

# Product datasheet

Specifications



## TeSys Deca , star delta starter , 3 x 3P (3 NO) , 18 A , 48 V AC coil

LC3D180AE7

⚠ Discontinued on: May 19, 2023

⚠ Discontinued

### Main

Range	TeSys
Product name	TeSys D
Product or component type	Star delta starter
Device short name	LC3D
Contactors application	Motor control
Utilisation category	AC-3
Device presentation	Pre-wired
Poles description	3 x 3P
power pole contact composition	3 x 3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	11 kW at 220/230 V AC 50/60 Hz 22 kW at 415 V AC 50/60 Hz 22 kW at 440 V AC 50/60 Hz 18.5 kW at 380/400 V AC 50/60 Hz
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NC for KM1 star contactor
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Oversvoltage category	III
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 1000 V conforming to IEC 60947-1
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V
safety cover	Protective cover
Interlocking type	Mechanical
Mounting support	Rail
Standards	EN 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 EN 60947-5-1 IEC 60947-4-1 UL 508

<b>Product certifications</b>	UL GL LROS (Lloyds register of shipping) DNV RINA CCC GOST CSA BV
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## Complementary

<b>Connections - terminals</b>	Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1...6 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening torque</b>	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver 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
<b>Maximum operating rate</b>	30 cyc/h 60 °C
<b>Starting time</b>	30 s
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <60 °C) Operational: 0.8...1.1 Uc at 50 Hz (at <60 °C) Operational: 0.85...1.1 Uc at 60 Hz (at <60 °C)
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	2...3 W at 50/60 Hz
<b>Auxiliary contacts type</b>	Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO + 1 NC Mirror contact conforming to IEC 60947-4-1 3 x 1 NC
<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>Width</b>	144 mm
<b>Height</b>	124 mm
<b>Depth</b>	143 mm
<b>Product weight</b>	1.73 kg

## Environment

Insulation resistance	> 10 MOhm for signalling circuit
IP degree of protection	IP20 front face conforming to IEC 60529
Climatic withstand	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for storage	-60...80 °C
Ambient air temperature for operation	-40...70 °C at U <sub>c</sub>
Operating altitude	3000 m without derating
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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	18 cm
Package 1 Width	16 cm
Package 1 Length	23.5 cm
Package 1 Weight	1.73 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 >](#)

### Use Better

#### Materials and Substances

EU RoHS Directive

[Compliant](#)

PVC free

Yes

### Use Longer

#### Lifetime extension

Repair

No

### Use Again

#### Repack and remanufacture

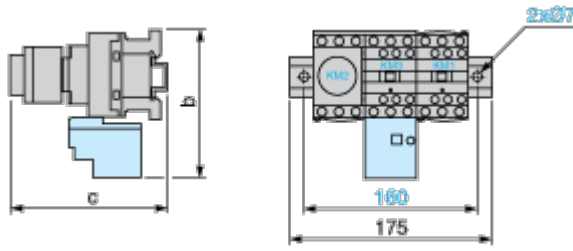
WEEE Label



The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Dimensions Drawings

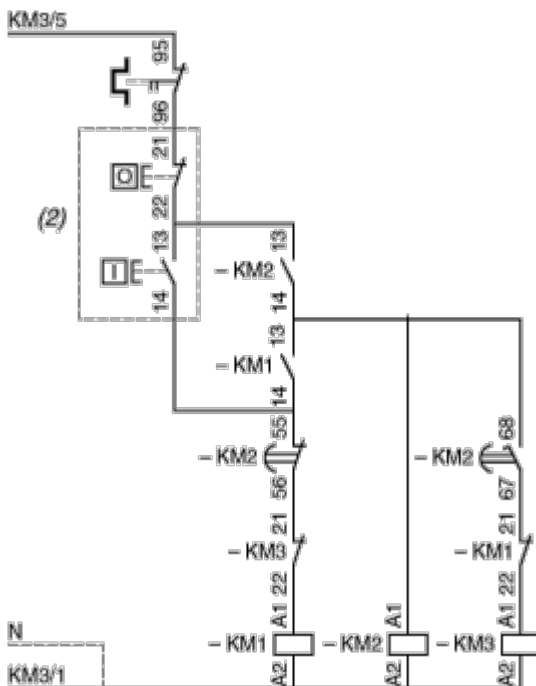
Dimensions



LC3		D09A to D180A	D320A
<b>b</b>		153	137
<b>c</b>	with LAD S	139	145
	with LAD S and sealing cover	143	149

Connections and Schema

Wiring



- (1) Recommended cabling for reversal of motor rotation (standard motor, viewed from shaft end).
- (2) Remote control.

**NOTE:** LC3 D09A to D18A: Mechanical interlock between KM3 and KM1.

