

# Product datasheet

Specifications



TeSys F contactor - 4P(4 NO)-AC-1 <= 440V 200A with coil LX9 - 24...575V AC 40/400Hz, LX4 - 24...460V DC, LXE - 100...250V AC 50/60Hz or 100...380V DC

LC1F1154

⚠ To be discontinued

⚠ To be discontinued on: 31 December 2023

## 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 <= 460 V DC
[Ie] rated operational current	200 A (at <40 °C) at <= 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	200 A (at 40 °C)
Irms rated making capacity	1150 A conforming to IEC 60947-4-1
Rated breaking capacity	920 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1100 A 40 °C - 10 s 640 A 40 °C - 30 s 520 A 40 °C - 1 min 400 A 40 °C - 3 min 320 A 40 °C - 10 min
Associated fuse rating	200 A gG at <= 440 V
Average impedance	0.37 mOhm - Ith 200 A 50 Hz
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C

Power dissipation per pole	15 W AC-1
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	5.9...7.2 W 2.2...5.5 W
Operating time	130 ms opening for with LX9 coil 30...40 ms closing for with LX4 coil 30...50 ms opening for with LX4 coil 40...80 ms closing for with LXE coil 6...54 ms opening for with LXE coil
Mounting support	Plate
Standards	EN 60947-4-1 IEC 60947-4-1 JIS C8201-4-1 EN 60947-1 IEC 60947-1
Product certifications	CB UL RINA DNV LROS (Lloyds register of shipping) RMRoS CSA ABS BV UKCA
Connections - terminals	Power circuit: lugs-ring terminals 1 cable(s) 95 mm <sup>2</sup> Power circuit: connector 1 cable(s) 95 mm <sup>2</sup> Power circuit: bar 2 cable(s) - busbar cross section: 20 x 3 mm Power circuit: bolted connection Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> Control circuit: screw clamp terminals 1.0 cable(s) 0.2...2.5 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.25...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1.0 cable(s) 0.2...2.5 mm <sup>2</sup> solid without cable end
Tightening torque	Power circuit: 10 N.m Control circuit: 1.2 N.m Control circuit: 0.6 N.m
Inrush power in VA	590...855 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 543...665 VA (at 20 °C)with LX4 coil 280...310 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 270...320 VA (at 20 °C)with LXE coil
Hold-in power consumption in VA	6.6...8.1 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 3.94...4.83 VA (at 20 °C)with LX4 coil 4.5...7.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 2.5...4.0 VA (at 20 °C)with LXE coil
Maximum operating rate	2400 cyc/h 55 °C
Compatibility code	LC1F
Environment	
IP degree of protection	IP2X front face with shrouds conforming to IEC 60529 IP2X front face with shrouds conforming to VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-40...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	60...70 °C at Uc
Operating altitude	3000 m without derating

Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 6 Gn, 5...300 Hz Shocks contactor open: 9 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
Height	162 mm
Width	200.5 mm
Depth	171 mm
Net weight	3.83 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	21.500 cm
Package 1 Width	20.000 cm
Package 1 Length	26.500 cm
Package 1 Weight	4.208 kg
Unit Type of Package 2	P06
Number of Units in Package 2	18
Package 2 Height	75.000 cm
Package 2 Width	60.000 cm
Package 2 Length	80.000 cm
Package 2 Weight	84.244 kg

Offer Sustainability

Sustainable offer status	Green Premium product
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> Product out of China RoHS scope. Substance declaration for your information
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


Contractual warranty

Warranty	18 months
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Recommended replacement(s)

LC1F1154 is replaced by the following group of products:

1x






High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, standard version, 48...130V wide band AC/DC coil

LC1G1154EHEN

1x		High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, standard version, 100...250V wide band AC/DC coil LC1G1154KUEN
1x		High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, advanced version, 200...500V wide band AC/DC coil LC1G1154LSEA

Or LC1F1154 may be replaced by any of the following products:

1x		High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, advanced version, 200...500V wide band AC/DC coil LC1G1154LSEA
1x		High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, standard version, 48...130V wide band AC/DC coil LC1G1154EHEN
1x		High power contactor, TeSys Giga, 4 pole (4NO), AC-1 <=440V 250A, standard version, 100...250V wide band AC/DC coil LC1G1154KUEN