

Contactor, TeSys Deca, 3P(3NO), AC-3/3e, <=440V, 25A, 230V AC 50/60Hz coil, snap-in terminals

LC1D25AP7

# Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	25 A (at <60 °C) at <= 440 V AC-3 for power circuit 25 A (at <60 °C) at <= 440 V AC-3e for power circuit 40 A (at <60 °C) at <= 440 V AC-1 for power circuit
[Uc] control circuit voltage	230 V AC 50/60 Hz

# **Complementary**

Motor power kW	5.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	11 kW at 380400 V AC 50/60 Hz (AC-3)	
	11 kW at 415440 V AC 50/60 Hz (AC-3)	
	15 kW at 500 V AC 50/60 Hz (AC-3)	
	15 kW at 660690 V AC 50/60 Hz (AC-3)	
	5.5 kW at 400 V AC 50/60 Hz (AC-4)	
	5.5 kW at 220230 V AC 50/60 Hz (AC-3e)	
	11 kW at 380400 V AC 50/60 Hz (AC-3e)	
	11 kW at 415440 V AC 50/60 Hz (AC-3e)	
	15 kW at 500 V AC 50/60 Hz (AC-3e)	
	15 kW at 660690 V AC 50/60 Hz (AC-3e)	
Compatibility code	LC1D	
Pole contact composition	3 NO	
Protective cover	With	
[Ith] conventional free air thermal	40 A (at 60 °C) for power circuit	
current	10 A (at 60 °C) for signalling circuit	
Irms rated making capacity	450 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	450 A at 440 V for power circuit conforming to IEC 60947	

[lcw] rated short-time withstand	240 A 40 °C - 10 s for power circuit	
current	380 A 40 °C - 1 s for power circuit	
	50 A 40 °C - 10 min for power circuit	
	120 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	
	140 / 100 ms for signaling official	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1	
	63 A gG at <= 690 V coordination type 1 for power circuit	
	40 A gG at <= 690 V coordination type 2 for power circuit	
A		
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit	
Power dissipation per pole	1.25 W AC-3	
	1.25 W AC-3e	
	3.2 W AC-1	
[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	
	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO	
	13849-1	
Mechanical durability	15 Mcycles	
Electrical durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V	
,	1.65 Mcycles 25 A AC-3 at Ue <= 440 V	
	1.65 Mcycles 25 A AC-3e at Ue <= 440 V	
	1.00 Micycles 20 A A0-0e at 0e 1- 440 V	
Control circuit type	AC at 50/60 Hz standard	
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)	
Uald in mannan agreementier to the	751/4.001/	
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 at 60 °C	
	0000 GyG/11 at 00 ° C	

Connections - terminals	Control circuit: snap-in terminal 1 0.54 mm² - cable stiffness: flexible without cable	
	end	
	Control circuit: snap-in terminal 2 0.54 mm² - cable stiffness: flexible without cable	
	end Control circuit: snap-in terminal 1 0.52.5 mm² - cable stiffness: flexible with cable	
	end Control circuit: snap-in terminal 2 0.52.5 mm² - cable stiffness: flexible with cable end	
	Control circuit: snap-in terminal 1 0.52.5 mm² - cable stiffness: solid without cable end	
	Control circuit: snap-in terminal 2 0.52.5 mm² - cable stiffness: solid without cable end	
	Power circuit: snap-in terminal 1 0.756 mm² - cable stiffness: flexible without cable end	
	Power circuit: snap-in terminal 2 0.756 mm² - cable stiffness: flexible without cable end	
	Power circuit: snap-in terminal 1 0.754 mm <sup>2</sup> - cable stiffness: flexible with cable end	
	Power circuit: snap-in terminal 2 0.754 mm² - cable stiffness: flexible with cable end	
	Power circuit: snap-in terminal 1 0.754 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: snap-in terminal 2 0.754 mm <sup>2</sup> - cable stiffness: solid 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	Plate Rail	
Environment		
Standards	EN 60947-4-1	
	EN 60947-5-1	
	IEC 60947-4-1	
	IEC 60947-5-1 IEC 60335-1:Clause 30.2	
	IEC 60335-2-40:Annex JJ	
Product certifications	CB Scheme	
Product certifications	CB Scheme CCC	

Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ	
Product certifications	CB Scheme CCC	
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	
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 (8 Gn for 11 ms)	
Height	110 mm	
Width	45 mm	

Depth	92 mm	
Product weight	454 a	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5 cm
Package 1 Width	10.5 cm
Package 1 Length	11.5 cm
Package 1 Weight	474 g
Unit Type of Package 2	S02
Number of Units in Package 2	15
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.425 kg
Unit Type of Package 3	P06
Number of Units in Package 3	240
Package 3 Height	75 cm
Package 3 Width	60 cm
Package 3 Length	80 cm
Package 3 Weight	127.3 kg



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	
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	126
Environmental Disclosure	Product Environmental Profile

## **Use Better**

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Compliant
REACh Regulation	REACh Declaration
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

### **Use Again**

○ Repack and remanufacture	
Circularity Profile	End of Life Information
Take-back	No

# **Technical Illustration**

# Assembly's dimensions



