

# Product datasheet

Specifications



## Star delta starter, TeSys Deca, 3 x 3P (3 NO), 18A, 380VAC 50/60Hz coil

LC3D180AQ7

! Discontinued

### Main

Range	TeSys TeSys Deca
Product name	TeSys D TeSys Deca
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	380 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
Overvoltage 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

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

<b>Standards</b>	UL 508 EN 60947-4-1 CSA C22.2 No 14 IEC 60947-5-1 EN 60947-5-1 IEC 60947-4-1 IEC 60335-1
<b>Product certifications</b>	RINA CCC BV CSA DNV GL LROS (Lloyds register of shipping) GOST UL

## 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 Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv 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 U <sub>c</sub> at 50/60 Hz (at <60 °C) Operational: 0.8...1.1 U <sub>c</sub> at 50 Hz (at <60 °C) Operational: 0.85...1.1 U <sub>c</sub> 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>Net weight</b>	1.73 kg

## Environment

<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Climatic withstand</b>	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Pollution degree</b>	3
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Ambient air temperature for operation</b>	-40...70 °C at U <sub>c</sub>
<b>Operating altitude</b>	3000 m without derating
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	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

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	18 cm
<b>Package 1 Width</b>	16 cm
<b>Package 1 Length</b>	23.5 cm
<b>Package 1 Weight</b>	1.73 kg

## 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

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