Product data sheet

Specifications

TeSys Deca contactor,3P(3NO),AC-3/AC-3e 440V 65A,coil 415V AC

LC1D65N7

Main

Range	TeSys
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-2 AC-3 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 65 A (at <60 °C) at 415 V AC AC-3 for power circuit 80 A (at <60 °C) at 415 V AC AC-1 for power circuit
[Uc] control circuit voltage	415 V AC 50/60 Hz

Complementary

Motor power kW	11 kW at 400 V AC 50 Hz (AC-4) 30 kW at 380...400 V AC 50 Hz (AC-3) 37 kW at 500 V AC 50 Hz (AC-3) 37 kW at 660...690 V AC 50 Hz (AC-3) 18.5 kW at 220...230 V AC 50 Hz (AC-3) 30 kW at 415 V AC 50 Hz (AC-3) 37 kW at 1000 V AC 50 Hz (AC-3) 30 kW at 440 V AC 50 Hz (AC-3e) 30 kW at 380...400 V AC 50 Hz (AC-3e) 37 kW at 500 V AC 50 Hz (AC-3e) 37 kW at 660...690 V AC 50 Hz (AC-3e) 18.5 kW at 220...230 V AC 50 Hz (AC-3e) 30 kW at 415 V AC 50 Hz (AC-3e) 37 kW at 1000 V AC 50 Hz (AC-3e) 37 kW at 500 V AC 50 Hz 30 kW at 380...400 V AC 50 Hz
Motor power hp	10 hp at 230/240 V AC 60 Hz for 1 phase motors 20 hp at 200/208 V AC 60 Hz for 3 phases motors 20 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 50 hp at 575/600 V AC 60 Hz for 3 phases motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO

Protective cover	With
[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit
Irms rated making capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 kA at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit conforming to IEC 60947-5-1 10 A gG for control circuit conforming to IEC 60947-5-1
Average impedance	1.5 Ohm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 6.3 W AC-3 9.6 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified conforming to IEC 60947-1 Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V CSA certified conforming to IEC 60947-1 Control circuit: 600 V CSA certified
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	6000000 cycles
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in
Control circuit voltage limits	0.8...1.1 Uc (-40…60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40…60 °C):operational AC 60 Hz 1...1.1 Uc (60…70 °C):operational AC 50/60 Hz 0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz
Inrush power in VA	160 VA cos phi 0.75 (at 20 °C) 140 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 20 °C) 13 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4…5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/mn 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: rigid Power circuit: screw terminals 2 2.5…16 mm² - cable stiffness: rigid without cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 2 2.5…16 mm² - cable stiffness: flexible without cable end Power circuit: screw terminals 1 2.5…25 mm² - cable stiffness: flexible with cable end Power circuit: screw terminals 2 2.5…10 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: rigid
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	type mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
Terminals description ISO n°1	(13-14)NO

	(21-22)NC
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting support	Rail Rail

Environment

Standards	IEC 60947-5-1 EN 60947-4-1 IEC 60947-4-1 UL 508 CSA C22.2 No 14
Product certifications	GOST CSA DNV UL CCC LROS (Lloyds register of shipping) BV RINA UKCA DNV
IP degree of protection	IP2X conforming to VDE 0106 IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30
Climatic withstand	conforming to IACS E10 exposure to damp heat
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor opened (10 Gn for 11 ms)
Height	122 mm
Width	70 mm
Depth	118 mm
Net weight	2.185 kg
Quantity per set	Set of 10

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	14.0 cm
Package 1 Width	13.2 cm
Package 1 Length	9.5 cm
Package 1 Weight	1.449 kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm

Package 2 Weight	7.7 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
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
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

Contractual warranty

Warranty	18 months

Recommended replacement(s)