## Product data sheet Characteristics

## LC1D09BD

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 24 V DC coil



TSI Code: 381800178 Price\*: 65.00 GBP



#### Main

- Iviaii i				
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	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 500 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	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			

Overvoltage category	III		
[lth] conventional free air thermal current	25 A (at 60 °C) for power circuit 10 A (at 60 °C) for signalling circuit		
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		
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947		
[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 140 A - 100 ms for signalling circuit		
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit		
Average impedance	2.5 MOhm - Ith 25 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	0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V 2 Mcycles 9 A AC-3e at Ue <= 440 V		
Power dissipation per pole	1.56 W AC-1 0.2 W AC-3 0.2 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 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1		
Product certifications	LROS (Lloyds register of shipping) CSA UL GOST DNV CCC GL BV RINA 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 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) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without 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		



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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 m 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	Built-in bidirectional peak limiting diode suppressor	
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

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	0.48 Kg	

#### Packing Units

3	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	524.8 G
Package 1 Height	5.221 Cm
Package 1 width	9.256 Cm
Package 1 Length	11.739 Cm
Unit Type of Package 2	S02



15
8.036 Kg
15 Cm
30 Cm
40 Cm
P06
240
136.568 Kg
75 Cm
80 Cm
60 Cm

#### Offer Sustainability

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

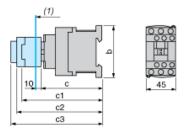
Contractadi Warranty		
Warranty	18 months	



# Product data sheet Dimensions Drawings

## LC1D09BD

#### Dimensions



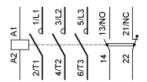
#### (1) Minimum electrical clearance

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 T	,1 <b>B</b> 0S and sealing cover	150	150	

### Product data sheet Connections and Schema

## LC1D09BD

Wiring



Product Life Status: Commercialised