

LC1F780

TeSys F contactor - 3P(3 NO)-AC-3 <= 440V
780 A with coil LX1/ LX9 - 110...500V AC
40/400Hz, LX4 - 110...440V DC



Main

Range	TeSys
Product name	TeSys F
Product or Component Type	Contactors
Device short name	LC1F
Contactors application	Resistive load Motor control
Utilisation category	AC-4 AC-3 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	780 A 131 °F (55 °C) <= 440 V AC AC-3 1600 A 104 °F (40 °C) <= 440 V AC AC-1
Motor power kW	450 kW 1000 V AC 50/60 Hz AC-3) 400 kW 380...400 V AC 50/60 Hz AC-3) 425 kW 415 V AC 50/60 Hz AC-3) 425 kW 440 V AC 50/60 Hz AC-3) 450 kW 500 V AC 50/60 Hz AC-3) 220 kW 220...240 V AC 50/60 Hz AC-3) 475 kW 660...690 V AC 50/60 Hz AC-3) 110 kW 400 V AC 50/60 Hz AC-4)

Complementary

[Uc] control circuit voltage	110...500 V AC 40...400 Hz with LX1/LX9 coil 48...440 V DC with LX4 coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	1600 A 104 °F (40 °C)
Irms rated making capacity	7800 A AC IEC 60947-4-1
Rated breaking capacity	6240 A IEC 60947-4-1
[Icw] rated short-time withstand current	3000 A 104 °F (40 °C) - 3 min 6250 A 104 °F (40 °C) - 10 s 5600 A 104 °F (40 °C) - 30 s 4600 A 104 °F (40 °C) - 1 min 2200 A 104 °F (40 °C) - 10 min
Associated fuse rating	800 A aM <= 440 V 1600 A gG <= 440 V
Average impedance	0.1 mOhm - Ith 1600 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	60 W AC-3 250 W AC-1
Control circuit voltage limits	Operational 0.85...1.1 Uc AC 40...400 Hz Drop-out 0.2...0.4 Uc AC 40...400 Hz Operational 0.85...1.1 Uc DC Drop-out 0.2...0.4 Uc DC
Heat dissipation	22 W

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Operating time	40...80 ms closing with LX1/LX9 coil 130...230 ms opening with LX1/LX9 coil 70...80 ms closing with LX4 coil 100...130 ms opening with LX4 coil
Mounting Support	Plate
Standards	IEC 60947-1 IEC 60947-4-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1
Product Certifications	UL LROS (Lloyds register of shipping) RINA DNV CCC BV CB ABS UKCA
Connections - terminals	Power circuit bar 2 100 x 5 mm Power circuit bolted connection Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²) Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)
Tightening torque	Power circuit 513.34 lbf.in (58 N.m) Control circuit 10.62 lbf.in (1.2 N.m)
Mechanical durability	5 Mcycles
Inrush power in VA	1900...2300 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX1/LX9 coil 1960...2420 VA (at 68 °F (20 °C))with LX4 coil
Hold-in power consumption in VA	44...55 VA 42...52 VA
Maximum operating rate	600 cyc/h 131 °F (55 °C)
Compatibility code	LC1F

Environment

IP degree of protection	IP20 front face with shrouds IEC 60529 IP20 front face with shrouds VDE 0106
Protective treatment	TH
Ambient Air Temperature for Operation	23...131 °F (-5...55 °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)
Operating altitude	9842.52 ft (3000 m) without derating
Mechanical robustness	Vibrations contactor open2.5 Gn, 5...300 Hz Vibrations contactor closed5.5 Gn, 5...300 Hz Shocks contactor open5 Gn for 1/2 sine wave (11 ms) Shocks contactor closed15 Gn for 1/2 sine wave (11 ms)
Height	17.09 in (434 mm)
Width	27.64 in (702 mm)
Depth	10.04 in (255 mm)
Net Weight	105.82 lb(US) (48 kg)

Ordering and shipping details

Category	22336-CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	3389110227239
Nbr. of units in pkg.	1
Package weight(Lbs)	90.39 lb(US) (41.0 kg)

Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	35.63 in (90.5 cm)
Package 1 width	16.14 in (41 cm)
Package 1 Length	12.40 in (31.5 cm)
Unit Type of Package 2	P12
Number of Units in Package 2	2
Package 2 Weight	220.46 lb(US) (100.0 kg)
Package 2 Height	29.92 in (76 cm)
Package 2 width	47.24 in (120 cm)
Package 2 Length	31.50 in (80 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
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
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