 1 0.00…0.01 in² (1…6 mm²) flexible with cable end Power circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) flexible with cable end Power circuit screw clamp terminals 1 0.00…0.01 in² (1.5…6 mm²) solid Power circuit screw clamp terminals 2 0.00…0.01 in² (1.5…6 mm²) 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 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Control circuit 15.05 lbf.in (1.7 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	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 open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)
Height	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.39 in (86 mm)
Net Weight	0.83 lb(US) (0.378 kg)

Ordering and shipping details

Category	22356-CTR,TESYS D,OPEN,9-65A AC/DC GREEN
Discount Schedule	I12
GTIN	3606480987694
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.05 in (5.200 cm)
Package 1 Width	3.62 in (9.200 cm)
Package 1 Length	4.41 in (11.200 cm)
Package 1 Weight	13.97 oz (396.000 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	13.74 lb(US) (6.232 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