# LC1D093B7

Contactor, TeSys Deca, 3P(3 NO), AC-3/AC-3e, 0 to 440V, 9A, 24VAC 50/60Hz coil, spring





#### Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-3 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 20 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	24 V AC 50/60 Hz

#### Complementary

Motor power kW	2.2 KW at 220230 V AC 50/60 Hz (AC-3)	
Motor power RVV	4 KW at 380400 V AC 50/60 Hz (AC-3)	
	4 KW at 415440 V AC 50/60 Hz (AC-3)	
	5.5 KW at 500 V AC 50/60 Hz (AC-3)	
	5.5 KW at 660690 V AC 50/60 Hz (AC-3)	
	2.2 KW at 400 V AC 50/60 Hz (AC-4)	
	2.2 KW at 220230 V AC 50/60 Hz (AC-3e)	
	4 KW at 380400 V AC 50/60 Hz (AC-3e)	
	4 KW at 415440 V AC 50/60 Hz (AC-3e)	
	5.5 KW at 500 V AC 50/60 Hz (AC-3e)	
	5.5 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor power hp	1 Hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	2 Hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	2 Hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	5 Hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	7.5 Hp at 575/600 V AC 50/60 Hz for 3 phases motors	
	0.33 hp at 115 V AC 50/60 Hz for 1 phase motors	
Compatibility code	LC1D	
Pole contact composition	3 NO	
Contact compatibility	M2	
Protective cover	With	
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit	
	16 A (at 60 °C) for power circuit	
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947	
	140 A AC for signalling circuit conforming to IEC 60947-5-1	
	250 A DC for signalling circuit conforming to IEC 60947-5-1	
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947	

[lcw] rated short-time withstand current	105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit
	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min 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
Associated fuse fatting	25 A gG at <= 690 V coordination type 1 for power circuit
	20 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2.5 mOhm - Ith 16 A 50 Hz for power circuit
Power dissipation per pole	1.56 W AC-1 0.2 W AC-3
	0.2 W AC-3 0.2 W AC-3e
[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
Overvoltage category	
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
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
Electrical durability	0.6 Mcycles 25 A AC-1 at Ue <= 440 V 2 Mcycles 9 A AC-3 at Ue <= 440 V
	2 Mcycles 9 A AC-3 at Ue <= 440 V
Control circuit type	AC at 50/60 Hz
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 (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz
	11.1 Uc (6070 °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 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	23 W at 50/60 Hz
Operating time	1222 ms closing
	419 ms opening
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Power circuit: spring terminals 1 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Power circuit: spring terminals 2 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable
	end Control circuit: caring terminals 1.2.5 mm², cable stiffness; flevible without cable
	Control circuit: spring terminals 1 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
	Control circuit: spring terminals 2 2.5 mm <sup>2</sup> - cable stiffness: flexible without cable end
Auxiliary contact composition	1 NO + 1 NC
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 voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm 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
Mounting support	Rail
	Plate

### Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1
	IEC 60947-5-1 UL 508 IEC 60335-1
Product certifications	UL CSA GOST RINA BV CCC DNV GL LROS (Lloyds register of shipping) UKCA
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	Conforming to IACS E10 exposure to damp heat Conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-4060 °C 6070 °C with derating
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	80 mm
Width	45 mm
Depth	86 mm
Net weight	0.32 kg

#### Packing Units

Packing Units	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.500 cm
Package 1 Width	10.300 cm
Package 1 Length	10.500 cm
Package 1 Weight	388.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	6.393 kg
Unit Type of Package 3	P06
Number of Units in Package 3	120
Package 3 Height	45.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	52.000 kg

## Offer Sustainability

Contractual warranty

Warranty

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EPEU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	☑ China RoHS Declaration
RoHS exemption information	₫Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

18 months