## Product data sheet Characteristics

# LC1D115Q7





#### Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3
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 50/60 Hz (AC-3) 55 KW at 380400 V AC 50/60 Hz (AC-3) 59 KW at 415440 V AC 50/60 Hz (AC-3) 75 KW at 500 V AC 50/60 Hz (AC-3) 80 KW at 660690 V AC 50/60 Hz (AC-3) 65 KW at 1000 V AC 50/60 Hz (AC-3) 18.5 KW at 400 V AC 50/60 Hz (AC-4)
Motor power hp	30 Hp at 200/208 V AC 50/60 Hz for 3 phases motors 40 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 75 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 100 Hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	380 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	1260 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	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	250 A gG at <= 690 V coordination type 1 for power circuit 200 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling 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 Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified	
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	
Mounting support	Plate Rail	
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	LROS (Lloyds register of shipping) UL GL DNV CSA BV GOST RINA CCC	
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 with cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²solid without cable end Control circuit: screw clamp terminals 1 cable(s) 12.5 mm²solid without cable 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) 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 1 cable(s) 10120 mm²solid without cable end	
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat $\emptyset$ 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	
Operating time	620 ms opening 2050 ms closing	
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	8 Mcycles	
Maximum operating rate	2400 Cyc/H 60 °C	
Complementary		
Coil technology	Built-in bidirectional peak limiting diode suppressor	
Inrush power in VA	280350 VA 60 Hz cos phi 0.8 (at 20 °C)	

Coil technology	Built-in bidirectional peak limiting diode suppressor	
Inrush power in VA	280350 VA 60 Hz cos phi 0.8 (at 20 °C) 280350 VA 50 Hz cos phi 0.8 (at 20 °C)	
Hold-in power consumption in VA	218 VA 60 Hz cos phi 0.3 (at 20 °C) 218 VA 50 Hz cos phi 0.3 (at 20 °C)	
Heat dissipation	38 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	

25400 Hz	
5 MA for signalling circuit	
17 V for signalling circuit	
<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>	
> 10 MOhm for signalling circuit	
M13	
LC1D	
	5 MA for signalling circuit  17 V for signalling circuit  1.5 Ms on de-energisation between NC and NO contact 1.5 Ms on energisation between NC and NO contact > 10 MOhm for signalling circuit  M13

### Environment

IP degree of protection	IP20 front face conforming to IEC 60529	
Protective treatment	TH conforming to IEC 60068-2-30	
Pollution degree	3	
Ambient air temperature for storage	-6080 °C	
Operating altitude	3000 m without derating	
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	120 Mm	
Depth	136 Mm	
Net weight	2.5 Kg	

## Packing Units

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Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Weight	2.492 Kg	
Package 1 Height	19 Cm	
Package 1 width	17 Cm	
Package 1 Length	20.8 Cm	

## Offer Sustainability

Sustainable offer status	Green Premium product	
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 specific waste collection and never end up in rubbish bins	
PVC free	Yes	

## Contractual warranty

Warranty	18 months

Product Life Status:	Commercialised
Product the Status	Commercialised