

# LC1F185

contactor, TeSys F, 3P(3NO), AC-3, <=440V  
185A with coil LX9, 24...600V AC 40/400Hz,  
LX4, 24...460V DC, LXE, 100...250V AC  
50/60Hz or 100...380V DC



## Main

Range	TeSys
Product name	TeSys F
Product or Component Type	Contacteur
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz <= 460 V DC
[Ie] rated operational current	275 A 104 °F (40 °C) <= 440 V AC-1 185 A 131 °F (55 °C) <= 440 V AC-3
Motor power kW	100 KW 415 V AC 50/60 Hz AC-3) 100 KW 440 V AC 50/60 Hz AC-3) 110 KW 500 V AC 50/60 Hz AC-3) 90 KW 380...400 V AC 50/60 Hz AC-3) 55 KW 220...240 V AC 50/60 Hz AC-3) 110 KW 660...690 V AC 50/60 Hz AC-3) 33 kW 400 V AC 50/60 Hz AC-4)

## Complementary

[Uc] control circuit voltage	24...575 V AC 40...400 Hz with LX9 coil 24...460 V DC with LX4 coil 100...250 V AC 50/60 Hz with LXE coil 100...380 V DC with LXE coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	275 A 104 °F (40 °C)
Irms rated making capacity	1850 A IEC 60947-4-1
Rated breaking capacity	1480 A IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A 104 °F (40 °C) - 10 s 920 A 104 °F (40 °C) - 30 s 740 A 104 °F (40 °C) - 1 min 500 A 104 °F (40 °C) - 3 min 400 A 104 °F (40 °C) - 10 min
Associated fuse rating	200 A aM <= 440 V 315 A gG <= 440 V
Average impedance	0.33 mOhm - Ith 275 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	25 W AC-1 12 W AC-3

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Control circuit voltage limits	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX9 coil Drop-out: 0.2...0.55 Uc AC 40...400 Hz with LX9 coil Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.15...0.2 Uc DC with LX4 coil Operational: 85...275 V AC 50/60 Hz with LXE coil Drop-out: 0...60 V AC 50/60 Hz with LXE coil Operational: 85...418 V DC with LXE coil Drop-out: 0...45 V DC with LXE coil
Heat dissipation	8...9.8 W 2.2...2.5 W
Operating time	35 ms closing with LX9 coil 130 ms opening with LX9 coil 30...40 ms closing with LX4 coil 30...50 ms opening with LX4 coil 40...80 ms closing with LXE coil 6...54 ms opening with LXE coil
Mounting Support	Plate
Standards	IEC 60947-4-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1 IEC 60947-1
Product Certifications	ABS LROS (Lloyds register of shipping) RINA CSA CB UL BV RMRoS DNV UKCA
Connections - terminals	Power circuit bar 2 25 x 3 mm Power circuit lugs-ring terminals 1 0.23 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit connector 1 0.23 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit bolted connection Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.25...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1.0 0.00...0.00 in <sup>2</sup> (0.2...2.5 mm <sup>2</sup> )solid without cable end
Tightening torque	Power circuit 159.31 lbf.in (18 N.m) Control circuit 10.62 lbf.in (1.2 N.m) Control circuit 5.31 lbf.in (0.6 N.m)
Mechanical durability	10 Mcycles
Inrush power in VA	950...1180 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX9 coil 737...902 VA (at 68 °F (20 °C))with LX4 coil 280...310 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 270...320 VA (at 68 °F (20 °C))with LXE coil
Hold-in power consumption in VA	8.9...10.9 VA, 40...400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX9 coil 4.13...5.07 VA (at 68 °F (20 °C))with LX4 coil 4.5...7.0 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 2.5...4.0 VA (at 68 °F (20 °C))with LXE coil
Compatibility code	LC1F

## Environment

IP degree of protection	IP2X front face with shrouds IEC 60529 IP2X 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)
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed5 Gn, 5...300 Hz Shocks contactor open7 Gn for 1/2 sine wave (11 ms) Shocks contactor closed15 Gn for 1/2 sine wave (11 ms)
Height	6.85 in (174 mm)
Width	6.63 in (168.5 mm)
Depth	7.13 in (181 mm)
Net Weight	12.02 lb(US) (5.45 kg)
Color	-

## Ordering and shipping details

Category	22336-CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	3389110122381
Returnability	Yes
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	9.45 in (24.000 cm)
Package 1 Width	10.63 in (27.000 cm)
Package 1 Length	9.84 in (25.000 cm)
Package 1 Weight	9.65 lb(US) (4.379 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Height	29.53 in (75.000 cm)
Package 2 Width	23.62 in (60.000 cm)
Package 2 Length	31.50 in (80.000 cm)
Package 2 Weight	134.59 lb(US) (61.048 kg)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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

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Warranty	18 months
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