

# Product data sheet

Specifications

SQUARE D



## Motor Starter Kit, TeSys, LC1D25B7 contactor, GV2P21 motor starter protector, 24 VAC 50/60 Hz coil, 17 to 23A trip

GV2P21KD25B7

! Discontinued

! Discontinued on: Aug 9, 2024

**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-3 AC-4
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-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	5.5 kW at 220...230 V AC 50/60 Hz (AC-3) 11 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 415...440 V AC 50/60 Hz (AC-3) 15 kW at 500 V AC 50/60 Hz (AC-3) 15 kW at 660...690 V AC 50/60 Hz (AC-3) 5.5 kW at 400 V AC 50/60 Hz (AC-4)
motor power HP (UL / CSA)	3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 3 phase motors 15 hp at 460/480 V AC 50/60 Hz for 3 phase motors 20 hp at 575/600 V AC 50/60 Hz for 3 phase motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phase motors
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Oversvoltage category	III
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for signalling circuit 40 A (at 140 °F (60 °C)) for 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 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 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.

<b>[Icw] rated short-time withstand current</b>	240 A 104 °F (40 °C) - 10 s for power circuit 380 A 104 °F (40 °C) - 1 s for power circuit 50 A 104 °F (40 °C) - 10 min for power circuit 120 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
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	2 mOhm - lth 40 A 50 Hz for power circuit
<b>[Ui] rated insulation voltage</b>	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
<b>Electrical durability</b>	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V
<b>Power dissipation per pole</b>	3.2 W AC-1 1.25 W AC-3
<b>safety cover</b>	With
<b>Mounting Support</b>	Plate Rail
<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
<b>Product Certifications</b>	GL GOST BV UL LROS (Lloyds register of shipping) DNV CCC CSA RINA
<b>Connections - terminals</b>	Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Power circuit screw clamp terminals 1 0.004...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 2 0.004...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )flexible without cable end Power circuit screw clamp terminals 1 0.002...0.02 in <sup>2</sup> (1...10 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> )flexible with cable end Power circuit screw clamp terminals 1 0.002...0.02 in <sup>2</sup> (1.5...10 mm <sup>2</sup> )solid without cable end Power circuit screw clamp terminals 2 0.004...0.02 in <sup>2</sup> (2.5...10 mm <sup>2</sup> )solid without cable end
<b>Tightening torque</b>	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 22.1 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals Philips No 2

<b>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	15 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Trip unit rating</b>	17...23 A
<b>Trip unit technology</b>	Thermal-magnetic
<b>Phase failure sensitivity</b>	Yes IEC 60947-4-1
<b>Suitability for isolation</b>	Yes IEC 60947-1

## Complementary

<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	Drop-out 0.3...0.6 Uc AC 50/60 Hz 140 °F (60 °C) Operational 0.8...1.1 Uc AC 50 Hz 140 °F (60 °C) Operational 0.85...1.1 Uc AC 60 Hz 140 °F (60 °C)
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat dissipation</b>	2...3 W 50/60 Hz
<b>Auxiliary contacts type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Non-overlap time</b>	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Contact compatibility</b>	M2
<b>motor power range</b>	4...6 kW 200...240 V 3 phase 7...11 kW 380...440 V 3 phase 7...11 kW 480...500 V 3 phase
<b>Motor starter type</b>	Direct on-line contactor
<b>Contactors coil voltage</b>	24 V AC standard
<b>Utilisation category</b>	AC-3 IEC 60947-4-1 Category A IEC 60947-2
<b>Network frequency</b>	50/60 Hz IEC 60947-4-1
<b>Fixing mode</b>	35 mm symmetrical DIN rail clipped Panel screwed with 2 x M4 screws
<b>Operating position</b>	Any position
<b>Motor power kW</b>	9 kW 400/415 V AC 50/60 Hz 11 kW 500 V AC 50/60 Hz 18.5 kW 690 V AC 50/60 Hz
<b>Breaking capacity</b>	100 kA Icu 230/240 V AC 50/60 Hz IEC 60947-2 10 kA Icu 500 V AC 50/60 Hz IEC 60947-2 4 kA Icu 690 V AC 50/60 Hz IEC 60947-2 20 kA Icu 440 V AC 50/60 Hz IEC 60947-2 50 kA Icu 400/415 V AC 50/60 Hz IEC 60947-2

