Product data sheet
Characteristics

LC1D65B7
Contactor, TeSys Deca,3P(3NO),AC-3/AC-3e/ <=440V 65A,24V AC 50/60Hz coil, screw clamp terminals



Main

Range	TeSys
Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3e AC-1 AC-1 AC-4 AC-2
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 65 A (at <60 °C) at 24 V AC AC-3 for power circuit 80 A (at <60 °C) at 24 V AC AC-1 for power circuit
[Uc] control circuit voltage	24 V AC 50/60 Hz

Complementary

Motor power kW	18.5 KW at 220/230 V AC 50/60 Hz (AC-3) 30 KW at 380/400 V AC 50/60 Hz (AC-3) 30 KW at 415 V AC 50/60 Hz (AC-3) 37 KW at 500 V AC 50/60 Hz (AC-3) 37 KW at 660/690 V AC 50/60 Hz (AC-3) 37 KW at 1000 V AC 50/60 Hz (AC-3) 18.5 KW at 220/230 V AC 50/60 Hz (AC-3e) 30 KW at 380/400 V AC 50/60 Hz (AC-3e) 30 KW at 415 V AC 50/60 Hz (AC-3e) 30 KW at 440 V AC 50/60 Hz (AC-3e) 37 KW at 500 V AC 50/60 Hz (AC-3e) 37 KW at 660/690 V AC 50/60 Hz (AC-3e) 37 KW at 1000 V AC 50/60 Hz (AC-3e) 11 KW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	10 Hp at 230/240 V AC 60 Hz for 1 phase motors 20 Hp at 200/208 V AC 60 Hz for 3 phases motors 20 Hp at 230/240 V AC 60 Hz for 3 phases motors 40 Hp at 460/480 V AC 60 Hz for 3 phases motors 50 Hp at 575/600 V AC 60 Hz for 3 phases motors 5 Hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With

[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit
Irms rated making capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 KA 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
Associated fuse rating	125 A gG at <= 690 V coordination type 2 for power circuit 160 A gG at <= 690 V coordination type 1 for power circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Average impedance	1.5 Ohm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	6.4 W AC-1 4.2 W AC-3e 6.3 W AC-3 9.6 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V UL certified[RETURN]Power circuit: 600 V CSA certified[RETURN]Power cir
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	6 Mcycles
Control circuit type	AC at 50/60 Hz
Coil technology	Without built-in
Control circuit voltage limits	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 0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz
Inrush power in VA	160 VA cos phi 0.75 (at 20 °C) 140 VA cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 20 °C) 13 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4…5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 Cyc/Mn at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid without 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…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: rigid Power circuit: screw clamp terminals 2 2.5…16 mm² - cable stiffness: rigid without cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5…16 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5…10 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: rigid
Tightening torque	Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw terminal - with screwdriver flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Type mirror contact 1 NC conforming to IEC 60947-4-1 type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1
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 energisation between NC and NO contacts 1.5 Ms on de-energisation between NC and NO contacts
Mounting support	Rail Rail

Environment

Standards	UL 60947-4-1 EN 60947-5-1 EN 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14
Product certifications	UL[RETURN]CCC[RETURN]BV[RETURN]GL[RETURN]GOST[RETURN]RINA[RETURN]LROS
IP degree of protection	IP2X conforming to VDE 0106 IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30
Climatic withstand	Conforming to IACS E10 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) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor opened (10 Gn for 11 ms)
Height	122 Mm
Width	70 Mm
Depth	118 Mm
Net weight	2.185 Kg
Quantity per set	Set of 10

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.5 Cm
Package 1 Width	13.2 Cm
Package 1 Length	14.0 Cm
Package 1 Weight	1.452 Kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15 Cm
Package 2 Width	30 Cm
Package 2 Length	40 Cm
Package 2 Weight	7.586 Kg

Offer Sustainability

Recyclability potential, in %	76
Total lifecycle Carbon footprint	77 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	13.816234817123652
Carbon footprint of the manufacturing phase [A1 to A3]	14 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.2725576806360515
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.3907958470947523
Carbon footprint of the installation phase [A5]	0.4 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]	5.154276898714952
Carbon footprint of the end-of-life phase [C1 to C4]	5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Total lifecycle Carbon footprint	77
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 trioxi
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 and

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised