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Main

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 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	25 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 40 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	5.5 KW 220...230 V AC 50/60 Hz AC-3) 11 KW 380...400 V AC 50/60 Hz AC-3) 11 KW 415...440 V AC 50/60 Hz AC-3) 15 KW 500 V AC 50/60 Hz AC-3) 15 KW 660...690 V AC 50/60 Hz AC-3) 5.5 kW 400 V AC 50/60 Hz AC-4)
Motor power HP (UL / CSA)	3 Hp 230/240 V AC 50/60 Hz 1 phase 2 Hp 115 V AC 50/60 Hz 1 phase 7.5 Hp 230/240 V AC 50/60 Hz 3 phase 15 Hp 460/480 V AC 50/60 Hz 3 phase 20 Hp 575/600 V AC 50/60 Hz 3 phase 7.5 hp 200/208 V AC 50/60 Hz 3 phase
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	220 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 40 A 140 °F (60 °C) 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 60947-5-1 450 A 440 V power circuit IEC 60947
Rated breaking capacity	450 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	240 A 104 °F (40 °C) - 10 s power circuit 380 A 104 °F (40 °C) - 1 s power circuit 50 A 104 °F (40 °C) - 10 min power circuit 120 A 104 °F (40 °C) - 1 min 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 63 A gG <= 690 V type 1 power circuit 40 A gG <= 690 V type 2 power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified

Electrical durability	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V
Power dissipation per pole	3.2 W AC-1 1.25 W AC-3
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	BV GL LROS (Lloyds register of shipping) GOST UL DNV CCC CSA RINA
Connections - terminals	Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00... 0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00... 0.01 in ² (1...4 mm ²)solid without cable end Control circuit screw clamp terminals 2 0.00... 0.01 in ² (1...4 mm ²)solid without cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1...10 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1.5...6 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.02 in ² (1.5...10 mm ²)solid without cable end Power circuit screw clamp terminals 2 0.00...0.02 in ² (2.5...10 mm ²)solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2
Operating time	12...22 ms closing 4...19 ms opening
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	15 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	2...3 W at 50/60 Hz
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	25...400 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	M2
Compatibility code	LC1D
Motor power range	4...6 KW 200...240 V 3 phase 7...11 KW 380...440 V 3 phase 7...11 kW 480...500 V 3 phase
Motor starter type	Direct on-line contactor
Contactor coil voltage	220 V AC standard

Environment

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	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms
Height	3.35 in (85 mm)
Maximum Width	1.77 in (45 mm)
Depth	3.62 in (92 mm)
Net Weight	0.82 lb(US) (0.37 kg)

Ordering and shipping details

Category	22354 - CTR, TESYS D, OPEN, 9-38A AC
Discount Schedule	I12
GTIN	00785901207160
Nbr. of units in pkg.	1
Package weight(Lbs)	0.92 lb(US) (0.42 kg)
Returnability	Yes
Country of origin	ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.17 in (5.5 cm)
Package 1 width	3.54 in (9 cm)
Package 1 Length	3.94 in (10 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Weight	18.90 lb(US) (8.574 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	320
Package 3 Weight	324.74 lb(US) (147.3 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)

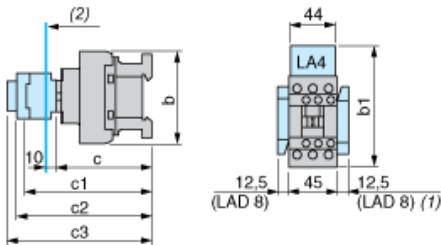
Offer Sustainability

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
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

Contractual warranty

Warranty	18 months
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Dimensions



- (1) Including LAD 4BB
(2) Minimum electrical clearance

LC1		D25...D38 (3-pole)
b	without add-on blocks	85
b1	with LAD 4BB	98
	with LA4 D•2	114 ⁽¹⁾
	with LA4 DF, DT	123 ⁽¹⁾
	with LA4 DW, DL	130 ⁽¹⁾
c	without cover or add-on blocks	90
	with cover, without add-on blocks	92
c1	with LAD N or C (2 or 4 contacts)	123
c2	with LA6 DK10, LAD 6K10	135
c3	with LAD T, R, S	143
	with LAD T, R, S and sealing cover	147
(1)	Including LAD 4BB.	

Wiring

