

Product data sheet

Specifications



Contactor, TeSys Deca, railway
S207, 3P(3NO),AC-3/AC-3e 65A,
≤440V, 110V DC wide voltage
range coil

LC1D656FWS207

Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: ≤ 1000 V AC 25...400 Hz
[Ie] rated operational current	80 A (at ≤60 °C) at 440 V AC AC-1 for power circuit 65 A (at ≤60 °C) at 440 V AC AC-3 for power circuit 65 A (at ≤60 °C) at 440 V AC AC-3e for power circuit

Complementary

Motor power kW	18.5 kW at 220/230 V AC 50 Hz (AC-3) 30 kW at 380/400 V AC 50 Hz (AC-3) 37 kW at 415 V AC 50 Hz (AC-3) 37 kW at 440 V AC 50 Hz (AC-3) 37 kW at 500 V AC 50 Hz (AC-3) 37 kW at 660/690 V AC 50 Hz (AC-3) 37 kW at 1000 V AC 50 Hz (AC-3) 18.5 kW at 220/230 V AC 50 Hz (AC-3e) 30 kW at 380/400 V AC 50 Hz (AC-3e) 37 kW at 415 V AC 50 Hz (AC-3e) 37 kW at 440 V AC 50 Hz (AC-3e) 37 kW at 500 V AC 50 Hz (AC-3e) 37 kW at 660/690 V AC 50 Hz (AC-3e) 37 kW at 1000 V AC 50 Hz (AC-3e)
Pole contact composition	3 NO
Protective cover	With
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Auxiliary contact composition	1 NO + 1 NC
[Ui] rated insulation voltage	Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	80 A (at 60 °C) for power circuit 10 A (at 60 °C) for control circuit

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

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 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Time constant	65 ms
Control circuit type	DC wide range
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.1...0.3 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...50 °C):operational DC 1...1.25 Uc (50...70 °C):operational DC
Average impedance	1.5 mOhm - lth 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1 3.7 W AC-3 3.7 W AC-3e
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
Operating time	20...35 ms opening 85...110 ms closing
Maximum operating rate	3600 cyc/h 60 °C
Inrush power in W	22 W (at 20 °C)
Hold-in power consumption in W	22 W at 20 °C
Insulation resistance	> 10 MOhm for signalling circuit
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 8 mm Power circuit: lugs-ring terminals - external diameter: 16 mm
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M6 Power circuit: 2.5 N.m - on lugs-ring terminals - with screwdriver Philips No 3 M6
Mounting support	Rail Plate
Electrical durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 50 A AC-3 at Ue <= 440 V 1.45 Mcycles 50 A AC-3e at Ue <= 440 V
Mechanical durability	20 Mcycles
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Operating altitude	0...3000 m
Compatibility code	LC1D
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 EN 45545: R22 HL3 EN 45545: R26 HL3 DIN 5510-2
Product certifications	IEC CCC UKCA

Environment

Climatic withstand	conforming to IACS E10 conforming to IEC 60947-1 Annex Q category D
Ambient air temperature for storage	-60...80 °C
Fire resistance	850 °C conforming to IEC 60695-2-1
Height	127 mm
Width	75 mm
Depth	176 mm
Product weight	2.185 kg
Mechanical robustness	Vibrations contactor open (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz) Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	12.7 cm
Package 1 Width	7.5 cm
Package 1 Length	17.1 cm
Package 1 Weight	2.19 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 >](#)



Environmental footprint

Total lifecycle Carbon footprint	94 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	13 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	4 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	71 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	5 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	Ec55be43-4a3d-41ef-bba5-099a44e1b62b
EU RoHS Directive	Compliant
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	73
End of life manual availability	No need of specific recycling operations
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

TeSys Deca Contactors

Technical Benefits



The image shows a TeSys Deca Contactor, a black industrial electrical component with a green label. The label features the 'TeSys' and 'Schneider Electric' logos, along with the word 'Control'. The device has multiple terminals on top and bottom, labeled with numbers and letters such as 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100. The device is shown against a green circular background.

- 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



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).

