Product data sheet

Specifications

TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 115 A - coil 24 V AC

LC1F115B7

Discontinued on: Nov 20, 2023

Discontinued

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-3 AC-1 AC-4
Poles description	3P
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz
[Uc] control circuit voltage	24 V AC 40...400 Hz
[Ie] rated operational current	200 A (at <104 °F (40 °C)) at <= 440 V AC-1 115 A (at <131 °F (55 °C)) at <= 440 V AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	200 A (at 104 °F (40 °C))
Rated breaking capacity	920 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	1100 A 104 °F (40 °C) - 10 s 640 A 104 °F (40 °C) - 30 s 520 A 104 °F (40 °C) - 1 min 400 A 104 °F (40 °C) - 3 min 320 A 104 °F (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 IEC 60947-4-1 1500 V 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 40...400 Hz 131 °F (55 °C)) Drop-out 0.2...0.55 Uc 40...400 Hz 131 °F (55 °C))
Mechanical durability	10 Mcycles
Inrush power in VA	690…855 VA, 40...400 Hz 0.9 68 °F (20 °C))
Hold-in power consumption in VA	8.9…10.9 VA, 40...400 Hz 0.9 68 °F (20 °C))
Maximum operating rate	2400 cyc/h 131 °F (55 °C)
Operating time	35 ms closing at Uc) 130 ms opening at Uc)
Connections - terminals	Power circuit bar 2 20 x 3 mm Power circuit lugs-ring terminals 1 0.1 in² (95 mm²) Power circuit connector 1 0.1 in² (95 mm²) Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.002…0.004 in² (1…2.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.002…0.006 in² (1…4 mm²)solid without cable end Control circuit screw clamp terminals 2 0.002…0.006 in² (1…4 mm²)solid without cable end Power circuit bolted connection
Tightening torque	Power circuit 88.5 lbf.in (10 N.m) Control circuit 10.6 lbf.in (1.2 N.m)
Mounting support	Plate
Heat dissipation	5.9…7.2 W
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
Compatibility code	LC1F
Control circuit type	AC 40...400 Hz

Environment

IP degree of protection	IP2X front face with shrouds IEC 60529 IP2X front face with shrouds VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-40…140 °F (-40…60 °C)
Ambient air temperature for storage	-76…176 °F (-60…80 °C)
Permissible ambient air temperature around the device	140…158 °F (60…70 °C) at Uc

Height	6.4 in (162 mm)
Width	6.4 in (163.3 mm)
Depth	6.7 in (171 mm)
Operating altitude	3000 m without derating
Net weight	7.56 lb(US) (3.43 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.7 in (17.1 cm)
Package 1 Width	6.44 in (16.35 cm)
Package 1 Length	6.4 in (16.2 cm)
Package 1 Weight	7.61 lb(US) (3.45 kg)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

SCIP Number	Fd9a8828-e2ec-48b0-8cbe-cb8a9fd887e0
EU RoHS Directive	Compliant By Exemption

Use Longer

Lifetime extension

Repair	No

Use Again

Repack and remanufacture

Circularity Profile	End of Life Information
WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins