# **Product datasheet**

Specifications





# Easy TeSys contactor 3P(3 NO) - AC-3 - <= 440 V 38A - 110 V AC coil

LC1E3810F7

# 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-1 AC-3	
poles description	3P	
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz	
[le] rated operational current	50 A (at <55 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
[Uc] control circuit voltage	110 V AC 50/60 Hz	

# Complementary

Motor power kW	18.5 kW at 500 V
•	18.5 kW at 660690 V
	9 kW at 220230 V AC 50/60 Hz
	18.5 kW at 380400 V
	18.5 kW at 415 V
	18.5 kW at 440 V
	18.5 KW at 440 V
Pole contact composition	3 NO
[Ith] conventional free air thermal current	50 A (at 55 °C)
Irms rated making capacity	380 A at 440 V AC for power circuit conforming to IEC 60947-4-1
Rated breaking capacity	304 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand	60 A 40 °C - 600 s for power circuit
current	310 A 40 °C - 10 s for power circuit
	150 A 40 °C - 60 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
	63 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	2.5 mOhm - Ith 50 A 50 Hz for power circuit
Power dissipation per pole	2.9 W AC-3
	5 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	8000000 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	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)	
Hold-in power consumption in VA	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)	
Heat dissipation	23 W for control circuit	
Operating time	1222 ms on closing 419 ms on opening	
Maximum operating rate	1800 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 1.56 mm² - cable stiffness: solid without cable end  Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: solid without cable end  Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable end  Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable end	
Tightening torque	Control circuit: 1.2 N.m Power circuit: 2.1 N.m	
Auxiliary contact composition	1 NO	
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	Plate DIN rail	
Environment		
Standards	IEC 60947-4-1 IEC 60947-5-1 IEC 60947-1	
product certifications	EAC CE	
IP degree of protection	IP2X conforming to IEC 60529	
Protective treatment	TH (pollution degree 3) conforming to IEC 60068-2-30 test Db	

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 closed (10 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)	
Height	84 mm	
Width	56 mm	
Depth	86 mm	
Net weight	0.45 kg	

# **Packing Units**

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	8.6 cm
Package 1 Width	8.4 cm
Package 1 Length	5.6 cm
Package 1 Weight	449 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	11.184 kg



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Transparency RoHS/REACh

# Well-being performance

<b>⊘</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

# **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
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

# Offer Marketing Illustration

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



# Offer Marketing Illustration

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



# Offer Marketing Illustration

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



# LC1E3810F7

**Technical Illustration** 

# Assembly's dimensions



