Product data sheet Characteristics

LC1D18BD

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 24 V DC coil



TSI Code: 381803052 Price*: 87.00 GBP



Main

IVIAIII		
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-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	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 18 A (at <60 °C) at <= 440 V AC AC-3e for power circuit	
Motor power kW	4 KW at 220230 V AC 50/60 Hz (AC-3) 7.5 KW at 380400 V AC 50/60 Hz (AC-3) 9 KW at 415440 V AC 50/60 Hz (AC-3) 10 KW at 500 V AC 50/60 Hz (AC-3) 10 KW at 660690 V AC 50/60 Hz (AC-3) 4 KW at 400 V AC 50/60 Hz (AC-4) 4 KW at 220230 V AC 50/60 Hz (AC-3e) 7.5 KW at 380400 V AC 50/60 Hz (AC-3e) 9 KW at 415440 V AC 50/60 Hz (AC-3e) 10 KW at 500 V AC 50/60 Hz (AC-3e)	
Motor power hp	1 Hp at 115 V AC 50/60 Hz for 1 phase motors 3 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 Hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947	

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. This documentation is not inherended as a substitute for and is not to be used for determining suitability or reliability of these products by especific bear applications. It is the dourn arise that such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein. *Prices are indicative

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	
[lcw] rated short-time withstand current	145 A 40 °C - 10 s for power circuit 240 A 40 °C - 1 s for power circuit 40 A 40 °C - 10 min for power circuit 84 A 40 °C - 1 min 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 1.65 Mcycles 18 A AC-3e at Ue <= 440 V	
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3 0.8 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	LROS (Lloyds register of shipping) DNV GL RINA BV CCC UL CSA 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 without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end 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) 16 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 16 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 16 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 16 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm²solid without 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 mr Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 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	53.5572.45 ms closing 1624 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	30 Mcycles	
Maximum operating rate	3600 Cyc/H 60 °C	

Complementary

Coil technology	With integral suppression device	
Control circuit voltage limits	0.10.25 Uc (-4070 °C):drop-out DC 0.71.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC	
Time constant	28 Ms	
Inrush power in W	5.4 W (at 20 °C)	
Hold-in power consumption in W	5.4 W at 20 °C	
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

LIMIOIIIICII		
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	
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	45 Mm	
Depth	95 Mm	
Product weight	0.49 Kg	

Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	522.5 G
Package 1 Height	5 Cm
Package 1 width	9 Cm
Package 1 Length	11 Cm
Unit Type of Package 2	S02



Number of Units in Package 2	15
Package 2 Weight	8.068 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	240
Package 3 Weight	137.08 Kg
Package 3 Height	75 Cm
Package 3 width	80 Cm
Package 3 Length	60 Cm

Offer Sustainability

Sustainable offer status	Green Premium product			
REACh Regulation	☑ REACh Declaration			
EU RoHS Directive	Compliant E EU RoHS Declaration			
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			

Contractual warranty

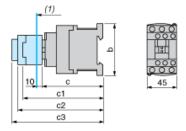
Contractadi Warranty		
Warranty	18 months	



Product data sheet Dimensions Drawings

LC1D18BD

Dimensions



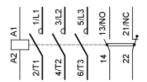
(1) Minimum electrical clearance

LC1		D09D18	D093D123	D099D129
b		77	99	80
С	without cover or add-on blocks	93	93	93
with cover	9.6thout add-on blocks	95	95	
c1	with LAD N or C (2 or 4 contacts)	126	126	126
c2	with LA6 DK10	138	138	138
с3	with LAD T, R, S	146	146	146
with LAD 1	,1 B 0S and sealing cover	150	150	

Product data sheet Connections and Schema

LC1D18BD

Wiring



Product Life Status: Commercialised