

# LC2D115P7

Reversing Contactor, TeSys Deca, 3P(3NO),  
AC-3, <=440V 115A, 230V AC 50/60Hz coil,  
screw clamp terminals





## Main

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 AC-3e
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: $\leq 1000$ V AC 25...400 Hz Power circuit: $\leq 300$ V DC
[Ie] rated operational current	200 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-1 for power circuit 115 A (at $\leq 60$ °C) at $\leq 440$ V AC AC-3 for power circuit
Motor power kW	30 kW at 220...230 V AC 50...60 Hz 55 kW at 380...400 V AC 50...60 Hz 59 kW at 415 V AC 50...60 Hz 59 kW at 440 V AC 50...60 Hz 75 kW at 500 V AC 50...60 Hz 80 kW at 660...690 V AC 50...60 Hz 65 kW at 1000 V AC 50...60 Hz
Motor power HP (UL / CSA)	30 Hp at 200/208 V AC 60 Hz for 3 phases motors 40 Hp at 230/240 V AC 60 Hz for 3 phases motors 75 Hp at 460/480 V AC 60 Hz for 3 phases motors 100 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	230 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	200 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 1260 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	250 A 40 °C - 10 min for power circuit 550 A 40 °C - 1 min for power circuit 950 A 40 °C - 10 s for power circuit 1100 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 60947-5-1 250 A gG at $\leq 690$ V coordination type 1 for power circuit 200 A gG at $\leq 690$ V coordination type 2 for power circuit
Average impedance	0.6 mOhm - Ith 200 A 50 Hz for power circuit

[U <sub>i</sub> ] 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	0.8 Mcycles 200 A AC-1 at U <sub>e</sub> ≤ 440 V 0.95 Mcycles 115 A AC-3 at U <sub>e</sub> ≤ 440 V 0.95 Mcycles 115 A AC-3e at U <sub>e</sub> ≤ 440 V
Power dissipation per pole	24 W AC-1 7.9 W AC-3 7.9 W AC-3e
Front cover	With
Interlocking type	Mechanical Electrical
Mounting support	Rail Plate
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[RETURN]CCC[RETURN]CSA[RETURN]DNV[RETURN]GL[RE
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1... 2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1... 2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1... 2.5 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm <sup>2</sup> solid without cable end Power circuit: connector 1 cable(s) 10... 120 mm <sup>2</sup> flexible without cable end Power circuit: connector 2 cable(s) 10... 50 mm <sup>2</sup> flexible without cable end Power circuit: connector 1 cable(s) 10... 120 mm <sup>2</sup> flexible with cable end Power circuit: connector 2 cable(s) 10... 50 mm <sup>2</sup> flexible with cable end Power circuit: connector 1 cable(s) 10... 120 mm <sup>2</sup> solid without cable end Power circuit: connector 2 cable(s) 10...50 mm <sup>2</sup> solid without cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Operating time	20...50 ms closing 6...20 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	8000000 cycles
Maximum operating rate	2400 cyc/h 60 °C

## Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.3...0.5 U <sub>c</sub> (55 °C):drop-out AC 50/60 Hz 0.8...1.15 U <sub>c</sub> (55 °C):operational AC 50/60 Hz
Inrush power in VA	280...350 VA 60 Hz cos phi 0.8 (at 20 °C) 280...350 VA 50 Hz cos phi 0.8 (at 20 °C)
Hold-in power consumption in VA	2...18 VA (at 20 °C) cos phi 0.3 60 Hz 2...18 VA (at 20 °C) cos phi 0.3 50 Hz
Heat dissipation	3...8 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	25...400 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	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
Operating altitude	0...3000 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, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 6 Gn for 11 ms
Height	158 mm
Width	266 mm
Depth	148 mm
Net weight	6.35 kg

## Packing Units

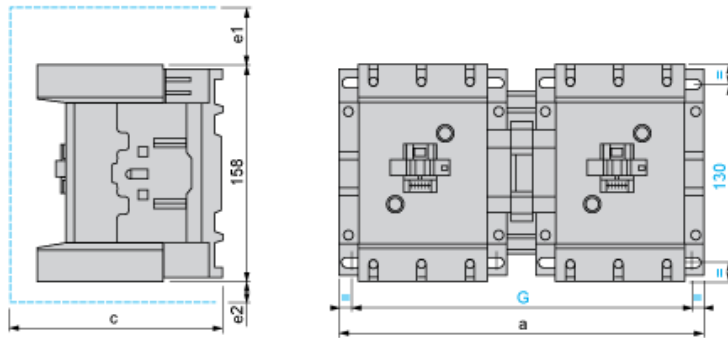
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	23 cm
Package 1 Width	31.5 cm
Package 1 Length	37.5 cm
Package 1 Weight	7.103 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
<b>Contractual warranty</b>	
Warranty	18 months

Dimensions



LC2 or 2 x LC1	a	c	e1	e2	G
D115 and D150	266	148	56	18	242/256
c, e1 and e2: including cabling.					

Wiring

