

# Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <= 440V, 40A, coil 110V AC

LC2D40F7

! Discontinued on: 1 Nov 2020

## (!) Discontinued

# Main

Iviaiii		
Range	TeSys	
product name	TeSys Deca	
Product or component type	Reversing contactor	
Device short name	LC2D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-1 AC-3	
Device presentation	Preassembled with reversing power busbar	
Poles description	3P	
power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25400 Hz	
[le] rated operational current	40 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 60 A (at <40 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	18.5 kW at 380400 V AC 50 Hz 11 kW at 220230 V AC 50 Hz 22 kW at 500 V AC 50 Hz 30 kW at 660690 V AC 50 Hz 22 kW at 440 V AC 50 Hz 22 kW at 415 V AC 50 Hz	
motor power HP (UL / CSA)	10 hp at 200/208 V AC 60 Hz for 3 phases motors 3 hp at 115 V AC 60 Hz for 1 phase motors 30 hp at 575600 V AC 60 Hz for 3 phases motors 30 hp at 460480 V AC 60 Hz for 3 phases motors 10 hp at 220240 V AC 60 Hz for 3 phases motors 5 hp at 230240 V AC 60 Hz for 1 phase motors	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	110 V AC 50/60 Hz	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947	
Overvoltage category	III	
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling 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 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947-4	
Rated breaking capacity	800 A at 220/415/440 V for power circuit conforming to IEC 60947 800 A at 500 V for power circuit conforming to IEC 60947 400 A at 690 V for power circuit conforming to IEC 60947	

[lcw] rated short-time withstand	100 A - 1 s for signalling circuit
current	120 A - 500 ms for signalling circuit
	140 A - 100 ms for signalling circuit
	320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit
	72 A 40 °C - 10 min for power circuit
	165 A 40 °C - 1 min for power circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
[Ui] rated insulation voltage	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
	Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical durability	1.5 Mcycles 40 A AC-3 at Ue <= 440 V 1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	2.4 W AC-3
	5.4 W AC-1
Front cover	With
Interlocking type	Mechanical
Mounting support	Plate
	Rail
Standards	CSA C22.2 No 14
	EN 60947-4-1
	EN 60947-5-1
	IEC 60947-4-1 IEC 60947-5-1
	UL 508
Product certifications	BV
	CCC
	CSA
	DNV GL
	RINA
	UL
	EAC
	UKCA
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: screw clamp terminals 1 cable(s) 2.525 mm²flexible without cable
	end Power circuit: screw clamp terminals 2 cable(s) 2.516 mm²flexible without cable
	end
	Power circuit: screw clamp terminals 1 cable(s) 2.525 mm²flexible with cable end
	Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²flexible with cable end
	Power circuit: screw clamp terminals 1 cable(s) 2.525 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 2.516 mm²solid without cable end
Tightening torque	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: 6 N.m - on screw clamp terminals - with screwdriver flat Ø 8 mm Power circuit: 6 N.m - on screw clamp terminals
Operating time	2026 ms closing 812 ms opening
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
Mechanical durability	16000000 cycles
Maximum operating rate	3600 cyc/h 55 °C

# Complementary

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Coil technology	Built-in bidirectional peak limiting diode suppressor	
Control circuit voltage limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4055 °C):operational AC 50 Hz 0.851.1 Uc (-4055 °C):operational AC 60 Hz 11.1 Uc (5570 °C):operational AC 50/60 Hz	
Inrush power in VA	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)	
Heat dissipation	610 W at 50/60 Hz	
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	
Signalling circuit frequency	25400 Hz	
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	
Insulation resistance	> 10 MOhm for signalling circuit	

# **Environment**

IP degree of protection	IP20 front face conforming to IEC 60529	
Climatic withstand	conforming to IACS E10	
Protective treatment	TH conforming to IEC 60068-2-30	
pollution degree	3	
Ambient air temperature for operation	-4060 °C 6070 °C with derating	
Ambient air temperature for storage	-6080 °C	
Operating altitude	03000 m	
Fire resistance	960 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Shocks contactor closed: 10 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms Vibrations contactor closed: 3 Gn, 5300 Hz	
Height	127 mm	
Width	165 mm	
Depth	142 mm	
Net weight	2.4 kg	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	19.000 cm
Package 1 Width	19.000 cm
Package 1 Length	25.500 cm
Package 1 Weight	3.260 kg
Unit Type of Package 2	S03

Number of Units in Package 2	2
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.935 kg



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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	101
Environmental Disclosure	Product Environmental Profile

### **Use Better**

Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration
PVC free	Yes

# **Use Again**

○ Repack and remanufacture	
Circularity Profile	No need of specific recycling operations
Take-back	No
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins