Product data sheet
Characteristics

LC1D65008E7
Contactor, TeSys Deca, 4P(2NO+2NC),AC-1 , <=440V, 80A,48V AC 50/60Hz coil, screw clamp terminal



Main

Range	TeSys
Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25...400 Hz 0...5.115 V
[Ie] rated operational current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V AC 50/60 Hz

Complementary

Compatibility code	LC1D
Pole contact composition	2 NO + 2 NC
Protective cover	With
[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit
Irms rated making capacity	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	640 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
Associated fuse rating	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	1.5 MOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified[RETURN]Power circuit: 600 V UL certified[RETURN]Power c
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947
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
Electrical durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in suppressor module

Control circuit voltage limits	0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…60 °C):operational AC 50 Hz 0.85...1.1 Uc (-40…60 °C):operational AC 60 Hz 1...1.1 Uc (60…70 °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	4…5 W at 50/60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Maximum operating rate	3600 Cyc/H at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1…35 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1…25 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1…35 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1…25 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1…35 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1…25 mm² - cable stiffness: solid 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: 8 N.m - on screw clamp terminals - cable 25…35 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 1…25 mm² hexagonal screw head 4 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Mounting support	Plate Rail

Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1
Product certifications	GL[RETURN]BV[RETURN]UL[RETURN]DNV[RETURN]LROS (Lloyds register of shipping)[RETU
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	Conforming to IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	-40…60 °C 60…70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (3 Gn, 5...300 Hz)
Height	127 Mm
Width	85 Mm
Depth	125 Mm
Net weight	1.45 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15.4 Cm
Package 1 Width	13.5 Cm
Package 1 Length	11.0 Cm
Package 1 Weight	1.465 Kg
Unit Type of Package 2	S02

Number of Units in Package 2	5
Package 2 Height	15.0 Cm
Package 2 Width	30.0 Cm
Package 2 Length	40.0 Cm
Package 2 Weight	7.69 Kg

Offer Sustainability

Recyclability potential, in %	76
Total lifecycle Carbon footprint	70 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	9.23368400909753
Carbon footprint of the manufacturing phase [A1 to A3]	9 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.18215610334927448
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.26117718842388454
Carbon footprint of the installation phase [A5]	0.3 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	56.91943840579708
REACh free of SVHC	Yes
Carbon footprint of the use phase [B2, B3, B4, B6]	57 kg CO2 eq.
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	3.444713035648395
Carbon footprint of the end-of-life phase [C1 to C4]	3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	70
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
REACh Regulation	Free of Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony tr
PVC free	Yes
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised