

Product data sheet

Specifications



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

LC1F185M5

! To be discontinued on: 30 April 2022

! To be end-of-service on: 30 April 2022

! To be discontinued

Main

Range	TeSys
Product name	TeSys F
Product or component type	Contacteur
Device short name	LC1F
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
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	220 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

Power dissipation per pole	12 W AC-3 25 W AC-1
Mounting support	Plate
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 JIS C8201-4-1 IEC 60947-4-1
Product certifications	ABS RINA BV RMRoS UL LROS (Lloyds register of shipping) CCC CB DNV
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm ² solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm ² 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 ² Power circuit: connector 1 cable(s) 150 mm ² Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 18 N.m
Control circuit voltage limits	Operational: 0.85...1.1 U _c 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 U _c 50/60 Hz (at 55 °C)
Inrush power in VA	805 VA 50 Hz cos phi 0.3 (at 20 °C)
Hold-in power consumption in VA	55 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	18...24 W
Operating time	20...35 ms closing 7...15 ms opening
Mechanical durability	10 Mcycles
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	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Operating altitude	3000 m without derating
Height	174 mm
Width	168.5 mm
Depth	181 mm
Net weight	4.65 kg

Packing Units

Unit Type of Package 1	PCE
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Number of Units in Package 1	1
Package 1 Weight	4.924 kg
Package 1 Height	21 cm
Package 1 width	22 cm
Package 1 Length	23 cm
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Weight	67.088 kg
Package 2 Height	80 cm
Package 2 width	80 cm
Package 2 Length	60 cm

Offer Sustainability



Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
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
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

Contractual warranty

Warranty	18 months
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Recommended replacement(s)

LC1F185M5 is replaced by the following group of products:

Linking to group 1	
1x	 <p>TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 185 A - coil 220 V AC LC1F185M7</p>
1x	 <p>High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 185A, standard version, 100...250V wide band AC/DC coil LC1G185KUEN</p>

Linking to group 1

1x



High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 185A, advanced version, 200...500V wide band AC/DC coil

LC1G185LSEA