

# Product datasheet

Specifications



## TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 275 A - coil 24 V AC

LC1F185B5

### 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-3 AC-4 AC-1
Poles description	3P
Power pole contact composition	3 NO
[Ie] rated operational current	275 A (at <40 °C) at <= 440 V AC-1 185 A (at <55 °C) at <= 440 V AC-3
Motor power kW	90 kW at 380...400 V AC 50/60 Hz (AC-3) 100 kW at 415 V AC 50/60 Hz (AC-3) 100 kW at 440 V AC 50/60 Hz (AC-3) 110 kW at 500 V AC 50/60 Hz (AC-3) 110 kW at 660...690 V AC 50/60 Hz (AC-3) 55 kW at 220...230 V AC 50/60 Hz (AC-3) 33 kW at 400 V AC 50/60 Hz (AC-4)
[Uc] control circuit voltage	24 V AC 50 Hz

### Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	275 A (at 40 °C)
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	200 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.33 mOhm - Ith 275 A 50 Hz
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C

<b>Power dissipation per pole</b>	12 W AC-3 25 W AC-1
<b>Mounting support</b>	Plate
<b>Standards</b>	JIS C8201-4-1 IEC 60947-4-1 EN 60947-4-1 EN 60947-1 IEC 60947-1
<b>Product certifications</b>	LROS (Lloyds register of shipping) DNV RMRoS UL RINA CB CCC BV ABS UKCA
<b>Connections - terminals</b>	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 without 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> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 25 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 150 mm <sup>2</sup> Power circuit: connector 1 cable(s) 150 mm <sup>2</sup> Power circuit: bolted connection
<b>Tightening torque</b>	Control circuit: 1.2 N.m Power circuit: 18 N.m
<b>Control circuit voltage limits</b>	Operational: 0.85...1.1 U <sub>c</sub> 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 U <sub>c</sub> 50/60 Hz (at 55 °C)
<b>Inrush power in VA</b>	805 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Hold-in power consumption in VA</b>	55 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	18...24 W
<b>Operating time</b>	20...35 ms closing 7...15 ms opening
<b>Mechanical durability</b>	10 Mcycles
<b>Maximum operating rate</b>	2400 cyc/h 55 °C
<b>Compatibility code</b>	LC1F

## Environment

<b>IP degree of protection</b>	IP2x front face with shrouds conforming to IEC 60529 IP2x 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>Height</b>	174 mm
<b>Width</b>	168.5 mm
<b>Depth</b>	181 mm
<b>Net weight</b>	4.65 kg

## Packing Units

<b>Unit Type of Package 1</b>	PCE
-------------------------------	-----

<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	5.1 kg
<b>Package 1 Height</b>	21 cm
<b>Package 1 width</b>	20 cm
<b>Package 1 Length</b>	24 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>PVC free</b>	Yes

## Contractual warranty

<b>Warranty</b>	18 months
-----------------	-----------