

# Product datasheet

Specifications



## EasyPact TVS contactor 3P(3 NO) - AC-3 - <= 440 V 18A - 110 V AC coil

LC1E1801F7

### Main

Range	EasyPact
Product name	EasyPact TVS
Product or component type	Contactors
Device short name	LC1E
Contactors application	Resistive load Motor control
Utilisation category	AC-1 AC-3
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 50/60 Hz
[Ie] rated operational current	32 A (at <55 °C) at <= 415 V AC AC-1 for power circuit 18 A (at <55 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	4 kW at 220...230 V AC 50/60 Hz 7.5 kW at 380...400 V 9 kW at 415 V 9 kW at 440 V 10 kW at 500 V 10 kW at 660...690 V
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
Height	74 mm
Width	45 mm
Depth	80 mm
Product weight	0.3 kg
Colour	Grey (RAL 7011)

### Complementary

Auxiliary contact composition	1 NC
[Uimp] rated impulse withstand voltage	6 kV coil not connected to the power circuit conforming to IEC 60947
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1
Overvoltage category	III

<b>[Ith] conventional free air thermal current</b>	32 A (at 55 °C)
<b>Irms rated making capacity</b>	180 A at 440 V AC for power circuit conforming to IEC 60947-4-1
<b>Rated breaking capacity</b>	144 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	145 A 40 °C - 10 s for power circuit 84 A 40 °C - 60 s for power circuit 40 A 40 °C - 600 s for power circuit
<b>Associated fuse rating</b>	10 A gG at ≤ 690 V coordination type 1 for control circuit conforming to IEC 60947-5-1 35 A gG at ≤ 690 V coordination type 1 for power circuit
<b>Average impedance</b>	2.5 mOhm - Ith 32 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	0.81 W AC-3 2.6 W AC-1
<b>Control circuit voltage limits</b>	Operational: 0.85...1.1 Uc at 50/60 Hz (at <55 °C) Drop-out: 0.3...0.6 Uc at 50/60 Hz (at <55 °C)
<b>Operating time</b>	12...22 ms on closing 4...19 ms on opening
<b>Mechanical durability</b>	10000000 cycles
<b>Maximum operating rate</b>	1800 cyc/h 60 °C
<b>Inrush power in VA</b>	95 VA 50 Hz cos phi 0.75 (at 20 °C) 95 VA 60 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	8.3 VA 50 Hz cos phi 0.3 (at 20 °C) 8.5 VA 60 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	2...3 W for control circuit
<b>Minimum switching current</b>	5 mA for control circuit
<b>Minimum switching voltage</b>	17 V for control circuit
<b>Non-overlap time</b>	1.5 ms on energisation guaranteed between NC and NO contact 1.5 ms on de-energisation guaranteed between NC and NO contact
<b>Insulation resistance</b>	> 10 MOhm for control circuit
<b>Electrical durability</b>	300000 cycles AC-1 1200000 cycles AC-3
<b>Mounting support</b>	DIN rail Plate
<b>Connections - terminals</b>	Power circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm <sup>2</sup> - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.5...6 mm <sup>2</sup> - cable stiffness: solid without cable end
<b>Recommended tightening torque</b>	Power circuit: 1.2 N.m Control circuit: 1.2 N.m
<b>Max tightening torque</b>	Power circuit: 1.4 N.m Control circuit: 1.4 N.m

## Environment

<b>Standards</b>	IEC 60947-5-1 IEC 60947-4-1 IEC 60947-1
<b>Product certifications</b>	EAC CE
<b>IP degree of protection</b>	IP2x conforming to IEC 60529
<b>Protective treatment</b>	TH (pollution degree 3) conforming to IEC 60068-2-30 test Db
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-5...55 °C

<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Permissible ambient air temperature around the device</b>	-20...70 °C at Uc
<b>Operating altitude</b>	3000 m without derating
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Mechanical robustness</b>	Vibrations contactor open: 1.5 Gn, 5...300 Hz Vibrations contactor closed: 3 Gn, 5...300 Hz Shocks contactor open: 7 Gn for 11 ms Shocks contactor closed: 10 Gn for 11 ms

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	300.0 g
<b>Package 1 Height</b>	8 cm
<b>Package 1 width</b>	4.5 cm
<b>Package 1 Length</b>	7.4 cm

## Offer Sustainability

<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>REACH free of SVHC</b>	Yes
<b>EU RoHS Directive</b>	Compliant <a href="#">EU RoHS Declaration</a>
<b>Toxic heavy metal free</b>	Yes
<b>Mercury free</b>	Yes
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins