## Product data sheet Characteristics

### LC1DT40BD

# TeSys Deca contactor - 4P(4 NO) - AC-1 - <= 440 V 40 A - 24 V DC standard coil





#### Main

Wall	
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	40 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 40 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 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min for power circuit 240 A 40 °C - 10 s for power circuit 380 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 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 MOhm - Ith 40 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

Electrical durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power dissipation per pole	3.2 W AC-1
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	CSA UL RINA GOST LROS (Lloyds register of shipping) BV GL DNV 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 1 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 without cable end Power circuit: connector 2 cable(s) 2.516 mm²flexible without cable end
Tightening torque	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver- flat Ø 6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver- Philips No 2 Power circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver- flat Ø 6 mm Power circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver- Philips No 2 Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver- pozidriv No 2 Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver- pozidriv No 2 - on EverLink BTR screw connectors
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	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	
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

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Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	637.0 G
Package 1 Height	5.5 Cm
Package 1 width	9.5 Cm
Package 1 Length	12.0 Cm
Unit Type of Package 2	S02
Number of Units in Package 2	16
Package 2 Weight	10.567 Kg
Package 2 Height	15.0 Cm
Package 2 width	30.0 Cm
Package 2 Length	40.0 Cm
Unit Type of Package 3	PAL
Number of Units in Package 3	256
Package 3 Weight	177.6 Kg
Package 3 Height	60.0 Cm
Package 3 width	80.0 Cm
Package 3 Length	70.0 Cm

#### Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	☐ REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Compliant EEEU 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 speci- fic 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

