Product data sheet Characteristics

LC1DT80A3U7

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 80 A - 240 V AC 50/60 Hz coil





Main

IVIAIII	
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] rated operational current	80 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
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 IEC 60947
Overvoltage category	III
[lth] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 80 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit 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 current	520 A 40 °C - 10 s for power circuit 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 signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	10 A gG signalling circuit 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	1.6 mOhm - Ith 80 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL Power circuit 690 V IEC 60947-4-1
Electrical durability	1.4 Mcycles 80 A AC-1 <= 440 V
Power dissipation per pole	10.2 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	GOST CSA LROS (Lloyds register of shipping) RINA BV UL DNV CCC GL
Connections - terminals	Control circuit spring terminals 1 0.00 in² (2.5 mm²)flexible without cable end Control circuit spring terminals 2 0.00 in² (2.5 mm²)flexible without cable end Power circuit spring clamp terminal 1 0.000.05 in² (135 mm²)flexible without cable end Power circuit spring clamp terminal 2 0.000.04 in² (125 mm²)flexible without cable end Power circuit spring clamp terminal 1 0.000.05 in² (135 mm²)flexible with cable end Power circuit spring clamp terminal 2 0.000.04 in² (125 mm²)flexible with cable end Power circuit spring clamp terminal 1 0.000.05 in² (135 mm²)solid without cable end Power circuit spring clamp terminal 1 0.000.05 in² (135 mm²)solid without cable end Power circuit spring clamp terminal 2 0.000.04 in² (125 mm²)solid without cable end
Tightening torque	Power circuit 70.81 lbf.in (8 N.m) screw clamp terminals 0.040.05 in² (2535 mm²) hexagonal 0.16 in (4 mm) Power circuit 44.25 lbf.in (5 N.m) screw clamp terminals 0.000.04 in² (2.525 mm²) hexagonal 0.16 in (4 mm)
Operating time	419 ms opening 1226 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	6 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 50/60 Hz 0.81.1 Uc -40140 °F (-4060 °C) operational AC 50 Hz 0.851.1 Uc -40140 °F (-4060 °C) operational AC 60 Hz 11.1 Uc 140158 °F (6070 °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	45 W 50/60 Hz	
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1	
Signalling circuit frequency	25400 Hz	
Minimum switching current	5 mA signalling circuit	
Minimum switching voltage	17 V signalling circuit	
Non-overlap time	1.5 Ms on de-energisation between NC and NO contact1.5 ms on energisation between NC and NO contact	
Insulation resistance	> 10 MOhm signalling circuit	
Contact compatibility	M6	
Compatibility code	LC1D	

Environment

IP degree of protection	IP20 front face IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40140 °F (-4060 °C) 140158 °F (6070 °C) with derating
Ambient air temperature for storage	-76176 °F (-6080 °C)
Operating altitude	09842.52 ft (03000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5300 Hz Vibrations contactor closed4 Gn, 5300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open10 Gn for 11 ms
Height	4.80 in (122 mm)
Maximum Width	2.76 in (70 mm)
Depth	4.72 in (120 mm)
Net Weight	2.54 lb(US) (1.15 kg)

Ordering and shipping details

0 11 0	
Category	22357 - CTR,TESYS D,OPEN,40-65A AC
Discount Schedule	l12
GTIN	03389118330467
Nbr. of units in pkg.	1
Package weight(Lbs)	2.42 lb(US) (1.10 kg)
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	2.95 in (7.5 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 EEU 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
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