Product data sheet

Specifications

TESYS motor starter kit, LC1D12BD contactor, LR9D32 thermal overload relay

LR9D32KITD12BD

Discontinued on: Jun 30, 2023

Discontinued

Product availability: Non-Stock - Not normally stocked in distribution facility

Main

Range	TeSys
Product Or Component Type	Motor starter
Contactor Application	Resistive load Motor control
Utilisation Category	AC-1 AC-4 AC-3
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 (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 12 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
Motor Power Kw	3 kW at 220...230 V AC 50/60 Hz (AC-3) 5.5 kW at 380...400 V AC 50/60 Hz (AC-3) 5.5 kW at 415...440 V AC 50/60 Hz (AC-3) 7.5 kW at 500 V AC 50/60 Hz (AC-3) 7.5 kW at 660...690 V AC 50/60 Hz (AC-3) 3.7 kW at 400 V AC 50/60 Hz (AC-4)
Motor Power Hp (Ul / Csa)	0.5 hp at 115 V AC 50/60 Hz for 1 phase motors 2 hp at 230/240 V AC 50/60 Hz for 1 phase motors 3 hp at 200/208 V AC 50/60 Hz for 3 phase motors 3 hp at 230/240 V AC 50/60 Hz for 3 phase motors 7.5 hp at 460/480 V AC 50/60 Hz for 3 phase motors 10 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	24 V DC
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	25 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling circuit
Irms Rated Making Capacity	250 A at 440 V for power circuit conforming to 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	250 A at 440 V for power circuit conforming to IEC 60947

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

[Icw] Rated Short-Time Withstand Current	105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min for 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 40 A gG at <= 690 V coordination type 1 for power circuit 25 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2.5 mOhm - Ith 25 A 50 Hz for 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	2 Mcycles 12 A AC-3 <= 440 V 0.8 Mcycles 25 A AC-1 <= 440 V
Power Dissipation Per Pole	0.36 W AC-3 1.56 W AC-1
Safety 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 CSA DNV RINA GL GOST LROS (Lloyds register of shipping) CCC UL
Connections - Terminals	Power circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)solid without cable end Power circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²)solid without cable end 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 without cable end Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 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 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

Operating Time	53.55...72.45 ms closing 16...24 ms opening
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	30 Mcycles
Maximum Operating Rate	3600 cyc/h 140 °F (60 °C)
Relay Application	Motor protection
Phase Failure Sensitivity	Phase difference > 40% 3 s IEC 60947-4-1

Complementary

Coil Technology	With integral suppression device
Control Circuit Voltage Limits	Drop-out 0.1...0.25 Uc DC 140 °F (60 °C)) Operational 0.7...1.25 Uc DC 140 °F (60 °C))
Time Constant	28 ms
Inrush Power In W	5.4 W 68 °F (20 °C))
Hold-In Power Consumption In W	5.4 W 68 °F (20 °C)
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 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	M4
Motor Power Range	4…6 kW 380…440 V 3 phase 4…6 kW 480…500 V 3 phase 2.2…3 kW 200…240 V 3 phase
Motor Starter Type	Direct on-line contactor
Contactor Coil Voltage	24 V DC standard
Thermal Overload Class	Class 5…30
Thermal Protection Adjustment Range	6.4…32 A
Power Consumption In W	300 mW
Mounting Support	Under contactor Plate, with specific accessories Rail, with specific accessories
[Ue] Rated Operational Voltage	690 V power circuit 660 V signalling circuit
[Ui] Rated Insulation Voltage	Power circuit 1000 V Signalling circuit 690 V
Tripping Threshold	1.25 In IEC 60947-4-1
Control Type	Red push-button stop and manual reset White 2 microswitches adjustable trip class Red knob automatic reset Gray dial full-load current adjustment
Time Range	1.5...4 min - automatic reset time
[Ith] Conventional Free Air Thermal Current	5 A signalling circuit

Associated Fuse Rating	5 A gG signalling circuit 5 A BS signalling circuit
[Uimp] Rated Impulse Withstand Voltage	6 kV
Ip Degree Of Protection	Front face IP20 IEC 60529 Front face IP20 VDE 0106
Mechanical Robustness	Vibrations 10...150 Hz 6 Gn) IEC 60068-2-6 Shocks 11 ms 15 gn) IEC 60068-2-7
Connections - Terminals	Control circuit screw clamp terminals 1 0.00 in² (2.5 mm²) solid or flexible - without cable end Power circuit screw clamp terminals 1 0.02 in² (16 mm²) solid or flexible - without cable end
Tightening Torque	Control circuit 0.8 N.m screw clamp terminals Power circuit 3.1 N.m screw clamp terminals

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	23…140 °F (-5…60 °C)
Permissible Ambient Air Temperature Around The Device	-40…158 °F (-40…70 °C) at Uc
Operating Altitude	9842.52 ft (3000 m) without derating
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	3.03 in (77 mm)
Width	1.77 in (45 mm)
Depth	3.74 in (95 mm)
Net Weight	1.07 lb(US) (0.485 kg)
Standards	UL 60947-4-1 IEC 60947-4-1 CSA C22.2 GB 14048.4
Product Certifications	CSA CCC TÜV CULus
Ambient Air Temperature For Operation	-13…158 °F (-25…70 °C) IEC 60255-8
Ambient Air Temperature For Storage	-76…176 °F (-60…80 °C)
Ambient Air Temperature For Storage	-67…176 °F (-55…80 °C)
Operating Altitude	6561.68 ft (2000 m) without derating
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 conforming to UL 94
Electromagnetic Compatibility	Surge withstand 2 kV common mode IEC 61000-4-5 Resistance to electrostatic discharge 8 kV IEC 61000-4-2 Immunity to radiated radio-electrical interference 10 V/m IEC 61000-4-3 Immunity to fast transients 2 kV IEC 61000-4-4
Dielectric Strength	6 kV 50 Hz IEC 60255-5
Height	2.85 in (72.5 mm)

Width	1.77 in (45 mm)
Depth	3.15 in (79.9 mm)
Net Weight	0.40 lb(US) (0.18 kg)

Ordering and shipping details

Category	US10I1222350
Discount Schedule	0I12
Gtin	3606486288115
Returnability	No
Country Of Origin	CN

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	8.00 in (20.32 cm)
Package 1 Width	4.00 in (10.16 cm)
Package 1 Length	4.00 in (10.16 cm)
Package 1 Weight	26.24 oz (743.892 g)

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

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Guide to assess a product's sustainability >

RoHS/REACh

Well-being performance

Mercury Free

Rohs Exemption Information	Yes

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.