

# Product datasheet

Specifications



## TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 40 A - 220 V AC coil

LC1D258M7

### Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

### Complementary

Compatibility code	LC1D
Pole contact composition	2 NO + 2 NC
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 40 A (at 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
[Icw] rated short-time withstand current	240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 50 A 40 °C - 10 min for power circuit 120 A 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 63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
Power dissipation per pole	3.2 W AC-1
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Overvoltage category	III

Excluding VAT, FCA Jabal Ali &amp; are subject to change – check with your local distributor.

<b>Pollution degree</b>	3
<b>[Ui]imp] rated impulse withstand voltage</b>	6 kV conforming to IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 2000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
<b>Mechanical durability</b>	15 Mcycles
<b>Electrical durability</b>	1.4 Mcycles 40 A AC-1 at $U_e \leq 440$ V
<b>Control circuit type</b>	AC at 50/60 Hz
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 $U_c$ (-40...60 °C): drop-out AC 50/60 Hz 0.8...1.1 $U_c$ (-40...60 °C): operational AC 50 Hz 0.85...1.1 $U_c$ (-40...60 °C): operational AC 60 Hz
<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>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C
<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 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5...10 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5...10 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5...16 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 2.5...16 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Tightening torque</b>	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 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver flat Ø 6 mm Power circuit: 1.8 N.m - on screw clamps terminals - with screwdriver Philips No 2 Power circuit: 1.8 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
<b>Auxiliary contact composition</b>	1 NO + 1 NC
<b>Auxiliary contacts type</b>	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
<b>Signalling circuit frequency</b>	25...400 Hz
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Insulation resistance</b>	> 10 MΩ 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>Mounting support</b>	Rail Plate
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## Environment

<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 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ CSA C22.2 No 60947-4-1
<b>Product certifications</b>	UL CCC CSA Marine UKCA EAC CB Scheme
<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Climatic withstand</b>	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
<b>Permissible ambient air temperature around the device</b>	-40...60 °C 60...70 °C with derating
<b>Operating altitude</b>	0...3000 m
<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 closed (15 Gn for 11 ms) Shocks contactor open (8 Gn for 11 ms)
<b>Height</b>	91 mm
<b>Width</b>	45 mm
<b>Depth</b>	99 mm
<b>Net weight</b>	0.425 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.500 cm
<b>Package 1 Width</b>	9.500 cm
<b>Package 1 Length</b>	11.800 cm
<b>Package 1 Weight</b>	467.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	16
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm

<b>Package 2 Weight</b>	7.950 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	256
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	60.000 cm
<b>Package 3 Length</b>	80.000 cm
<b>Package 3 Weight</b>	136.176 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 >](#)

### Environmental footprint

Total lifecycle Carbon footprint	138
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Compliant
REACH Regulation	<a href="#">REACH Declaration</a>
PVC free	Yes

## Use Longer

### Lifetime extension

Repair	No
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## Use Again

### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
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

Offer Marketing Illustration

**Product benefits / Features**

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## Offer Marketing Illustration

## Product benefits / Features



**TeSys Deca Contactors**  
Technical Benefits

The graphic features a black Schneider Electric TeSys Deca Contactor with a green circular graphic to its left. The contactor has multiple terminals labeled 1A, 2A, 3A, 4A, 5A, 6A, 15 NO, 20 NO, 16 NC, 22 NC, and 17 NC. The Schneider Electric logo is visible on the top right of the contactor. To the right of the contactor, there are six green vertical bars, each containing a benefit statement.

- Deca green delivers a consistent low consumption range of contactors from 9 A to 80 A.
- Covers control voltage from 24 to 250 V, with same coils for AC and DC.
- Designed to meet the requirements of industrial and HVAC applications
- With IEC60335-1 compliance, improved fire resistance, and dust-proof auxiliaries
- Suitable for safety applications thanks to mechanically linked contacts and mirror contacts
- Outstanding breaking/making capacity up to 20 In with PLC direct connection

## Offer Marketing Illustration

## Product benefits / Features

## TeSys Deca

### Contactors

#### Reliable



Multi-standard solutions, high reliability, long mechanical and electrical durability for different sizes, and the most complete accessories.

#### Energy efficiency



These electronic-coil contactors require up to 80 % less energy than electro-mechanical contactors.

#### Universal

Multi standards certified (IEC, UL, CSA, CCC, EAC, Marine), Green Premium compliant (RoHS/REACH).



Image of product / Alternate images

Alternative

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## Technical Illustration

## Assembly's dimensions

