

Product data sheet

Specifications



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

LC1F115M7

! To be discontinued on: 31 December 2023

! To be end-of-service on: 31 December 2023

! To be discontinued

Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactors
Device short name	LC1F
Contactors application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ie] rated operational current	200 A (at <40 °C) at <= 440 V AC-1 115 A (at <55 °C) at <= 440 V AC-3
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)
[Uc] control circuit voltage	220 V AC 40...400 Hz

Complementary

[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[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

Power dissipation per pole	15 W AC-1 5 W AC-3
Mounting support	Plate
Standards	IEC 60947-4-1 IEC 60947-1 EN 60947-4-1 EN 60947-1 JIS C8201-4-1
Product certifications	RINA BV RMRoS CB LROS (Lloyds register of shipping) DNV UL CCC ABS UKCA
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
Control circuit voltage limits	Operational: 0.85...1.1 U _c 40...400 Hz (at 55 °C) Drop-out: 0.35...0.55 U _c 40...400 Hz (at 55 °C)
Inrush power in VA	770 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	8.1 VA 40...400 Hz cos phi 0.9 (at 20 °C)
Heat dissipation	5.9...7.2 W
Operating time	35 ms closing (at U _c) 130 ms opening (at U _c)
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	-40...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	60...70 °C at U _c
Operating altitude	3000 m without derating
Height	162 mm
Width	163.3 mm
Depth	171 mm
Net weight	3.43 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	3.964 kg
Package 1 Height	18.5 cm
Package 1 width	20 cm
Package 1 Length	22.5 cm
Unit Type of Package 2	P06
Number of Units in Package 2	18
Package 2 Weight	79.352 kg
Package 2 Height	75 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
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
----------	-----------

Recommended replacement(s)

LC1F115M7 is replaced by the following group of products:

Linking to group 1	
1x	 <p>High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 115A, standard version, 100...250V wide band AC/DC coil LC1G115KUEN</p>
1x	 <p>High power contactor, TeSys Giga, 3 pole (3NO), AC-3 <=440V 115A, advanced version, 200...500V wide band AC/DC coil LC1G115LSEA</p>