Product data sheet Characteristics

LC1D38P7

TeSys Deca contactor , 3P(3 NO) , AC-3/ AC-3e , <= 440V, 38 A , 230V AC 50/60 Hz coil





Main

Range	TeSys TeSys Deca
Product name	TeSys D TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3 AC-3e
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	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
Motor power kW	18.5 KW at 500 V AC 50/60 Hz (AC-3) 18.5 KW at 660690 V AC 50/60 Hz (AC-3) 7.5 KW at 400 V AC 50/60 Hz (AC-4) 18.5 KW at 380400 V AC 50/60 Hz (AC-3) 9 KW at 220230 V AC 50/60 Hz (AC-3) 18.5 KW at 415440 V AC 50/60 Hz (AC-3) 18.5 KW at 500 V AC 50/60 Hz (AC-3e) 18.5 KW at 660690 V AC 50/60 Hz (AC-3e) 18.5 KW at 380400 V AC 50/60 Hz (AC-3e) 9 KW at 220230 V AC 50/60 Hz (AC-3e) 18.5 KW at 415440 V AC 50/60 Hz (AC-3e)
Motor power hp	10 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 Hp at 240 V AC 50/60 Hz for 1 phase motors 20 Hp at 480 V AC 50/60 Hz for 3 phases motors 25 Hp at 600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	230 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
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 50 A (at 60 °C) for power circuit

Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1250 A DC for signalling circuit conforming to IEC 60947-5-1550 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	60 A 40 °C - 10 min for power circuit 430 A 40 °C - 1 s for power circuit 150 A 40 °C - 1 min for power circuit 310 A 40 °C - 10 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 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 MOhm - Ith 50 A 50 Hz for power circuit
[Ui] rated insulation voltage	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 Power circuit: 690 V conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V 1.4 Mcycles 38 A AC-3e at Ue <= 440 V
Power dissipation per pole	5 W AC-1 3 W AC-3 3 W AC-3e
Protective cover	With
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	GOST DNV RINA GL LROS (Lloyds register of shipping) BV CSA CCC UL
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end 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 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: screw clamp terminals 1 cable(s) 2.510 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1.510 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²solid without cable end
Tightening torque	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 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 2.5 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	419 ms opening 1222 ms closing
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 contact 1.5 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	
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms	
Height	85 Mm	
Width	45 Mm	
Depth	92 Mm	
Net weight	0.38 Kg	

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	417.0 G	
Package 1 Height	5.0 Cm	
Package 1 width	9.0 Cm	
Package 1 Length	11.0 Cm	
Unit Type of Package 2	S02	
Number of Units in Package 2	20	
Package 2 Weight	8.577 Kg	
Package 2 Height	15.0 Cm	



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Package 2 width	30.0 Cm
Package 2 Length	40.0 Cm
Unit Type of Package 3	P06
Number of Units in Package 3	320
Package 3 Weight	145.232 Kg
Package 3 Height	75.0 Cm
Package 3 width	80.0 Cm
Package 3 Length	60.0 Cm

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

Warranty	18 months
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Product Life Status : Commercialised

