Product data sheet Characteristics

LC1DT80AM7

TeSys Deca contactor - 4P(4 NO) - AC-1 - <= 440 V 80 A - 220 V AC 50/60 Hz 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	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	220 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	10 A (at 60 °C) for signalling circuit 80 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 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 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 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.6 MOhm - Ith 80 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	1.4 Mcycles 80 A AC-1 at Ue <= 440 V
Power dissipation per pole	10.2 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 LROS (Lloyds register of shipping) CCC GOST DNV GL RINA BV
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 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm²flexible without cable end
	cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm²flexible with- cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm²solid with- out cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm²solid with- out 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: 8 N.m - on screw clamp terminals - cable 2535 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 125 mm² hexagonal screw head 4 mm 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	419 ms opening 1226 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	6 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	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)	
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)	
Heat dissipation	45 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 closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms	
Height	122 Mm	
Width	70 Mm	
Depth	120 Mm	
Net weight	1.15 Kg	

Packing Units

r doking office	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	1.077 Kg
Package 1 Height	7.8 Cm
Package 1 width	13.5 Cm
Package 1 Length	15.2 Cm
Unit Type of Package 2	S02
Number of Units in Package 2	7
Package 2 Weight	8.036 Kg
Package 2 Height	15.0 Cm
Package 2 width	30.0 Cm
Package 2 Length	40.0 Cm

Offer Sustainability

WEEE	The product must be disposed on European Union markets following speci- fic waste collection and never end up in rubbish bins
Environmental Disclosure	Product Environmental Profile
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₫Yes
Mercury free	Yes
Toxic heavy metal free	Yes
EU RoHS Directive	Compliant
REACh free of SVHC	Yes
REACh Regulation	REACh Declaration
Sustainable offer status	Green Premium product
Offer Sustamability	



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 can cer. For more information go to www.P65Warnings.ca.gov
Contractual warranty	
Warranty	18 months
Draduct Life Ctatus	Commoncialiand
Product Life Status :	Commercialised

