

# Easy TeSys contactor 3P(3 NO) - AC-3 - <= 440 V 80A - 220 V AC coil

LC1E80M7

# Main

Range	Easy TeSys	
Range of product	Easy TeSys Control	
Product or component type	Contactor	
Device short name	LC1E	
contactor application	Resistive load Motor control	
Utilisation category	AC-3 AC-1	
poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz	
[le] rated operational current	80 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 110 A (at <55 °C) at <= 440 V AC AC-1 for power circuit	
[Uc] control circuit voltage	220 V AC 50/60 Hz	

# Complementary

Motor power kW	22 kW at 220230 V AC 50/60 Hz 37 kW at 380400 V 45 kW at 415 V 45 kW at 440 V 45 kW at 500 V 45 kW at 660690 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	100 A (at 60 °C) for power circuit
Irms rated making capacity	800 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	640 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	640 A 40 °C - 10 s for power circuit 320 A 40 °C - 60 s for power circuit 135 A 40 °C - 600 s for power circuit
Associated fuse rating	10 A gG at <= 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 160 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	0.8 mOhm - Ith 110 A 50 Hz for power circuit
Power dissipation per pole	5.1 W AC-3 9.7 W AC-1
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3

[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947
Mechanical durability	3000000 cycles
Electrical durability	350000 cycles AC-1 900000 cycles AC-3
Control circuit type	AC at 50/60 Hz
Control circuit voltage limits	0.851.1 Uc (-555 °C):operational 50/60 Hz 0.30.6 Uc (-555 °C):drop-out 50/60 Hz
Inrush power in VA	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	22 VA 60 Hz cos phi 0.3 (at 20 °C) 20 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	610 W for control circuit
Operating time	2035 ms on closing 630 ms on opening
Maximum operating rate	1200 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end  Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end  Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end  Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end  Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end  Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end  Power circuit: screw clamp terminals 1 450 mm² - cable stiffness: flexible with cable end  Power circuit: screw clamp terminals 2 416 mm² - cable stiffness: flexible with cable end  Power circuit: screw clamp terminals 1 450 mm² - cable stiffness: solid without cable end  Power circuit: screw clamp terminals 2 450 mm² - cable stiffness: solid without cable end  Power circuit: screw clamp terminals 2 450 mm² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m Power circuit: 12 N.m
Auxiliary contact composition	1 NO + 1 NC
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on energisation guaranteed between NC and NO contact     1.5 ms on de-energisation guaranteed between NC and NO contact
mounting support	DIN rail Plate
Environment	
Standards	IEC 60947-4-1 IEC 60947-5-1 IEC 60947-1
product certifications	CE EAC
IP degree of protection	IP2X conforming to IEC 60529
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30

Permissible ambient air temperature around the device	-2070 °C at Uc -6080 °C storage -555 °C operation
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Mechanical robustness	Vibrations contactor open (1.5 Gn, 5300 Hz) Vibrations contactor closed (3 Gn, 5300 Hz) Shocks contactor open (6 Gn for 11 ms) Shocks contactor closed (7 Gn for 11 ms)
Height	127 mm
Width	85 mm
Depth	121 mm
Net weight	1.52 kg

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.000 cm
Package 1 Width	15.000 cm
Package 1 Length	15.500 cm
Package 1 Weight	1.532 kg
Unit Type of Package 2	S03
Number of Units in Package 2	5
Package 2 Height	30.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	8.166 kg
Unit Type of Package 3	P06
Number of Units in Package 3	40
Package 3 Height	75.000 cm
Package 3 Width	60.000 cm
Package 3 Length	80.000 cm
Package 3 Weight	72.283 kg

# Sustainability Green Premium\*

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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Guide to assess a product's sustainability >







Sustainable Packaging Transparency RoHS/REACh

# Resource performance



Sustainable Packaging

# Well-being performance

Reach Free Of Svhc

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information Yes

# **Certifications & Standards**

Reach Regulation

Eu Rohs Directive

Compliant

EU RohS Declaration

China Rohs Regulation

China Rohs Regulation

China Rohs Regulation

Environmental Disclosure

Product Environmental Profile

Weee

The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile

End of Life Information

20-Sept-2024

# Offer Marketing Illustration

#### **Product benefits / Features**



# LC1E80M7

# Offer Marketing Illustration

#### **Product benefits / Features**



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#### **Product benefits / Features**



# LC1E80M7

**Technical Illustration** 

# Assembly's dimensions





