# **Product datasheet**

Specification





# TeSys D reversing contactor - 3P - <= 440 V - 50 A AC-3 - 48...130 V AC/DC coil

Local distributor code: 407812150

LC2D50AEHE

EAN Code: 3606480988127

#### Main

Range	TeSys
ū	TeSys Deca
	, 
Product Name	Tesys Deca green
	TeSys Deca
Product Or Component Type	Reversing contactor
	Neversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load
	Motor control
Utilisation Category	AC-1
0 3	AC-3
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
- Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: 690 V AC 25400 Hz
[le] Rated Operational Current	E0 A (at <60 °C) at <= 440 \/ AC 2 for power sirquit
[le] Nated Operational Current	50 A (at <60 °C) at <= 440 V AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC-1 for power circuit
	oo A (at 100 O) at 1- 440 V AO-1 for power circuit
Motor Power Kw	15 kW at 220230 V AC 50 Hz
	22 kW at 380400 V AC 50 Hz
	25 kW at 415 V AC 50 Hz
	30 kW at 440 V AC 50 Hz
	30 kW at 500 V AC 50 Hz
	33 kW at 660690 V AC 50 Hz
Motor Power Hp (UI / Csa)	3 hp at 115 V AC 60 Hz for 1 phase motors
	7.5 hp at 230/240 V AC 60 Hz for 1 phase motors
	15 hp at 200/208 V AC 60 Hz for 3 phases motors
	15 hp at 230/240 V AC 60 Hz for 3 phases motors
	40 hp at 460/480 V AC 60 Hz for 3 phases motors
	40 hp at 575/600 V AC 60 Hz for 3 phases motors
<del></del>	
Control Circuit Type	AC at 50/60 Hz AC/DC electronic
	DC AC/DC electronic
[Uc] Control Circuit Voltage	48130 V AC 50/60 Hz
[50] control chould voltage	48130 V DC
	40100 V DO
<b>Auxiliary Contact Composition</b>	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	80 A (at 60 °C) for power circuit
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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
	900 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	900 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 440 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 A 40 °C - 1 min for power circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1
Electrical Durability	1.8 Mcycles 42 A AC-3 at Ue <= 440 V 0.5 Mcycles 80 A AC-1 at Ue <= 440 V
Power Dissipation Per Pole	3.7 W AC-3 9.6 W AC-1
Front Cover	With
Interlocking Type	Mechanical
Mounting Support	Rail Plate
Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 CSA C22.2 No 60947-4-1 IEC 60335-1
Product Certifications	CCC CSA EAC UL KC DNV-GL LROS (Lloyds register of shipping) 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 Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm²flexible without cable end Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 135 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 135 mm²flexible with cable end Power circuit: EverLink BTR screw connectors 2 cable(s) 135 mm²flexible with 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: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm² hexagonal screw head 4 mm
Operating Time	5565 ms closing 20120 ms opening (date code >= 17221) 2080 ms opening (date code >= 18011)
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	6 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

## Complementary

Coil Technology	Built-in bidirectional peak limiting	
Control Circuit Voltage Limits	<= 0.1 Uc (-4070 °C):drop-out AC/DC 0.851.1 Uc (-4060 °C):operational AC/DC 11.1 Uc (6070 °C):operational AC/DC	
Inrush Power In Va	23 VA 50/60 Hz (at 20 °C)	
Inrush Power In W	19 W at 20 °C	
Hold-In Power Consumption In Va	1.4 VA (at 20 °C) 50/60 Hz	
Hold-In Power Consumption In W	0.9 W at 20 °C	
Heat Dissipation	0.9 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	ne 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms	
Height	122 mm	
Width	119 mm	
Depth	120 mm	
Net Weight	2.164 kg	
Colour	Grey (SE GREY 6) Green (SE GREEN 2)	

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	14.0 cm

Package 1 Width	16.2 cm
Package 1 Length	19.8 cm
Package 1 Weight	2.281 kg
Unit Type Of Package 2	S03
Number Of Units In Package 2	4
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	10.003 kg

# **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

### Well-being performance

<b>Ø</b>	Mercury Free	
	Rohs Exemption Information	Yes
	Halogen Free Plastic Parts & Cables Product	

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration  Product out of China RoHS scope. Substance declaration for your information
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