Product data sheet
Characteristics

LC1D186SLS207
Contactor, Tesys Deca, railway S207, 3P(3NO), AC-3/AC-3e, 18A, <=440V, 72V DC low consumption coil, lugs-ring terminals



Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 18 A (at <60 °C) at <= 440 V AC AC-3e for power circuit

Complementary

Motor power kW	4 KW at 220/230 V AC 50 Hz (AC-3) 7.5 KW at 380/400 V AC 50 Hz (AC-3) 9 KW at 415 V AC 50 Hz (AC-3) 9 KW at 440 V AC 50 Hz (AC-3) 10 KW at 500 V AC 50 Hz (AC-3) 10 KW at 660/690 V AC 50 Hz (AC-3) 4 KW at 220/230 V AC 50 Hz (AC-3e) 7.5 KW at 380/400 V AC 50 Hz (AC-3e) 9 KW at 415 V AC 50 Hz (AC-3e) 9 KW at 440 V AC 50 Hz (AC-3e) 10 KW at 500 V AC 50 Hz (AC-3e) 10 KW at 660/690 V AC 50 Hz (AC-3e)
Pole contact composition	3 NO
Protective cover	With
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
Auxiliary contact composition	1 NO + 1 NC
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
[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
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
Time constant	37 Ms
Control circuit type	DC low consumption
Coil technology	With integral suppression device
Control circuit voltage limits	0.1...0.25 Uc (-40…70 °C):drop-out DC 0.7...1.25 Uc (-40…70 °C):operational DC
Average impedance	2.5 MOhm - Ith 32 A 50 Hz for power circuit
Power dissipation per pole	2.5 W AC-1 0.8 W AC-3 0.8 W AC-3e
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
Operating time	77 ±15 % ms closing 25 ±20 % ms opening
Maximum operating rate	3600 Cyc/H 60 °C
Inrush power in W	4 W (at 20 °C)
Hold-in power consumption in W	4 W at 20 °C
Insulation resistance	> 10 MOhm for signalling circuit
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 9.5 mm
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M3.5 Power circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2 M3.5
Mounting support	Rail Plate
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V 1.65 Mcycles 18 A AC-3e at Ue <= 440 V
Mechanical durability	30 Mcycles
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
Operating altitude	0...3000 m
Compatibility code	LC1D
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 EN 45545: R22 HL3 EN 45545: R26 HL3 DIN 5510-2
Product certifications	IEC[RETURN]CCC[RETURN]EAC[RETURN]UA[RETURN]TR[RETURN]UKCA

Environment

Climatic withstand	Conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Ambient air temperature for storage	-60…80 °C
Fire resistance	850 °C conforming to IEC 60695-2-1
Height	77 Mm
Width	45 Mm
Depth	95 Mm
Net weight	0.33 Kg
Mechanical robustness	Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.800 Cm
Package 1 Width	9.200 Cm
Package 1 Length	11.800 Cm
Package 1 Weight	534.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	8.465 Kg

Offer Sustainability

Recyclability potential, in %	73
Total lifecycle Carbon footprint	23 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2.8801187278540907
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.9728081149705692
Carbon footprint of the distribution phase [A4]	1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.032189912401467194
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	17.558664666727488
Carbon footprint of the use phase [B2, B3, B4, B6]	18 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	1.2333756728546024
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	23
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	4be95b29-a1a6-4998-9661-e1893f5e4a16
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
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