Product datasheet

Specification





TeSys; TeSys Deca, Contactor, 3P(3 NO), AC-3/AC-3e, 0 to 440V, 65A, 380VAC 50/60Hz coil

LC1D65AQ7

Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
product or component type	Contactor
Device short name	LC1D
contactor application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-3 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	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	380 V AC 50/60 Hz

Complementary

Motor power kW	11 kW at 400 V AC 50/60 Hz (AC-4)	
	18.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	30 kW at 380400 V AC 50/60 Hz (AC-3)	
	37 kW at 500 V AC 50/60 Hz (AC-3)	
	37 kW at 660690 V AC 50/60 Hz (AC-3)	
	18.5 kW at 220230 V AC 50/60 Hz (AC-3e)	
	30 kW at 380400 V AC 50/60 Hz (AC-3e)	
	37 kW at 500 V AC 50/60 Hz (AC-3e)	
	37 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor power hp	40 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
	5 hp at 115 V AC 50/60 Hz for 1 phase motors	
	10 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	20 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	20 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	50 hp at 575/600 V AC 50/60 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	80 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	
	1000 A at 440 V for power circuit conforming to IEC 60947	

Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand	640 A 40 °C - 10 s for power circuit
current	900 A 40 °C - 1 s for power circuit
	110 A 40 °C - 10 min for power circuit
	260 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
	125 A gG at <= 690 V coordination type 1 for power circuit
	125 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1
	6.3 W AC-3
	6.3 W AC-3e
[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
	Power circuit: 690 V conforming to IEC 60947-4-1
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	6 Mcycles
Electrical durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V
	1.45 Mcycles 65 A AC-3 at Ue <= 440 V
	1.45 Mcycles 65 A AC-3e 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	140 VA 60 Hz cos phi 0.75 (at 20 °C)
	160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C)
	15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	45 W at 50/60 Hz
Operating time	419 ms opening
	1226 ms closing
Maximum operating rate	3600 cyc/h 60 °C

Connections - terminals	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: 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 1 14 mm² - cable stiffness: solid without
	cable end
	Control circuit: screw clamp terminals 2 14 mm ² - cable stiffness: solid without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm ² - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 2 125 mm ² - cable stiffness: flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: flexible
	with cable end Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: flexible
	with cable end Power circuit: EverLink BTR screw connectors 1 135 mm² - cable stiffness: solid
	without cable end Power circuit: EverLink BTR screw connectors 2 125 mm² - cable stiffness: solid
	without cable end
Tightening torque	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver flat Ø
	6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver
	Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm²
	hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm²
	hexagonal screw head 4 mm
	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2
	Power circuit: 2.5 N.m - on EverLink BTR screw connectors - 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	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	ccc
	UL
	CSA GOST
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 closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)	
Height	122 mm	
Width	55 mm	
Depth	120 mm	
net weight	0.86 kg	

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.400 cm
Package 1 Width	13.900 cm
Package 1 Length	15.500 cm
Package 1 Weight	908.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	9.365 kg

Contractual warranty

Warranty 18 months



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Transparency RoHS/REACh

Well-being performance

⊘	Reach Free Of Svhc
⊘	Toxic Heavy Metal Free
⊘	Mercury Free
⊘	Rohs Exemption Information Yes
⊘	Pvc Free

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information