

Product datasheet

Specifications



Contactor, Easy TeSys Control, LC1E, 3P(3NO), AC-3/AC-3e, <=440V, 18A, 24V DC coil, 1 NC auxiliary contact

LC1E1801BD

Main

Range	Easy TeSys
Range of product	Easy TeSys Control
Product or component type	Contactor
Device short name	LC1E
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-3e AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	18 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 18 A (at <55 °C) at <= 440 V AC AC-3e for power circuit 32 A (at <55 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	4 kW at 220/230 V AC 50/60 Hz 7.5 kW at 380/400 V AC 50/60 Hz 9 kW at 415/440 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 9 kW at 660/690 V AC 50/60 Hz 10 kW at 660...690 V AC 50/60 Hz
Pole contact composition	3 NO
[Ith] conventional free air thermal current	32 A (at 55 °C) for power circuit
Irms rated making capacity	234 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	153 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	145 A 40 °C - 10 s for power circuit 84 A 40 °C - 60 s for power circuit 40 A 40 °C - 600 s for power circuit
Associated fuse rating	10 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 35 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit
Power dissipation per pole	0.81 W AC-3 2.6 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	10000000 cycles
Electrical durability	1400000 cycles AC-3 at $U_e \leq 440$ V 300000 cycles AC-1 at $U_e \leq 440$ V
Control circuit type	DC
Control circuit voltage limits	0.85...1.1 U_c (-5...55 °C):operational DC 0.1...0.25 U_c (-5...55 °C):drop-out DC
Inrush power in W	6 W (at 20 °C)
Hold-in power consumption in W	6 W at 20 °C
Operating time	53...72 ms on closing 16...24 ms on opening
Time constant	28 ms
Maximum operating rate	1800 cyc/h 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end
Tightening torque	Power circuit: 1.7 N.m Control circuit: 1.7 N.m
Auxiliary contact composition	1 NC
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Mounting support	DIN rail Plate

Environment

Standards	EN/IEC 60947-1 EN/IEC 60947-4-1 EN/IEC 60947-5-1 GB/T 14048.1 GB/T 14048.4 GB/T 14048.5
Product certifications	CB Scheme CCC CE EAC
IP degree of protection	IP20 conforming to IEC 60529

Protective treatment	TH conforming to IEC 60068-2-30 test Db
Permissible ambient air temperature around the device	-20...70 °C at Uc -60...80 °C storage -5...55 °C operation
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Shocks contactor open (5 Gn for 11 ms) conforming to IEC 60068-2-7 Shocks contactor closed (10 Gn for 11 ms) conforming to IEC 60068-2-7 Vibrations contactor open (1.5 Gn, 5...300 Hz) conforming to IEC 60068-2-6 Vibrations contactor closed (3 Gn, 5...300 Hz) conforming to IEC 60068-2-6
Height	77 mm
Width	45 mm
Depth	93 mm
Net weight	0.48 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.000 cm
Package 1 Width	9.400 cm
Package 1 Length	11.300 cm
Package 1 Weight	493.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	7.662 kg

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	510 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.1 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	505 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	1 kg CO2 eq.

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	66d8b16b-4ee4-4193-a748-b691b2425131
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer




Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	73
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Technical Illustration

Assembly's dimensions

