Product datasheet

Specifications

, Green Premium™



REVERSING CONTACTOR 575VAC 40A IEC

LC2DT40B7

() Discontinued on: 30 Sept 2020

① Discontinued

Main

Mann	
Range	TeSys
Product name	TeSys Deca
product or component type	Changeover contactor
Device short name	LC2D
contactor application	Resistive load
Utilisation category	AC-1
	AC-3
	AC-3e
	AC-4
device presentation	Preassembled with reversing power busbar
poles description	4P
power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal	10 A (at 60 °C) for signalling circuit
current	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	50 A 40 °C - 10 min for power circuit
current	120 A 40 °C - 1 min for power circuit
	240 A 40 °C - 10 s for power circuit
	380 A 40 °C - 1 s 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

[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
Electrical durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power dissipation per pole	3.2 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
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible without cable end
	Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible without cable end
	Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible 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 mm ² solid without cable end
	Control circuit: screw clamp terminals 2 cable(s) 14 mm ² solid without cable end
	Power circuit: connector 1 cable(s) 2.510 mm ² flexible without cable end
	Power circuit: connector 2 cable(s) 2.510 mm ² flexible without cable end
	Power circuit: connector 1 cable(s) 2.510 mm ² flexible with cable end
	Power circuit: connector 2 cable(s) 2.510 mm ² flexible with cable end
	Power circuit: connector 1 cable(s) 2.516 mm ² solid without cable end
	Power circuit: connector 2 cable(s) 2.516 mm ² solid 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: 1.7 N.m - on connector - with screwdriver flat Ø 6 mm
	Power circuit: 1.7 N.m - on connector - with screwdriver Philips No 2
Operating time	1222 ms closing
	419 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	15 Mcycles
Maximum operating rate	3600 cyc/h 60 °C
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Complementary

Coil technology	Without built-in suppressor module
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	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA (at 20 °C) cos phi 0.3 60 Hz 7 VA (at 20 °C) cos phi 0.3 50 Hz
Heat dissipation	23 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 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 operation	-4060 °C 6070 °C with derating	
Ambient air temperature for storage	-6080 °C	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms	
Height	91 mm	
Width	90 mm	
Depth	98 mm	
net weight	0.85 kg	

Packing Units

-	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.48 cm
Package 1 Width	9 cm
Package 1 Length	9.25 cm
Package 1 Weight	870 g

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >



Transparency RoHS/REACh

Well-being performance

Reach Free Of Svhc
Toxic Heavy Metal Free
Mercury Free
Rohs Exemption Information Yes
Pvc Free

Certifications & Standards

Eu Rohs Directive	Compliant
	EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information