Product data sheet
Characteristics

LC1D383BL
Contactor, TeSys Deca, 3P(3NO), AC-3/AC-3e, <=440V, 38A, 24V DC coil, spring terminals



Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	9 KW at 220/230 V AC 50/60 Hz (AC-3) 18.5 KW at 380/400 V AC 50/60 Hz (AC-3) 18.5 KW at 415/440 V AC 50/60 Hz (AC-3) 18.5 KW at 500 V AC 50/60 Hz (AC-3) 18.5 KW at 660/690 V AC 50/60 Hz (AC-3) 9 KW at 220/230 V AC 50/60 Hz (AC-3e) 18.5 KW at 380/400 V AC 50/60 Hz (AC-3e) 18.5 KW at 415/440 V AC 50/60 Hz (AC-3e) 18.5 KW at 500 V AC 50/60 Hz (AC-3e) 18.5 KW at 660/690 V AC 50/60 Hz (AC-3e) 7.5 KW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	2 Hp at 115 V AC 60 Hz for 1 phase motors 5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp at 200/208 V AC 60 Hz for 3 phases motors 10 Hp at 230/240 V AC 60 Hz for 3 phases motors 20 Hp at 460/480 V AC 60 Hz for 3 phases motors 25 Hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 50 A (at 60 °C) for power circuit
Irms rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947

Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 63 A at <= 690 V coordination type 1 for power circuit 63 A at <= 690 V coordination type 2 for power circuit
Average impedance	2 MOhm - Ith 50 A 50 Hz for power circuit
Power dissipation per pole	3 W AC-3 5 W AC-1 3 W AC-3e
[Ui] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
[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	30 Mcycles
Control circuit type	DC low consumption
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc (-40…70 °C):drop-out DC 0.8...1.25 Uc (-40…60 °C):operational DC 1...1.25 Uc (60…70 °C):operational DC
Inrush power in W	2.4 W (at 20 °C)
Hold-in power consumption in W	2.4 W at 20 °C
Operating time	77 ±15 % ms closing 25 ±20 % ms opening
Time constant	28 Ms
Maximum operating rate	3600 Cyc/H at 60 °C
Connections - terminals	Control circuit: spring terminals 1 2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 1 4 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 2 4 mm² - cable stiffness: flexible without cable end
Auxiliary contact composition	1 NO + 1 NC
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 MA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 Ms on de-energisation between NC and NO contacts 1.5 Ms on energisation between NC and NO contacts
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 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ CSA C22.2 No 60947-4-1
Product certifications	UL[RETURN]CCC[RETURN]CSA[RETURN]Marine[RETURN]UKCA[RETURN]EAC[RETURN]CB
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106
Climatic withstand	Conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
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 closed (15 Gn for 11 ms) Shocks contactor opened (8 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	99 Mm

Width	45 Mm
Depth	101 Mm
Net weight	0.54 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.4 Cm
Package 1 Width	11.0 Cm
Package 1 Length	5.5 Cm
Package 1 Weight	604.0 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	9.355 Kg

Offer Sustainability

Recyclability potential, in %	75
Total lifecycle Carbon footprint	32 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	2.963615900407641
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.16379358958558668
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.04535722537625197
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	27.216324324324326
Carbon footprint of the use phase [B2, B3, B4, B6]	27 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	1.4352510732063306
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	32
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
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	End Of Life Information
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