

# Product datasheet

Specifications



## TeSys F contactor - 4P(4 NO)-AC-1 ≤ 440V 1600A with coil LX1/ LX9 - 110...500V AC 40/400Hz, LX4 - 110...440V DC

Local distributor code: 2221023 LC1F7804

⚠ Discontinued

⚠ Discontinued on: 09 February 2023

EAN Code : 3389110227284

### 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	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Ie] rated operational current	1600 A (at <40 °C) at ≤ 440 V AC AC-1

### 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 (at 40 °C)
Irms rated making capacity	7800 A AC conforming to IEC 60947-4-1
Rated breaking capacity	6240 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	3000 A 40 °C - 3 min 6250 A 40 °C - 10 s 5600 A 40 °C - 30 s 4600 A 40 °C - 1 min 2200 A 40 °C - 10 min
Associated fuse rating	800 A aM at ≤ 440 V 1600 A gG at ≤ 440 V
Average impedance	0.1 mOhm - Ith 1600 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	250 W AC-1

<b>Control circuit voltage limits</b>	Operational: 0.85...1.1 Uc AC 40...400 Hz with LX1/LX9 coil Drop-out: 0.2...0.4 Uc AC 40...400 Hz with LX1/LX9 coil Operational: 0.85...1.1 Uc DC with LX4 coil Drop-out: 0.2...0.4 Uc DC with LX4 coil
<b>Heat dissipation</b>	22 W
<b>Operating time</b>	40...80 ms closing for with LX1/LX9 coil 130...230 ms opening for with LX1/LX9 coil 70...80 ms closing for with LX4 coil 100...130 ms opening for with LX4 coil
<b>Mounting support</b>	Plate
<b>Standards</b>	IEC 60947-1 IEC 60947-4-1 EN 60947-1 JIS C8201-4-1 EN 60947-4-1
<b>Product certifications</b>	UL LROS (Lloyds register of shipping) RINA DNV CCC BV CB ABS UKCA
<b>Connections - terminals</b>	Power circuit: bar 2 cable(s) - busbar cross section: 100 x 5 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>
<b>Tightening torque</b>	Power circuit: 58 N.m Control circuit: 1.2 N.m
<b>Mechanical durability</b>	5 Mcycles
<b>Inrush power in VA</b>	1900...2300 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 1960...2420 VA (at 20 °C)with LX4 coil
<b>Hold-in power consumption in VA</b>	44...55 VA, 40...400 Hz cos phi 0.9 (at 20 °C)with LX1/LX9 coil 42...52 VA (at 20 °C)with LX4 coil
<b>Maximum operating rate</b>	600 cyc/h 55 °C
<b>Compatibility code</b>	LC1F
<b>Environment</b>	
<b>IP degree of protection</b>	IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds conforming to VDE 0106
<b>Protective treatment</b>	TH
<b>Ambient air temperature for operation</b>	-5...55 °C
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Permissible ambient air temperature around the device</b>	-40...70 °C
<b>Operating altitude</b>	3000 m without derating
<b>Mechanical robustness</b>	Vibrations contactor open: 2.5 Gn, 5...300 Hz Vibrations contactor closed: 5.5 Gn, 5...300 Hz Shocks contactor open: 5 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
<b>Height</b>	434 mm
<b>Width</b>	862 mm
<b>Depth</b>	255 mm
<b>Net weight</b>	48 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	41.0 cm
Package 1 Width	115.0 cm
Package 1 Length	44.0 cm
Package 1 Weight	47.5 kg
Unit Type of Package 2	PAL
Number of Units in Package 2	2
Package 2 Height	85.0 cm
Package 2 Width	120.0 cm
Package 2 Length	80.0 cm
Package 2 Weight	142.0 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	Yes
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)