Product data sheet
Characteristics

LC2D40AF7
TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 40 A - 110 V AC coil

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Main

Range	TeSys
Product name	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
Device presentation	Preassembled with reversing power busbar
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	40 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 60 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	18.5 KW at 380...400 V AC 50 Hz 11 KW at 220...230 V AC 50 Hz 22 KW 415...440 V AC 50 Hz 22 KW at 500 V AC 50 Hz 30 kW at 660...690 V AC 50 Hz
Motor power HP (UL / CSA)	5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp at 230/240 V AC 60 Hz for 3 phases motors 30 Hp at 575/600 V AC 60 Hz for 3 phases motors 10 Hp at 200/208 V AC 60 Hz for 3 phases motors 3 Hp at 115 V AC 60 Hz for 1 phase motors 30 hp at 460/480 V AC 60 Hz for 3 phases motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	110 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 60 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 800 A 440 V power circuit IEC 60947
Rated breaking capacity	800 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	72 A 104 °F (40 °C) - 10 min power circuit 165 A 104 °F (40 °C) - 1 min power circuit 320 A 104 °F (40 °C) - 10 s power circuit 720 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	10 A gG signalling circuit IEC 60947-5-1 80 A gG <= 690 V type 1 power circuit 80 A gG <= 690 V type 2 power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Electrical durability	1.5 Mcycles 40 A AC-3 <= 440 V 1.4 Mcycles 60 A AC-1 <= 440 V
Power dissipation per pole	2.4 W AC-3 5.4 W AC-1

Front cover	With
Interlocking type	Mechanical
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	CCC UL GOST CSA
Connections - terminals	Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)solid Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²)solid Power circuit EverLink BTR screw connectors 1 0.00…0.05 in² (1…35 mm²)flexible without cable end Power circuit EverLink BTR screw connectors 2 0.00…0.04 in² (1…25 mm²)flexible without cable end Power circuit EverLink BTR screw connectors 1 0.00…0.05 in² (1…35 mm²)flexible with cable end Power circuit EverLink BTR screw connectors 2 0.00…0.04 in² (1…25 mm²)flexible with cable end Power circuit EverLink BTR screw connectors 1 0.00…0.05 in² (1…35 mm²)solid Power circuit EverLink BTR screw connectors 2 0.00…0.04 in² (1…25 mm²)solid
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 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04…0.05 in² (25…35 mm²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00…0.04 in² (1…25 mm²) hexagonal 0.16 in (4 mm)
Operating time	4...19 ms opening 12...26 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	6 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	140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	4…5 W 50/60 Hz
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
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 de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Insulation resistance	> 10 MOhm signalling circuit
Contact compatibility	M2
Compatibility code	LC2D
Motor power range	7…11 KW 200…240 V 3 phase 15…25 KW 380…440 V 3 phase 15…25 kW at 480…500 V 3 phases
Motor starter type	Reversing contactor
Contactor coil voltage	110 V AC standard

Environment

IP degree of protection	IP20 front face IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40…140 °F (-40…60 °C) 140…158 °F (60…70 °C) with derating
Ambient air temperature for storage	-76…176 °F (-60…80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	4.80 in (122 mm)
Maximum Width	4.69 in (119 mm)
Depth	4.72 in (120 mm)
Net Weight	4.12 lb(US) (1.87 kg)

Ordering and shipping details

Category	22357 - CTR,TESYS D,OPEN,40-65A AC
Discount Schedule	I12
GTIN	00785901562498
Nbr. of units in pkg.	1
Package weight(Lbs)	4.57 lb(US) (2.07 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	5.51 in (14 cm)
Package 1 width	6.38 in (16.2 cm)
Package 1 Length	7.80 in (19.8 cm)

Offer Sustainability

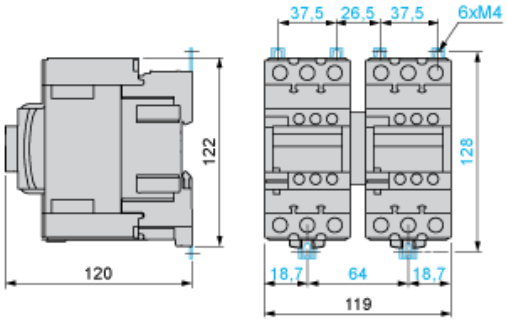
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh 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

Dimensions



Wiring

