

Contactor, TeSys Deca Advanced, 3P(3NO), AC-3/3e, <=440V, 18A, 24...60V AC/DC coil, screw clamp terminals

LC1D18BNE

### Main

Range of product	TeSys Deca Advanced	
Product or component type	Contactor	
Device short name	LC1D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-1 AC-3 AC-3e	
Poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz	
[le] rated operational current	18 A (at <60 °C) at <= 440 V AC-3 for power circuit 32 A (at <60 °C) at <= 440 V AC-1 for power circuit 18 A (at <60 °C) at <= 440 V AC-3e for power circuit	
[Uc] control circuit voltage	2460 V AC 50/60 Hz 2460 V DC	

# Complementary

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Motor power kW	4 kW at 220230 V AC 50 Hz (AC-3)	
	7.5 kW at 380400 V AC 50 Hz (AC-3)	
	9 kW at 415 V AC 50 Hz (AC-3)	
	9 kW at 440 V AC 50 Hz (AC-3)	
	10 kW at 500 V AC 50 Hz (AC-3)	
	10 kW at 660690 V AC 50 Hz (AC-3)	
	4 kW at 220230 V AC 50 Hz (AC-3e)	
	7.5 kW at 380400 V AC 50 Hz (AC-3e)	
	9 kW at 415 V AC 50 Hz (AC-3e)	
	9 kW at 440 V AC 50 Hz (AC-3e)	
	10 kW at 500 V AC 50 Hz (AC-3e)	
	10 kW at 660690 V AC 50 Hz (AC-3e)	
Motor power hp	1 hp at 115 V AC 60 Hz for 1 phase motors	
	3 hp at 230/240 V AC 60 Hz for 1 phase motors	
	5 hp at 200/208 V AC 60 Hz for 3 phases motors	
	5 hp at 230/240 V AC 60 Hz for 3 phases motors	
	10 hp at 460/480 V AC 60 Hz for 3 phases motors	
	15 hp at 575/600 V AC 60 Hz for 3 phases motors	
Compatibility code	LC1D	
Pole contact composition	3 NO	
Protective cover	With	
[Ith] conventional free air thermal	10 A (at 60 °C) for signalling circuit	
current	32 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	
	300 A at 440 V for power circuit conforming to IEC 60947	
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947	

[Icw] rated short-time withstand	100 A - 1 s for signalling circuit	
current	120 A - 500 ms for signalling circuit	
	140 A - 100 ms for signalling circuit	
	5 5	
	40 A 40 °C - 10 min for power circuit	
	84 A 40 °C - 1 min for power circuit	
	145 A 40 °C - 10 s for power circuit	
	240 A 40 °C - 1 s for power circuit	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1	
-	50 A gG at <= 690 V coordination type 1 for power circuit	
	35 A gG at <= 690 V coordination type 2 for power circuit	
Average impedance	2.5 mOhm - Ith 32 A 50 Hz for power circuit	
Power dissipation per pole	2.5 W AC-1	
,	0.8 W AC-3	
	0.8 W AC-3e	
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1	
	Signalling circuit: 690 V conforming to IEC 60947-1	
Overvoltage category	III	
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	
carety remaining rever	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO	
	13849-1	
	13043-1	
Mechanical durability	15 Mcycles	
Electrical durability	2.2 Mcycles 15 A AC-3 at Ue <= 440 V	
	0.9 Mcycles 32 A AC-1 at Ue <= 440 V	
	2.2 Mcycles 15 A AC-3e at Ue <= 440 V	
Control circuit type	AC/DC at 50/60 Hz AC/DC electronic	
Coil technology	Built-in bidirectional peak limiting	
	Sant in Standard Pour Inning	
Control circuit voltage limits	<= 0.1 Uc (-4070 °C):drop-out AC/DC	
	0.851.1 Uc (-4060 °C):operational AC	
	0.81.1 Uc (-4060 °C):operational DC	
	11.1 Uc (6070 °C):operational AC/DC	
Inrush power in VA	15 VA 50/60 Hz (at 20 °C)	
Inrush power in W	14 W (at 20 °C)	
Hold-in power consumption in VA	0.9 VA 50/60 Hz (at 20 °C)	
Hold-in power consumption in W	0.6 W at 20 °C	
Heat dissipation	0.6 W at 50/60 Hz	
Operating time	4555 ms closing	
	2090 ms opening	
Maximum operating rate	3600 cyc/h at 60 °C	

Connections - terminals	Control circuit: screw clamp terminals 1 14 mm <sup>2</sup> - cable stiffness: flexible without cable end	
	Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end	
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end	
	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid	
	Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: flexible without	
	cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without	
	cable end Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable	
	end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable	
	end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: solid	
	Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid	
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 screw clamp terminals - with screwdriver flat Ø 6 mm	
	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2	
	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2	
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	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	
IP degree of protection	IP20 front face conforming to IEC 60529	
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	40_60°C	
temperature around the device	-4060 °C 6070 °C with derating	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	

V1 conforming to UL 94

Flame retardance

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	77 mm	
Width	45 mm	
Depth	86 mm	
Product weight	0.378 ka	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.200 cm
Package 1 Width	9.200 cm
Package 1 Length	11.200 cm
Package 1 Weight	397.000 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	6.232 kg

# **Contractual warranty**

Warranty 18 months



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

#### Environmental Data explained >

How we assess product sustainability >

∇ Environmental footprint	
Total lifecycle Carbon footprint	11
Environmental Disclosure	Product Environmental Profile

#### **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant with Exemptions
SCIP Number	7d699774-c34b-4bf4-9ecb-388a149eefdd
REACh Regulation	REACh Declaration
Halogen-free status	Halogen free plastic parts & cables product

#### **Use Again**

○ Repack and remanufacture	
End of life manual availability	End of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

# Product data sheet

# LC1D18BNE

Image of product / Alternate images

**Alternative** 







# LC1D18BNE

**Technical Illustration** 

#### Assembly's dimensions



