## Product data sheet Characteristics

## LC1DT32BD

# TeSys Deca contactor - 4P(4 NO) - AC-1 - <= 440 V 32 A - 24 V DC standard 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
Utilisation category	AC-1
Poles description	4P
Pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
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
[Ith] 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	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: 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 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	2.5 W AC-1
Protective cover	With
Mounting support	Rail
	Plate
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 LROS (Lloyds register of shipping) CSA UL DNV RINA GL CCC
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 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 1 cable(s) 2.516 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.516 mm²flexible 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: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on connector - 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	1624 ms opening 53.5572.45 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	30 Mcycles
Maximum operating rate	3600 Cyc/H 60 °C
Complementary Coil technology Control circuit voltage limits	Built-in bidirectional peak limiting diode suppressor  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



25...400 Hz

5 MA for signalling circuit

17 V for signalling circuit

> 10 MOhm for signalling circuit

Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1

type mirror contact 1 NC conforming to IEC 60947-4-1

1.5 Ms on de-energisation between NC and NO contact

1.5 Ms on energisation between NC and NO contact

Auxiliary contacts type

Signalling circuit frequency

Minimum switching current

Minimum switching voltage

Non-overlap time

Insulation resistance

#### 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	91 Mm	
Width	45 Mm	
Depth	107 Mm	
Net weight	0.425 Kg	

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	630.0 G
Package 1 Height	5.5 Cm
Package 1 width	9.5 Cm
Package 1 Length	12.0 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
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