Product data sheet
Characteristics

LC1F1854
TeSys F contactor - 4P(4 NO)-AC-1 <= 440V 275A with coil LX9 - 24...575V 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
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz
[Ie] rated operational current	275 A 104 °F (40 °C)) <= 440 V AC-1

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 (at 40 °C)
Irms rated making capacity	1850 A IEC 60947-4-1
Rated breaking capacity	1480 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min 400 A 40 °C - 10 min
Associated fuse rating	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
Control circuit voltage limits	Operational 0.85...1.1 Uc AC 40...400 Hz Drop-out 0.2...0.55 Uc AC 40...400 Hz Operational 0.85...1.1 Uc DC Drop-out 0.15...0.2 Uc DC Operational 85...275 V AC 50/60 Hz Drop-out 0...60 V AC 50/60 Hz Operational 85...418 V DC Drop-out 0...45 V DC
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

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Mounting support	Plate
Standards	EN 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 IEC 60947-4-1
Product certifications	ABS CSA DNV BV UL CB RMRoS LROS (Lloyds register of shipping) RINA
Connections - terminals	Power circuit bar 2 25 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 150 mm² Power circuit: connector 1 cable(s) 150 mm² Power circuit bolted connection Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.00…0.00 in² (1…2.5 mm²)solid without cable end Control circuit screw clamp terminals 1 0.00…0.01 in² (1…4 mm²) Control circuit screw clamp terminals 2 0.00…0.01 in² (1…4 mm²) Control circuit screw clamp terminals 1.0 0.00…0.00 in² (0.2…2.5 mm²)flexible without cable end Control circuit screw clamp terminals 1.0 0.00…0.00 in² (0.25…2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1.0 0.00…0.00 in² (0.2…2.5 mm²)solid without cable end
Tightening torque	Power circuit 159.31 lbf.in (18 N.m) Control circuit: 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 4.13…5.07 VA 4.5…7.0 VA 2.5…4.0 VA
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	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 open: 2 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	8.21 in (208.5 mm)
Maximum Depth	7.13 in (181 mm)
Net Weight	12.02 lb(US) (5.45 kg)

Ordering and shipping details

Category	22336 - CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	I12
GTIN	00785901132899
Nbr. of units in pkg.	1
Package weight(Lbs)	12.13 lb(US) (5.50 kg)
Returnability	No
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Package 1 Height	8.35 in (21.2 cm)
Package 1 width	8.74 in (22.2 cm)
Package 1 Length	9.21 in (23.4 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.
PVC free	Yes

Contractual warranty

Warranty	18 months