Product data sheet Characteristics

LC1D09Q7

TeSys Deca contactor - 3P(3 NO) - AC-3/ AC-3e - <= 440 V 9 A - 380 V AC coil



Main

Range	TeSys TeSys Deca	
Product name	TeSys D TeSys Deca	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Motor control Resistive load	
Utilisation category	AC-1 AC-4 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	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
Motor power kW	2.2 KW at 220230 V AC 50/60 Hz (AC-3) 4 KW at 380400 V AC 50/60 Hz (AC-3) 4 KW at 415440 V AC 50/60 Hz (AC-3) 5.5 KW at 500 V AC 50/60 Hz (AC-3) 5.5 KW at 660690 V AC 50/60 Hz (AC-3) 2.2 KW at 400 V AC 50/60 Hz (AC-4) 2.2 KW at 220230 V AC 50/60 Hz (AC-3e) 4 KW at 380400 V AC 50/60 Hz (AC-3e) 4 KW at 415440 V AC 50/60 Hz (AC-3e) 5.5 KW at 660690 V AC 50/60 Hz (AC-3e) 5.5 KW at 660690 V AC 50/60 Hz (AC-3e)	
Motor power hp	1 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 2 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 5 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 7.5 Hp at 575/600 V AC 50/60 Hz for 3 phases motors 0.33 Hp at 115 V AC 50/60 Hz for 1 phase motors	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	380 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	25 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit	

210 A 40 °C - 1 of not proper circuit 30 A 40 °C - 1 of min for prover circuit 110 A - 1 stor spanling circuit 110 A - 1 stor	Irms rated making capacity	250 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	
210 A 40 °C - 1 of info proper circuit 30 A 40 °C - 1 of inin for power circuit 110 A - 1 st for signaling circuit 110 A - 10 of for signaling circuit 110 A - 10 of for signaling circuit 110 A - 10 of signaling circuit 110 A - 10 of signaling circuit conforming to IEC 60947-6-1 21 A g d at = 600 V coordination type 1 for power circuit 22 A g d at = 600 V coordination type 1 for power circuit 24 A g d at = 600 V coordination type 2 for power circuit 25 Mohm - Ith 25 A 50 Hz for power circuit 26 A g d at = 600 V coordination type 2 for power circuit 27 A g d at = 600 V coordination type 2 for power circuit 28 A g d at = 600 V coordination type 2 for power circuit 29 A g d at = 600 V coordination type 2 for power circuit 30 A g d at = 600 V coordination type 2 for power circuit 30 A g d at = 600 V coordination type 2 for power circuit 30 A g d at = 600 V coordination type 2 for power circuit 30 A g d at = 600 V coordination type 2 for power circuit 30 A G coordination type 3 A G coordination t	Rated breaking capacity		
25 A G at ≤ 800 V coordination type 1 to power circuit 20 A G at ≤ 800 V coordination type 2 to power circuit 20 A G at s ≤ 800 V coordination type 2 to power circuit	[lcw] rated short-time withstand current	105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit	
[Ui] rated insulation voltage Power circuit: 600 V CSA certified Signalling circuit: 600 V CSA certified Power circuit: 600 V CSA certified Signalling circuit: 600 V CSA certified	Associated fuse rating	25 A gG at <= 690 V coordination type 1 for power circuit	
Power circuit: 800 V U. CSA certified Power circuit: 800 V U. Certified Signaling circuit: 800 V U. Certified Signaling circuit: 800 V Conforming to IEC 60947-1 Signaling circuit: 800 V Co. A certified Signaling circuit: 800 V U. Certified Signaling circuit: 8	Average impedance	2.5 MOhm - Ith 25 A 50 Hz for power circuit	
2 Moycles 9 A AC-3 at Us ← 440 V 2 Moycles 9 A AC-3 e at Us ← 440 V 2 Moycles 9 A AC-3 e at Us ← 440 V 2 Moycles 9 A AC-3 e at Us ← 440 V 3 More dissipation per pole 1.56 W AC-1 0.2 W AC-3 0. W AC-3 0.2 W AC-	[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	
O 2 W AC-3 o 2 W AC-3 o 2 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 60947-5-1 IEC 609347-5-1 IEC 609347-5-1 IEC 60935-1 UL 508 IEC 60335-1 Product certifications UL CSA DNV GI RINA CCC BV GOST LROS (Lloyds register of shipping) UKCA Connections - terminals Power circuit: screw clamp terminals 1 cable(s) 14 mm*flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 12 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 12 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 12 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 12 mm*flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm*flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm*flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm*flexible with cable end Control circuit: 1.7 N.m on screw clamp terminals - with screwdriver Piblips No 2 Control circuit: 1.7 N.m on screw clamp terminals - with screwdriver piblips No 2 Control circuit: 1.7 N.m on screw clamp terminals - with screwdriver piblips No 2 Control circuit: 1.7 N.m on screw clamp terminals - w	Electrical durability	2 Mcycles 9 A AC-3 at Ue <= 440 V	
Mounting support Plate Rail C SA C22 2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-5-1 IEC 60947-5-1 IEC 60947-5-1 IEC 60347-5-1 IEC 6035-1 IEC 6035-1 Product certifications UL CSA DNV GL RINA CCC BV GOST LROS (Lloyds register of shipping) UKCA Connections - terminals Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without 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 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 2 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 Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat 0 6 mm Control circuit: 1.7 N.m - on screw clamp te	Power dissipation per pole	1.56 W AC-1 0.2 W AC-3	
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 60947-5-1 UL 508 IEC 60947-5-1 UL 508 IEC 60335-1 Product certifications UL CSA DNV GL RINA CCC BV GOST LROS (Lloyds register of shipping) UKCA Connections - terminals Power circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without 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 2 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 Power circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 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 without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat 0 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat 0 6 mm	Protective cover	With	
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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	Connections - terminals	ble end Power circuit: screw clamp terminals 2 cable(s) 14 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) 12.5 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 14 mm²solid without 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 2 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with ca-	
	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-	
	Operating time	· · · · · · · · · · · · · · · · · · ·	

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	
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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms	
Height	77 Mm	
Width	45 Mm	
Depth	86 Mm	
Net weight	0.32 Kg	

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	351 G	
Package 1 Height	5 Cm	
Package 1 width	9.2 Cm	
Package 1 Length	11.2 Cm	
Unit Type of Package 2	S02	
Number of Units in Package 2	20	
Package 2 Weight	7.338 Kg	
Package 2 Height	15 Cm	
Package 2 width	30 Cm	
Package 2 Length	40 Cm	
Unit Type of Package 3	P06	
Number of Units in Package 3	160	



Package 3 Weight	68.3 Kg	
Package 3 Height	77 Cm	
Package 3 width	80 Cm	
Package 3 Length	60 Cm	

Offer Sustainability

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	
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
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Product Life Status:	Commercialised	
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