

LC1D50A6BD

TeSys D contactor - 3P(3 NO) - AC-3 - ≤ 440 V
50 A - 24 V DC standard coil



Product availability: Non-Stock - Not normally stocked in distribution facility



Main

Commercial Status	Commercialised
Range	TeSys
Product name	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
System Voltage	<= 300 V DC power circuit <= 690 V AC 25...400 Hz power circuit
[Ie] rated operational current	80 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit 50 A (<= 140 °F (60 °C)) at <= 440 V AC AC-3 power circuit
Motor power kW	30 kW at 440 V AC 50/60 Hz 25 kW at 415 V AC 50/60 Hz 33 kW at 660...690 V AC 50/60 Hz 30 kW at 500 V AC 50/60 Hz 22 kW at 380...400 V AC 50/60 Hz 15 kW at 220...230 V AC 50/60 Hz
Motor power hp	40 hp at 575/600 V AC 50/60 Hz 3 phases motors 40 hp at 460/480 V AC 50/60 Hz 3 phases motors 15 hp at 230/240 V AC 50/60 Hz 3 phases motors 15 hp at 200/208 V AC 50/60 Hz 3 phases motors 7.5 hp at 230/240 V AC 50/60 Hz 1 phase motors 3 hp at 115 V AC 50/60 Hz 1 phase motors
Control circuit type	DC standard
Control circuit voltage	24 V DC
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	80 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	900 A at 440 V power circuit conforming to IEC 60947 250 A DC signalling circuit conforming to IEC 60947-5-1 140 A AC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	900 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit 208 A <= 104 °F (40 °C) 1 min power circuit 84 A <= 104 °F (40 °C) 10 min power circuit 810 A <= 104 °F (40 °C) 1 s power circuit 400 A <= 104 °F (40 °C) 10 s power circuit
Associated fuse rating	100 A gG at <= 690 V coordination type 2 power circuit 100 A gG at <= 690 V coordination type 1 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A power circuit

[Ui] rated insulation voltage	690 V power circuit conforming to IEC 60947-4-1 600 V signalling circuit certifications UL 600 V signalling circuit certifications CSA 690 V signalling circuit conforming to IEC 60947-1 600 V power circuit certifications UL 600 V power circuit certifications CSA
Electrical durability	1.1 Mcycles 80 A AC-1 at $U_e \leq 440$ V 1.45 Mcycles 50 A AC-3 at $U_e \leq 440$ V
Power dissipation per pole	9.6 W AC-1 3.7 W AC-3
Protective cover	With
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
Product certifications	CCC CSA GOST UL
Connections - terminals	Power circuit: lugs-ring terminals - external diameter: 0.65 in (16.5 mm) Control circuit: lugs-ring terminals - external diameter: 0.31 in (8 mm)
Tightening torque	Power circuit: 53.1 lbf.in (6 N.m) - on lugs-ring terminals hexagonal 0.39 in (10 mm) screw : M6 Control circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver Philips No 2 screw : M3.5 Control circuit: 15.04 lbf.in (1.7 N.m) - on lugs-ring terminals - with screwdriver flat Ø 6 mm screw : M3.5
Operating time	16...24 ms opening 42.5...57.5 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Operating rate	3600 cyc/h at ≤ 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.75...1.25 U_c at 140 °F (60 °C) operational 0.1...0.3 U_c at 140 °F (60 °C) drop-out
Time constant	34 ms
Inrush power in W	19 W at 68 °F (20 °C)
Hold-in power consumption in W	7.4 W at 68 °F (20 °C)
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
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V signalling circuit
Non-overlap time	1.5 ms on energisation (between NC and NO contact) 1.5 ms on de-energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm signalling circuit

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	23...140 °F (-5...60 °C)
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating in temperature
Fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor closed 4 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	4.8 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Product weight	2.05 lb(US) (0.93 kg)

Ordering and shipping details

Category	22345 - CTR,D-LINE,OPEN,NONREV-NEW
Discount Schedule	I12
GTIN	00785901824008
Nbr. of units in pkg.	1
Product availability	Non-Stock - Not normally stocked in distribution facility
Returnability	N
Country of origin	FR

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0001 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental Profile
Product end of life instructions	Need no specific recycling operations

Contractual warranty

Warranty period	18 months
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