Product data sheet
Characteristics

LC1D40ABNE
TeSys D contactor 3P 40A AC-3 up to 440V coil 24-60V AC/DC EverLink

Main

Range	TeSys
Product name	TeSys D Green
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	60 A 140 °F (60 °C)) <= 440 V AC-1 power circuit 40 A 140 °F (60 °C)) <= 440 V AC-3 power circuit
Motor power kW	11 KW 220...230 V AC 50 Hz AC-3) 18.5 KW at 380...400 V AC 50 Hz (AC-3) 22 KW 415 V AC 50 Hz AC-3) 22 KW 440 V AC 50 Hz AC-3) 22 KW 500 V AC 50 Hz AC-3) 30 kW 660...690 V AC 50 Hz AC-3)
Motor power HP (UL / CSA)	3 Hp 115 V AC 60 Hz 1 phase 5 Hp at 230/240 V AC 60 Hz for 1 phase motors 10 Hp 200/208 V AC 60 Hz 3 phase 10 Hp at 230/240 V AC 60 Hz for 3 phases motors 30 Hp 460/480 V AC 60 Hz 3 phase 30 hp at 575/600 V AC 60 Hz for 3 phases motors
[Uc] control circuit voltage	24...60 V AC 50/60 Hz 24...60 V DC
Coil type	AC/DC electronic
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	60 A 140 °F (60 °C) power circuit 10 A (at 60 °C) for signalling circuit
Irms rated making capacity	800 A 440 V power circuit IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
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 for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	80 A gG <= 690 V type 1 power circuit 80 A gG <= 690 V type 2 power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm - Ith 60 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Electrical durability	2 Mcycles 35 A AC-3 <= 440 V 0.7 Mcycles 60 A AC-1 <= 440 V
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
Front cover	With

Mounting support	Plate Rail
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1
Product certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping)
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 1 0.00…0.05 in² (1…35 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)flexible without 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 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	55...65 ms closing 20...120 ms opening >= 17221) 20...80 ms opening >= 18011)
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	6 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc -40…158 °F (-40…70 °C) drop-out AC/DC 0.85...1.1 Uc -40…140 °F (-40…60 °C) operational AC 0.8...1.1 Uc -40…140 °F (-40…60 °C) operational DC 1...1.1 Uc 140…158 °F (60…70 °C) operational AC/DC
Inrush power in VA	15 VA 50/60 Hz 68 °F (20 °C))
Inrush power in W	16 W 68 °F (20 °C)
Hold-in power consumption in VA	1 VA 68 °F (20 °C)) 50/60 Hz
Hold-in power consumption in W	0.7 W 68 °F (20 °C)
Heat dissipation	0.7 W 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
Compatibility code	LC1D

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 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms
Height	4.80 in (122 mm)
Maximum Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Net Weight	2.19 lb(US) (0.992 kg)
Color	Gray SE GREY 6) Green SE GREEN 2)

Ordering and shipping details

Category	22356 - CTR,TESYS D,OPEN,9-65A AC/DC GREEN
Discount Schedule	I12
GTIN	00785901765080
Nbr. of units in pkg.	1
Package weight(Lbs)	2.35 lb(US) (1.07 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	9
Package 2 Weight	21.90 lb(US) (9.934 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)

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
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.
Halogen content performance	Halogen free plastic parts & cables product

Contractual warranty

Warranty	18 months