Product data sheet
Characteristics

LC1D50A6U7
TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 240 V AC 50/60 Hz coil

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
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	50 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 80 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	15 KW 220...230 V AC 50/60 Hz AC-3) 22 KW 380...400 V AC 50/60 Hz AC-3) 30 KW 500 V AC 50/60 Hz AC-3) 33 KW 660...690 V AC 50/60 Hz AC-3) 25 KW 415 V AC 50/60 Hz AC-3) 30 KW 440 V AC 50/60 Hz AC-3) 11 kW 400 V AC 50/60 Hz AC-4)
Motor power HP (UL / CSA)	3 Hp 115 V AC 50/60 Hz 1 phase 7.5 Hp 230/240 V AC 50/60 Hz 1 phase 15 Hp 200/208 V AC 50/60 Hz 3 phase 15 Hp 230/240 V AC 50/60 Hz 3 phase 40 Hp 460/480 V AC 50/60 Hz 3 phase 40 hp 575/600 V AC 50/60 Hz 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	240 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 80 A 140 °F (60 °C) 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 60947-5-1 900 A 440 V power circuit IEC 60947
Rated breaking capacity	900 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	400 A 104 °F (40 °C) - 10 s power circuit 810 A 104 °F (40 °C) - 1 s power circuit 84 A 104 °F (40 °C) - 10 min power circuit 208 A 104 °F (40 °C) - 1 min 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 60947-5-1 100 A gG <= 690 V type 1 power circuit 100 A gG <= 690 V type 2 power circuit
Average impedance	1.5 mOhm - Ith 80 A 50 Hz power circuit
[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

Electrical durability	1.45 Mcycles 50 A AC-3 <= 440 V 1.1 Mcycles 80 A AC-1 <= 440 V
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1
Front cover	With
Mounting support	Rail Plate
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	UL LROS (Lloyds register of shipping) CCC CSA RINA GL BV DNV GOST
Connections - terminals	Control circuit: lugs-ring terminals (external diameter: 8 mm) Power circuit lugs-ring terminals 0.65 in (16.5 mm))
Tightening torque	Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver flat Ø 6 mm M3.5 Control circuit: 1.7 N.m - on lugs-ring terminals - with screwdriver Philips No 2 M3.5 Power circuit 53.10 lbf.in (6 N.m) lugs-ring terminals hexagonal 0.39 in (10 mm) M6
Operating time	4...19 ms opening 12...26 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	6 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc -40…158 °F (-40…70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40…140 °F (-40…60 °C) operational AC 50 Hz 0.85...1.1 Uc -40…140 °F (-40…60 °C) operational AC 60 Hz 1...1.1 Uc 140…158 °F (60…70 °C) operational AC 50/60 Hz
Inrush power in VA	140 VA 60 Hz 0.75 68 °F (20 °C)) 160 VA 50 Hz 0.75 68 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz 0.3 68 °F (20 °C)) 15 VA 50 Hz 0.3 68 °F (20 °C))
Heat dissipation	4…5 W 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
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm for signalling circuit
Contact compatibility	M2
Compatibility code	LC1D

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 operation	-40…60 °C 60…70 °C with derating
Ambient air temperature for storage	-76…176 °F (-60…80 °C)
Operating altitude	0...3000 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, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open10 Gn for 11 ms
Height	4.80 in (122 mm)
Maximum Width	2.17 in (55 mm)
Depth	4.72 in (120 mm)
Net Weight	1.88 lb(US) (0.855 kg)

Ordering and shipping details

Category	22357 - CTR,TESYS D,OPEN,40-65A AC
Discount Schedule	I12
GTIN	03389118327979
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	2.36 in (6 cm)
Package 1 width	5.51 in (14 cm)
Package 1 Length	5.91 in (15 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
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
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
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