# Product data sheet Characteristics

## LC2D115BD

reversing contactor, TeSys Deca, 3P(3NO), AC-3, <=440V 115A, 24V DC coil





#### Main

Range	TeSys
Product name	TeSys D 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
Pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 115 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	30 KW at 220230 V AC 50 Hz 55 KW at 380400 V AC 50 Hz 59 KW at 415440 V AC 50 Hz 75 KW at 500 V AC 50 Hz 80 KW at 660690 V AC 50 Hz 65 KW at 1000 V AC 50 Hz
Motor power hp	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	DC standard
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 KV conforming to IEC 60947
Overvoltage category	III
[lth] 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

[lcw] rated short-time withstand current	250 A 40 °C - 10 min for power circuit
icwi rateu short-time withstand current	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 <= 690 V coordination type 1 for power circuit
	200 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.6 MOhm - Ith 200 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
Electrical description	Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical durability	0.8 Mcycles 200 A AC-1 at Ue <= 440 V 0.95 Mcycles 115 A AC-3 at Ue <= 440 V
Power dissipation per pole	24 W AC-1
	7.9 W AC-3
Protective cover	With
Interlocking type	Electrical Mechanical
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 CCC
	CSA
	DNV
	GL RINA
	UL
	EAC
	UKCA
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end
	Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible without ca-
	ble end
	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible without ca- ble end
	Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible with ca-
	ble end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²solid without ca-
	ble end
	Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²solid without cable end
	Power circuit: connector 1 cable(s) 10120 mm²flexible without cable end
	Power circuit: connector 2 cable(s) 1050 mm²flexible without cable end
	Power circuit: connector 1 cable(s) 10120 mm²flexible with cable end
	Power circuit: connector 2 cable(s) 1050 mm²flexible with cable end Power circuit: connector 1 cable(s) 10120 mm²solid without cable end
	Power circuit: connector 2 cable(s) 1050 mm²solid 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: 12 N.m - on connector nexagonal screw nead 4 mm  Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver-
	pozidriv No 2
Operating time	2035 ms closing 4075 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming-
Carety reliability 10461	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	1200 Cyc/H 60 °C



Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.150.4 Uc (-4070 °C):drop-out DC 0.751.2 Uc (-4055 °C):operational DC 11.2 Uc (5570 °C):operational DC
Time constant	25 Ms
Inrush power in W	270365 W at 20 °C
Hold-in power consumption in W	2.45.1 W at 20 °C
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	<ul><li>1.5 Ms on de-energisation between NC and NO contact</li><li>1.5 Ms on energisation between NC and NO contact</li></ul>
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	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: 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 Weight	6.5 Kg	
Package 1 Height	23.0 Cm	
Package 1 Width	31.5 Cm	
Package 1 Length	37.0 Cm	

#### Offer Sustainability

Office Odstallidability		
Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Compliant EPEU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	€Yes	
China RoHS Regulation	China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End Of Life Information	



WEEE	The product must be disposed on European Union markets following speci- fic waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

### Contractual warranty

Warranty	18 months
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Product Life Status : Commercialised

