

# Product data sheet

Specifications



## TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 275 A - coil 220 V AC

LC1F185M5

! Discontinued on: 17 February 2021

! Discontinued

### Main

Range	TeSys
Range of Product	TeSys F
Product or Component Type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
[Ue] rated operational voltage	<= 460 V DC <= 690 V AC 50/60 Hz
[Uc] control circuit voltage	220 V AC 50 Hz
[Ie] rated operational current	275 A 104 °F (40 °C) <= 440 V AC-1 185 A 131 °F (55 °C) <= 440 V AC-3

### Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	275 A 104 °F (40 °C)
Rated breaking capacity	1480 A IEC 60947-4-1
[Icw] rated short-time withstand current	1500 A 104 °F (40 °C) - 10 s 920 A 104 °F (40 °C) - 30 s 740 A 104 °F (40 °C) - 1 min 500 A 104 °F (40 °C) - 3 min 400 A 104 °F (40 °C) - 10 min
Associated fuse rating	200 A aM <= 440 V 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	12 W AC-3 25 W AC-1
Overvoltage category	III
Power pole contact composition	3 NO

<b>Motor power kW</b>	90 kW 380...400 V AC 50/60 Hz AC-3) 100 kW 415 V AC 50/60 Hz AC-3) 100 kW 440 V AC 50/60 Hz AC-3) 110 kW 500 V AC 50/60 Hz AC-3) 110 kW 660...690 V AC 50/60 Hz AC-3) 55 kW 220...230 V AC 50/60 Hz AC-3) 33 kW 400 V AC 50/60 Hz AC-4)
<b>Control circuit voltage limits</b>	Operational 0.85...1.1 U <sub>c</sub> 50/60 Hz 131 °F (55 °C)) Drop-out 0.35...0.55 U <sub>c</sub> 50/60 Hz 131 °F (55 °C))
<b>Mechanical durability</b>	10 Mcycles
<b>Inrush power in VA</b>	805 VA, 50 Hz 0.3 68 °F (20 °C))
<b>Hold-in power consumption in VA</b>	55 VA, 50 Hz 0.3 68 °F (20 °C))
<b>Maximum operating rate</b>	2400 cyc/h 131 °F (55 °C)
<b>Operating time</b>	20...35 ms closing 7...15 ms opening
<b>Connections - terminals</b>	Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> )flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> )solid without cable end Power circuit bar 2 25 x 3 mm Power circuit lugs-ring terminals 1 0.23 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit connector 1 0.23 in <sup>2</sup> (150 mm <sup>2</sup> ) Power circuit bolted connection
<b>Tightening torque</b>	Control circuit 10.62 lbf.in (1.2 N.m) Power circuit 159.31 lbf.in (18 N.m)
<b>Mounting Support</b>	Plate
<b>Heat dissipation</b>	18...24 W
<b>Standards</b>	EN 60947-1 EN 60947-4-1 IEC 60947-1 JIS C8201-4-1 IEC 60947-4-1
<b>Product Certifications</b>	ABS RINA BV RMRoS UL LROS (Lloyds register of shipping) CCC CB DNV
<b>Compatibility code</b>	LC1F
<b>Control circuit type</b>	AC 50 Hz

## Environment

<b>IP degree of protection</b>	IP2x front face with shrouds IEC 60529 IP2x front face with shrouds VDE 0106
<b>Protective treatment</b>	TH
<b>Ambient air temperature for operation</b>	23...131 °F (-5...55 °C)
<b>Ambient Air Temperature for Storage</b>	-76...176 °F (-60...80 °C)
<b>Permissible ambient air temperature around the device</b>	-40...158 °F (-40...70 °C)
<b>Height</b>	6.85 in (174 mm)
<b>Width</b>	6.63 in (168.5 mm)
<b>Depth</b>	7.13 in (181 mm)
<b>Operating altitude</b>	9842.52 ft (3000 m) without derating
<b>Net Weight</b>	10.25 lb(US) (4.65 kg)

## Ordering and shipping details

Category	22336-CTR,F-LINE,AC,OPEN,NONREV
Discount Schedule	112
GTIN	3389110122411
Returnability	No
Country of origin	CZ

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.27 in (21 cm)
Package 1 Width	8.66 in (22 cm)
Package 1 Length	9.06 in (23 cm)
Package 1 Weight	10.86 lb(US) (4.924 kg)

## 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Product out of China RoHS scope. Substance declaration for your information.
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.
PVC free	Yes

## Contractual warranty

Warranty	18 months
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## Recommended replacement(s)

LC1F185M5 may be replaced by any of the following products:

1x



Contactor, high power, TeSys Giga, advanced version, 3 pole/NO, AC-3 <=440V 185A, 200-500VAC/DC coil  
LC1G185LSEA

1x



Contactor, high power, TeSys Giga, standard version, 3 pole/NO, AC-3 <=440V 185A, 100-250VAC/DC coil  
LC1G185KUEN