Product data sheet
Characteristics

LC1D115M5
IEC contactor, TeSys Deca, nonreversing, 115A, 75HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 220VAC 50Hz coil, open style

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 1000 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	200 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 115 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 115 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	220 V AC 50 Hz

Complementary

Motor power kW	30 KW at 220...230 V AC 50/60 Hz (AC-3) 55 KW at 380...400 V AC 50/60 Hz (AC-3) 59 KW at 415...440 V AC 50/60 Hz (AC-3) 75 KW at 500 V AC 50/60 Hz (AC-3) 80 KW at 660...690 V AC 50/60 Hz (AC-3) 65 KW at 1000 V AC 50/60 Hz (AC-3) 18.5 KW at 400 V AC 50/60 Hz (AC-4) 30 KW at 220...230 V AC 50/60 Hz (AC-3e) 55 KW at 380...400 V AC 50/60 Hz (AC-3e) 59 KW at 415...440 V AC 50/60 Hz (AC-3e) 75 KW at 500 V AC 50/60 Hz (AC-3e) 80 KW at 660...690 V AC 50/60 Hz (AC-3e) 65 kW at 1000 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	30 Hp at 200/208 V AC 50/60 Hz for 3 phase motors 40 Hp at 230/240 V AC 50/60 Hz for 3 phase motors 75 Hp at 460/480 V AC 50/60 Hz for 3 phase motors 100 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	200 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	1260 A at 440 V 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	250 A 104 °F (40 °C) - 10 min for power circuit 550 A 104 °F (40 °C) - 1 min for power circuit 950 A 104 °F (40 °C) - 10 s for power circuit 1100 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	250 A gG at <= 690 V coordination type 1 for power circuit 200 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit
Power dissipation per pole	24 W AC-1 7.9 W AC-3 7.9 W AC-3e
[Ui] rated insulation voltage	Power circuit 600 V CSA[RETURN]Power circuit 600 V UL[RETURN]Power circuit 1000 V IEC 60947-4-1[RETURN]Signalling circuit 690 V IEC 60947-1[RETURN]Signalling circuit 600 V CSA[RETURN]Signalling circuit 600 V UL
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8 Mcycles
Electrical durability	0.8 Mcycles 200 A AC-1 <= 440 V 0.95 Mcycles 115 A AC-3 <= 440 V 0.95 Mcycles 115 A AC-3e <= 440 V
Control circuit type	AC 50 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc -40…158 °F (-40…70 °C) drop-out AC 50 Hz 0.85...1.1 Uc -40…131 °F (-40…55 °C) operational AC 50 Hz 1...1.1 Uc 131…158 °F (55…70 °C) operational AC 50 Hz
Inrush power in VA	300 VA 50 Hz cos phi 0.8 (at 68 °F (20 °C))
Hold-in power consumption in VA	22 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	3…8 W at 50 Hz
Operating time	6...20 ms opening 20...50 ms closing
Maximum operating rate	2400 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²) - cable stiffness: solid without cable end Power circuit: connector 1 0.02…0.19 in² (10…120 mm²) - cable stiffness: flexible without cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: flexible without cable end Power circuit: connector 1 0.02…0.19 in² (10…120 mm²) - cable stiffness: flexible with cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: flexible with cable end Power circuit: connector 1 0.02…0.19 in² (10…120 mm²) - cable stiffness: solid without cable end Power circuit: connector 2 0.02…0.08 in² (10…50 mm²) - cable stiffness: solid without cable end
Tightening torque	Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals flat Ø 6 mm Control circuit 10.62 lbf.in (1.2 N.m) screw clamp terminals Philips No 2 Power circuit 106.21 lbf.in (12 N.m) connector hexagonal 0.16 in (4 mm) Control circuit 10.62 lbf.in (1.2 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 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 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
Product Certifications	GOST[RETURN]RINA[RETURN]DNV[RETURN]CSA[RETURN]LROS (Lloyds register of shipping) [RETURN]BV[RETURN]UL[RETURN]GL[RETURN]CCC[RETURN]UKCA[RETURN]CE
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 6 Gn for 11 ms)
Height	6.22 in (158 mm)
Width	4.72 in (120 mm)
Depth	5.35 in (136 mm)
Net Weight	5.51 lb(US) (2.5 kg)

Ordering and shipping details

Category	US10I1222359
Discount Schedule	0I12
GTIN	3389110377156
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.89 in (17.500 cm)
Package 1 Width	7.48 in (19.000 cm)
Package 1 Length	8.27 in (21.000 cm)
Package 1 Weight	5.34 lb(US) (2.420 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	27
Package 2 Height	29.13 in (74.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)
Package 2 Weight	173.25 lb(US) (78.583 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 with Exemptions
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.
PVC free	Yes

Contractual warranty

Warranty	18 months