Product data sheet Characteristics

LC1D50ABD

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

Product availability: Stock - Normally stocked in distribution facility







Main

Widin		
Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	,
Device short name	LC1D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-3 AC-4 AC-1	
Poles description	3P	
Power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC	<u> </u>
[le] rated operational current	50 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 80 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit	
Motor power kW	15 kW 220230 V AC 50/60 Hz AC-3) 22 kW 380400 V AC 50/60 Hz AC-3) 30 kW 500 V AC 50/60 Hz AC-3) 33 kW 660690 V AC 50/60 Hz AC-3) 25 kW 415 V AC 50/60 Hz AC-3) 30 kW 440 V AC 50/60 Hz AC-3) 11 kW 400 V AC 50/60 Hz AC-4)	
Motor power HP (UL / CSA)	3 hp 115 V AC 50/60 Hz 1 phase 7.5 hp 230/240 V AC 50/60 Hz 1 phase 15 hp 200/208 V AC 50/60 Hz 3 phase 15 hp 230/240 V AC 50/60 Hz 3 phase 40 hp 460/480 V AC 50/60 Hz 3 phase 40 hp 575/600 V AC 50/60 Hz 3 phase	:
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	

^{*} Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	
Overvoltage category	III	
[lth] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 80 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 60947-5-1 900 A 440 V power circuit IEC 60947	
Rated breaking capacity	900 A 440 V power circuit IEC 60947	
[lcw] rated short-time withstand current	400 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 100 A gG <= 690 V type 1 power circuit 100 A gG <= 690 V type 2 power circuit	
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit	
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit: 690 V conforming to IEC 60947-4-1	
Electrical durability	1.45 Mcycles 50 A AC-3 <= 440 V 0.5 Mcycles 80 A AC-1 <= 440 V	
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1	
Front cover	With	
Mounting support	Plate Rail	
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508	
Product certifications	UL GOST DNV LROS (Lloyds register of shipping) CCC GL CSA RINA BV	
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Power circuit screw connection 1 0.000.05 in² (135 mm²)flexible without cable end Power circuit screw connection 2 0.000.04 in² (125 mm²)flexible without cable end Power circuit screw connection 2 0.000.04 in² (125 mm²)flexible with cable end Power circuit screw connection 1 0.000.05 in² (135 mm²)flexible with cable end Power circuit screw connection 1 0.000.05 in² (135 mm²)solid without cable end Power circuit screw connection 2 0.000.04 in² (125 mm²)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 EverLink BTR screw connectors - cable 2535 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm² hexagonal screw head 4 mm	
Operating time	42.557.5 ms closing	

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	10 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.10.3 Uc (-4070 °C):drop-out DC 0.751.25 Uc -40140 °F (-4060 °C) operational DC 11.25 Uc 140158 °F (6070 °C) operational DC
Time constant	34 ms
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
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
Signalling circuit frequency	25400 Hz
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
Insulation resistance	> 10 MOhm for signalling circuit
Contact compatibility	M4
Compatibility code	LC1D
Motor power range	711 kW at 200240 V 3 phases 1525 kW at 380440 V 3 phases 1525 kW at 200240 V 3 phases 3050 kW at 380440 V 3 phases 3050 kW at 480500 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	24 V DC standard

Environment

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IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-4060 °C 6070 °C with derating
Ambient air temperature for storage	-76176 °F (-6080 °C)
Operating altitude	03000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms
Height	4.80 in (122 mm)
Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Net Weight	2.05 lb(US) (0.93 kg)

Ordering and shipping details

Category	22358 - CTR,TESYS D,OPEN,40-65A DC
Discount Schedule	l12
GTIN	00785901562542
Nbr. of units in pkg.	1
Package weight(Lbs)	2.19 lb(US) (0.99 kg)

Returnability	Yes
Country of origin	FR
•	
Packing Units	
Unit Type of Package 1	PCE
Package 1 Height	2.44 in (6.2 cm)
Package 1 width	5.39 in (13.7 cm)
Package 1 Length	5.98 in (15.2 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Weight	22.62 lb(US) (10.26 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Weight	387.18 lb(US) (175.62 kg)
Package 3 Height	31.50 in (80 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)
Offer Sustainability	
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)

Contractual	warranty
Contractual	wananiv

Environmental Disclosure

Circularity Profile

WEEE

PVC free

Warranty	18 months

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Product Environmental Profile

End of Life Information