<b>[Ics] rated service short-circuit breaking capacity</b>	100 % 690 V AC 50/60 Hz IEC 60947-2 100 % 230/240 V AC 50/60 Hz IEC 60947-2 75 % 500 V AC 50/60 Hz IEC 60947-2 50 % 400/415 V AC 50/60 Hz IEC 60947-2 75 % 440 V AC 50/60 Hz IEC 60947-2
<b>Control Type</b>	Rotary knob
<b>Line Rated Current</b>	23 A
<b>Magnetic tripping current</b>	327 A
<b>[Ue] rated operational voltage</b>	690 V AC 50/60 Hz IEC 60947-2
<b>[Ui] rated insulation voltage</b>	690 V AC 50/60 Hz IEC 60947-2
<b>[Ith] conventional free air thermal current</b>	23 A IEC 60947-4-1
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947-2
<b>Power dissipation per pole</b>	2.5 W
<b>Mechanical durability</b>	100000 cycles
<b>Electrical durability</b>	100000 cycles AC-3 440 V
<b>maximum operating rate</b>	25 cyc/h
<b>Rated duty</b>	Continuous IEC 60947-4-1
<b>Direct connector</b>	Without
<b>Connections - terminals</b>	screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1...6 mm <sup>2</sup> ) solid screw clamp terminals 2 0.002...0.009 in <sup>2</sup> (1.5...6 mm <sup>2</sup> ) flexible without cable end screw clamp terminals 2 0.002...0.006 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end
<b>Tightening torque</b>	15.05 lbf.in (1.7 N.m) screw clamp terminals

## Environment

<b>IP degree of protection</b>	IP20 front face IEC 60529
<b>Pollution degree</b>	3
<b>Ambient Air Temperature for Operation</b>	23...140 °F (-5...60 °C)
<b>Ambient Air Temperature for Storage</b>	-76...176 °F (-60...80 °C)
<b>Permissible ambient air temperature around the device</b>	-40...158 °F (-40...70 °C) at Uc
<b>Operating altitude</b>	9842.52 ft (3000 m) without derating
<b>Fire resistance</b>	1562 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open8 Gn for 11 ms
<b>Height</b>	3.3 in (85 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.6 in (92 mm)
<b>Net Weight</b>	0.82 lb(US) (0.37 kg)

<b>Standards</b>	IEC 60947-1 NF C 79-130 VDE 0113 UL 508 CSA C22.2 EN 60204 NF C 63-650 VDE 0660 IEC 60947-2 IEC 60947-4-1 NF C 63-120
<b>Product certifications</b>	UL 508 type E EZU CCC EAC DNV LROS (Lloyds register of shipping) ATEX GL BV RINA TSE UL CSA
<b>Protective treatment</b>	TH
<b>Climatic withstand</b>	IACS E10
<b>IK degree of protection</b>	IK04
<b>IP degree of protection</b>	IP20 IEC 60529
<b>Ambient air temperature for operation</b>	-4...140 °F (-20...60 °C)
<b>Operating altitude</b>	6561.68 ft (2000 m)
<b>Ambient air temperature for storage</b>	-40...176 °F (-40...80 °C)
<b>Height</b>	3.5 in (89 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.8 in (97 mm)

## Ordering and shipping details

<b>Category</b>	US10I1122368
<b>Discount Schedule</b>	0111
<b>GTIN</b>	3606486288009
<b>Returnability</b>	No

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Nbr. of units in pkg.</b>	1
<b>Package 1 Height</b>	3.3 in (8.5 cm)
<b>Package 1 Width</b>	1.8 in (4.5 cm)
<b>Package 1 Length</b>	3.6 in (9.2 cm)
<b>Package weight(Lbs)</b>	26.080 oz (739.356 g)

## Contractual warranty

<b>Warranty (in months)</b>	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 >](#)

### Use Better



#### Materials and Substances

Packaging made with recycled cardboard

No

Packaging without single use plastic

No

[EU RoHS Directive](#)

Compliant with Exemptions

SCIP Number

C4def605-9cda-4bdf-968e-80f8fb87f293

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](http://www.P65Warnings.ca.gov)

### Use Longer



#### Lifetime extension

Repair

No