

Product data sheet

Specifications



TeSys F contactor - 3P (3 NO) - AC-3 - ≤ 440 V 115 A - coil 220 V AC

LC1F115M5

ⓘ Discontinued on: 08 October 2021

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Main

Range	TeSys
Range of product	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	≤ 690 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	220 V AC 50 Hz
[Ie] rated operational current	200 A (at <40 °C) at ≤ 440 V AC-1 115 A (at <55 °C) at ≤ 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	200 A (at 40 °C)
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	125 A aM at ≤ 440 V 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 5 W AC-3
Overvoltage category	III
Power pole contact composition	3 NO

Motor power kW	55 kW at 380...400 V AC 50/60 Hz (AC-3) 59 kW at 415 V AC 50/60 Hz (AC-3) 59 kW at 440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660...690 V AC 50/60 Hz (AC-3) 30 kW at 220...230 V AC 50/60 Hz (AC-3) 18.5 kW at 400 V AC 50/60 Hz (AC-4)
Control circuit voltage limits	Operational: 0.85...1.1 Uc 50/60 Hz (at 55 °C) Drop-out: 0.35...0.55 Uc 50/60 Hz (at 55 °C)
Mechanical durability	10 Mcycles
Inrush power in VA	550 VA, 50 Hz cos phi 0.3 (at 20 °C)
Hold-in power consumption in VA	45 VA, 50 Hz cos phi 0.3 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	23...35 ms closing 5...15 ms opening
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 20 x 3 mm Power circuit: lugs-ring terminals 1 cable(s) 95 mm ² Power circuit: connector 1 cable(s) 95 mm ² 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: bolted connection
Tightening torque	Power circuit: 10 N.m Control circuit: 1.2 N.m
Mounting support	Plate
Heat dissipation	12...16 W
Standards	EN 60947-4-1 IEC 60947-1 JIS C8201-4-1 EN 60947-1 IEC 60947-4-1
Product certifications	RINA BV RMRoS ABS CB CCC UL DNV LROS (Lloyds register of shipping)
Compatibility code	LC1F
Control circuit type	AC at 50 Hz
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
Height	162 mm
Width	163.3 mm
Depth	171 mm
Operating altitude	3000 m without derating
Net weight	3.43 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	22 cm
Package 1 Width	20 cm
Package 1 Length	24.5 cm
Package 1 Weight	4.018 kg

Offer Sustainability


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

LC1F115M5 may be replaced by any of the following products:

1x  High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 115A, advanced version, 200...500V wide band AC/DC coil
LC1G115LSEA

1x  High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 115A, standard version, 100...250V wide band AC/DC coil
LC1G115KUEN