Product data sheet Characteristics

LC2D18M7

TeSys Deca reversing contactor,3P(3NO),AC-3,<=440V 18A,220V AC coil





Main

Range	TeSys TeSys Deca
Product name	TeSys D TeSys Deca
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	4 KW at 220230 V AC 50 Hz 7.5 KW at 380400 V AC 50 Hz 9 KW at 415440 V AC 50 Hz 10 KW at 500 V AC 50 Hz 10 KW at 660690 V AC 50 Hz
Motor power hp	1 Hp at 115 V AC 60 Hz for 1 phase motors 3 Hp at 230/240 V AC 60 Hz for 1 phase motors 5 Hp at 200/208 V AC 60 Hz for 3 phases motors 5 Hp at 230/240 V AC 60 Hz for 3 phases motors 10 Hp at 460/480 V AC 60 Hz for 3 phases motors 15 Hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	220 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 300 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947

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[lcw] rated short-time withstand current	40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min for power circuit 145 A 40 °C - 10 s for power circuit 240 A 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	10 A gG for signalling circuit conforming to IEC 60947-5-1 50 A gG at <= 690 V coordination type 1 for power circuit 35 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 MOhm - Ith 32 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.8 W AC-3 2.5 W AC-1
Protective cover	With
Interlocking type	Mechanical
Mounting support	Plate Rail
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	DNV CSA CCC UL GL LROS (Lloyds register of shipping) BV RINA GOST UKCA
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid Power circuit: screw clamp terminals 1 cable(s) 1.56 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver-pozidriv No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver-pozidriv No 2
Operating time	1222 ms closing 419 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming- to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming- to EN/ISO 13849-1



Mechanical durability	15 Mcycles
Maximum operating rate	3600 Cyc/H 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	23 W at 50/60 Hz
Auxiliary contacts type	Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Signalling circuit frequency	25400 Hz
Minimum switching current	5 MA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact1.5 Ms on energisation between NC and NO contact
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529	
Climatic withstand	Conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D	
Protective treatment	TH conforming to IEC 60068-2-30	
Pollution degree	3	
Ambient air temperature for operation	-4060 °C 6070 °C with derating	
Ambient air temperature for storage	-6080 °C	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms	
Height	77 Mm	
Width	90 Mm	
Depth	86 Mm	
Net weight	0.707 Kg	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	807 G
Package 1 Height	14 Cm
Package 1 Width	9.4 Cm
Package 1 Length	11.4 Cm
Unit Type of Package 2	S02
Number of Units in Package 2	6
Package 2 Weight	5.209 Kg
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Length	40 CIII



Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
Toxic heavy metal free	Yes
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
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

Product Life Status: Commercialised