Product data sheet
Characteristics

LC2D093FE7
TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 115 V AC coil

Product availability : Non-Stock - Not normally stocked in distribution facility

Main

Range	TeSys
Product name	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
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	9 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 16 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	2.2 kW 220...230 V AC 50 Hz 4 kW 380...400 V AC 50 Hz 4 kW 415...440 V AC 50 Hz 5.5 kW 500 V AC 50 Hz 5.5 kW 660...690 V AC 50 Hz
Motor power HP (UL / CSA)	0.5 hp 115 V AC 60 Hz 1 phase 1 hp 230/240 V AC 60 Hz 1 phase 2 hp 200/208 V AC 60 Hz 3 phase 2 hp 230/240 V AC 60 Hz 3 phase 5 hp 460/480 V AC 60 Hz 3 phase 7.5 hp 575/600 V AC 60 Hz 3 phase
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	115 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947

Overvoltage category	III
[Ith] conventional free air thermal current	16 A 140 °F (60 °C) power circuit 10 A 140 °F (60 °C) signalling circuit
Irms rated making capacity	250 A 440 V power circuit IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1
Rated breaking capacity	250 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	30 A 104 °F (40 °C) - 10 min power circuit 61 A 104 °F (40 °C) - 1 min power circuit 105 A 104 °F (40 °C) - 10 s power circuit 210 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	25 A gG <= 690 V type 1 power circuit 20 A gG <= 690 V type 2 power circuit 10 A gG signalling circuit IEC 60947-5-1
Average impedance	2.5 mOhm - Ith 16 A 50 Hz 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	0.6 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 9 A AC-3 <= 440 V
Power dissipation per pole	0.2 W AC-3 1.56 W AC-1
Safety cover	With
Interlocking type	Mechanical
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	RINA CCC GOST UL BV CSA GL DNV LROS (Lloyds register of shipping)
Connections - terminals	Power circuit spring terminals 1 0.00 in² (2.5 mm²)flexible without cable end Power circuit spring terminals 2 0.00 in² (2.5 mm²)flexible without cable end 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
Operating time	12...22 ms closing 4...19 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

Coil technology	Without built-in suppressor module
Control circuit voltage limits	Drop-out 0.3...0.6 Uc AC 50/60 Hz 140 °F (60 °C)) Operational 0.8...1.1 Uc AC 50 Hz 140 °F (60 °C)) Operational 0.85...1.1 Uc AC 60 Hz 140 °F (60 °C))
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	2…3 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	25...400 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 contact 1.5 ms on energisation between NC and NO contact
Insulation resistance	> 10 MOhm signalling circuit

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	-4…140 °F (-20…60 °C)
Ambient air temperature for storage	-76…176 °F (-60…80 °C)
Permissible ambient air temperature around the device	-40…158 °F (-40…70 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	3.90 in (99 mm)
Width	3.54 in (90 mm)
Depth	3.39 in (86 mm)
Net weight	1.51 lb(US) (0.687 kg)

Ordering and shipping details

Category	22354 - CTR,TESYS D,OPEN,9-38A AC
Discount Schedule	I12
GTIN	03389110659689
Returnability	No
Country of origin	FR

Offer Sustainability

Sustainable offer status	Green Premium product
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.

Contractual warranty

Warranty	18 months