Product data sheet Characteristics

LC1D18BL

TeSys D IEC contactor, 18 A, 3 P, 10 HP at 480 VAC, nonreversing, low consumption 24 VDC coil

Product availability: Stock - Normally stocked in distribution facility



Price*: 170.00 USD



Main

Range	TeSys	
Product name	TeSys D	
Product or component type	Contactor	
Device short name	LC1D	
Contactor 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 25400 Hz Power circuit <= 300 V DC	· · · · · · · · · · · · · · · · · · ·
[le] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	4 kW 220230 V AC 50/60 Hz AC-3) 7.5 kW 380400 V AC 50/60 Hz AC-3) 9 kW 415440 V AC 50/60 Hz AC-3) 10 kW 500 V AC 50/60 Hz AC-3) 10 kW 660690 V AC 50/60 Hz AC-3) 4 kW 400 V AC 50/60 Hz AC-4)	
Motor power HP (UL / CSA)	1 hp 115 V AC 50/60 Hz 1 phase 3 hp 230/240 V AC 50/60 Hz 1 phase 5 hp 200/208 V AC 50/60 Hz 3 phase 5 hp 230/240 V AC 50/60 Hz 3 phase 10 hp 460/480 V AC 50/60 Hz 3 phase 15 hp 575/600 V AC 50/60 Hz 3 phase	
Control circuit type	DC low consumption	
[Uc] control circuit voltage	24 V DC	
Auxiliary contact composition	1 NO + 1 NC	

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

[Uimp] rated impulse withstand voltage Overvoltage category	6 kV conforming to IEC 60947
Overvoltage category	
[lth] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 32 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 60947-5-1 300 A 440 V power circuit IEC 60947
Rated breaking capacity	300 A 440 V power circuit IEC 60947
[lcw] rated short-time withstand current	145 A 104 °F (40 °C) - 10 s power circuit 240 A 104 °F (40 °C) - 1 s power circuit 40 A 104 °F (40 °C) - 10 min power circuit 84 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 50 A gG <= 690 V type 1 power circuit 35 A gG <= 690 V type 2 power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to 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 18 A AC-3 <= 440 V 1 Mcycles 32 A AC-1 <= 440 V
Power dissipation per pole	2.5 W AC-1 0.8 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 GOST CCC DNV LROS (Lloyds register of shipping) UL GL CSA RINA
Connections - terminals	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 2 cable(s) 12.5 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 clamp terminals 1 0.000.01 in² (16 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.000.01 in² (1.56 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Power circuit screw clamp terminals 2 0.000.01 in² (1.56 mm²)solid without cable end
Tightening torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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
Operating time	65.4588.55 ms closing 2030 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

Mechanical durability	30 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 0.81.25 Uc (-4060 °C):operational DC 11.25 Uc 140158 °F (6070 °C) operational DC	
Time constant	40 ms	
Inrush power in W	2.4 W (at 20 °C)	
Hold-in power consumption in W	2.4 W at 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	M5	
Compatibility code	LC1D	
Motor power range	46 kW 200240 V 3 phase 711 kW 380440 V 3 phase 711 kW 480500 V 3 phase	
Motor starter type	Direct on-line contactor	
Contactor coil voltage	24 V DC low consumption	

Environment

LIMIOHHEIR	
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40140 °F (-4060 °C) 140158 °F (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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms
Height	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.74 in (95 mm)
Net Weight	1.08 lb(US) (0.49 kg)

Ordering and shipping details

22354 - CTR,TESYS D,OPEN,9-38A AC
112
00785901207351
1
1.18 lb(US) (0.54 kg)
Yes
ID

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.13 in (5.4 cm)
Package 1 width	3.70 in (9.4 cm)
Package 1 Length	4.25 in (10.8 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Weight	18.26 lb(US) (8.284 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	240
Package 3 Weight	315.22 lb(US) (142.98 kg)
Package 3 Height	30.31 in (77 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

Offer Sustainability

PVC free	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	End of Life Information
Environmental Disclosure	Product Environmental Profile
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
RoHS exemption information	Yes
Mercury free	Yes
Toxic heavy metal free	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
REACh free of SVHC	Yes
REACh Regulation	REACh Declaration
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
Sustainable offer status	Green Premium product

Contractual warranty

Warranty	18 months