# Product data sheet Characteristics

## LC1D253D7

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 42 V AC coil





#### Main

IVIAIII	
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] rated operational current	25 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 40 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	5.5 KW 220230 V AC 50/60 Hz AC-3) 11 KW 380400 V AC 50/60 Hz AC-3) 11 KW 415440 V AC 50/60 Hz AC-3) 15 KW 500 V AC 50/60 Hz AC-3) 15 KW 660690 V AC 50/60 Hz AC-3) 5.5 kW 400 V AC 50/60 Hz AC-4)
Motor power HP (UL / CSA)	3 Hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 Hp 115 V AC 50/60 Hz 1 phase 7.5 Hp at 230/240 V AC 50/60 Hz for 3 phases motors 15 Hp at 460/480 V AC 50/60 Hz for 3 phases motors 20 Hp at 575/600 V AC 50/60 Hz for 3 phases motors 7.5 hp 200/208 V AC 50/60 Hz 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	42 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	25 A (at 60 °C) for power circuit 10 A 140 °F (60 °C) signalling circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 450 A 440 V power circuit IEC 60947
Rated breaking capacity	450 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	240 A 104 °F (40 °C) - 10 s power circuit 380 A 104 °F (40 °C) - 1 s power circuit 50 A 104 °F (40 °C) - 10 min power circuit 120 A 104 °F (40 °C) - 1 min 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 63 A gG <= 690 V type 1 power circuit 40 A gG <= 690 V type 2 power circuit
Average impedance	2 mOhm - Ith 25 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 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

Electrical durability	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V
Power dissipation per pole	3.2 W AC-1 1.25 W AC-3
Front 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	DNV UL BV GL CCC GOST CSA RINA LROS (Lloyds register of shipping)
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 terminals 1 cable(s) 4 mm²flexible without cable end Power circuit: spring terminals 2 cable(s) 4 mm²flexible without cable end
Operating time	1222 ms closing 419 ms opening
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	15 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

#### Complementary

bil 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	70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C))	
Hold-in power consumption in VA	7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C))	
Heat dissipation	23 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	<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>	
Insulation resistance	> 10 MOhm signalling circuit	
Contact compatibility	M2	
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 open8 Gn for 11 ms	
Height	3.90 in (99 mm)	
Maximum Width	1.77 in (45 mm)	
Depth	3.62 in (92 mm)	
Net Weight	0.82 lb(US) (0.37 kg)	

## Ordering and shipping details

Category	22354 - CTR,TESYS D,OPEN,9-38A AC
Discount Schedule	l12
GTIN	03389110804270
Nbr. of units in pkg.	1
Package weight(Lbs)	0.83 lb(US) (0.38 kg)
Returnability	No
Country of origin	FR

## Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	4.49 in (11.4 cm)	
Package 1 width	4.13 in (10.5 cm)	
Package 1 Length	2.13 in (5.4 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	
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