Product data sheet Characteristics

LC1F115

contactor, TeSys F, 3P(3NO), AC-3, <=440V 115A, 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	Contactor
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz <= 460 V DC
[le] rated operational current	200 A 104 °F (40 °C)) <= 440 V AC-1 115 A 131 °F (55 °C)) <= 440 V AC-3
Motor power kW	55 KW 380400 V AC 50/60 Hz AC-3) 59 KW 415 V AC 50/60 Hz AC-3) 59 KW 440 V AC 50/60 Hz AC-3) 75 KW 500 V AC 50/60 Hz AC-3) 30 KW 220240 V AC 50/60 Hz AC-3) 80 KW 660690 V AC 50/60 Hz AC-3) 18.5 kW 400 V AC 50/60 Hz AC-4)

Complementary

Complementary	
[Uc] control circuit voltage	24575 V AC 40400 Hz with LX9 coil 24460 V DC with LX4 coil 100250 V AC 50/60 Hz with LXE coil 100380 V DC with LXE coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	200 A 104 °F (40 °C)
Irms rated making capacity	1150 A IEC 60947-4-1
Rated breaking capacity	920 A IEC 60947-4-1
[lcw] rated short-time withstand current	1100 A 104 °F (40 °C) - 10 s 640 A 104 °F (40 °C) - 30 s 520 A 104 °F (40 °C) - 1 min 400 A 104 °F (40 °C) - 3 min 320 A 104 °F (40 °C) - 10 min
Associated fuse rating	125 A aM <= 440 V 200 A gG <= 440 V
Average impedance	0.37 mOhm - Ith 200 A 50 Hz
[Ui] rated insulation voltage	1000 V IEC 60947-4-1 1500 V VDE 0110 group C
Power dissipation per pole	15 W AC-1 5 W AC-3

Control circuit voltage limits	Operational: 0.851.1 Uc AC 40400 Hz with LX9 coil Drop-out: 0.20.55 Uc AC 40400 Hz with LX9 coil Operational: 0.851.1 Uc DC with LX4 coil Drop-out: 0.150.2 Uc DC with LX4 coil Operational: 85275 V AC 50/60 Hz with LXE coil Drop-out: 060 V AC 50/60 Hz with LXE coil Operational: 85418 V DC with LXE coil Drop-out: 045 V DC with LXE coil
Heat dissipation	5.97.2 W 2.25.5 W
Operating time	35 ms closing with LX9 coil 130 ms opening with LX9 coil 3040 ms closing with LX4 coil 3050 ms opening with LX4 coil 4080 ms closing with LXE coil 654 ms opening with LXE coil
Mounting Support	Plate
Standards	EN 60947-1 JIS C8201-4-1 IEC 60947-4-1 EN 60947-4-1 IEC 60947-1
Product Certifications	RINA ABS CSA DNV RMRoS BV LROS (Lloyds register of shipping) UL CB UKCA
Connections - terminals	Power circuit lugs-ring terminals 1 0.15 in² (95 mm²) Power circuit connector 1 0.15 in² (95 mm²) Power circuit bar 2 20 x 3 mm Power circuit bolted connection Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²) Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²) Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²) Control circuit screw clamp terminals 2 0.000.00 in² (0.22.5 mm²)flexible without cable end Control circuit screw clamp terminals 1.0 0.000.00 in² (0.252.5 mm²)flexible with cable end Control circuit screw clamp terminals 1.0 0.000.00 in² (0.22.5 mm²)solid without cable end
Tightening torque	Power circuit 88.51 lbf.in (10 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	590855 VA, 40400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX9 coil 543665 VA (at 68 °F (20 °C))with LX4 coil 280310 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 270320 VA (at 68 °F (20 °C))with LXE coil
Hold-in power consumption in VA	6.68.1 VA, 40400 Hz cos phi 0.9 (at 68 °F (20 °C))with LX9 coil 3.944.83 VA (at 68 °F (20 °C))with LX4 coil 4.57.0 VA, 50/60 Hz cos phi 0.5 (at 68 °F (20 °C))with LXE coil 2.54.0 VA (at 68 °F (20 °C))with LXE coil
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
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	-40140 °F (-4060 °C)
Ambient Air Temperature for Storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	140158 °F (6070 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without derating
Mechanical robustness	Vibrations contactor open2 Gn, 5300 Hz
	Vibrations contactor closed6 Gn, 5300 Hz
	Shocks contactor open9 Gn for 1/2 sine wave (11 ms)
	Shocks contactor closed15 Gn for 1/2 sine wave (11 ms)
Height	6.38 in (162 mm)
Width	6.44 in (163.5 mm)
Depth	6.73 in (171 mm)
Net Weight	8.44 lb(US) (3.83 kg)

Ordering and shipping details

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Category	22336-CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	l12
GTIN	3389110122213
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.66 in (22.000 cm)
Package 1 Width	7.87 in (20.000 cm)
Package 1 Length	9.65 in (24.500 cm)
Package 1 Weight	7.76 lb(US) (3.522 kg)
Unit Type of Package 2	P06
Number of Units in Package 2	18
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	158.50 lb(US) (71.896 kg)
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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 EEU RoHS Declaration
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	₫Yes
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.

Warranty 18 months