

Product Datasheet

Characteristic

LC1F330P7

TeSys F contactor - 3P (3 NO) - AC-3 -
≤ 440 V 330 A - coil 230 V AC



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-4 AC-1
poles description	3P
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Uc] control circuit voltage	230 V AC 40...400 Hz
[Ie] rated operational current	400 A (at <40 °C) at ≤ 440 V AC AC-1 330 A (at <55 °C) at ≤ 440 V AC AC-3

Complementary

[Uimp] rated impulse withstand voltage	8 kV
[Ith] conventional free air thermal current	400 A (at 40 °C)
Rated breaking capacity	2640 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	2650 A 40 °C - 10 s 1800 A 40 °C - 30 s 1300 A 40 °C - 1 min 900 A 40 °C - 3 min 750 A 40 °C - 10 min
Associated fuse rating	400 A aM at ≤ 440 V 500 A gG at ≤ 440 V
Average impedance	0.28 mOhm - Ith 400 A 50 Hz
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-4-1 1500 V conforming to VDE 0110 group C
Power dissipation per pole	44 W AC-1 31 W AC-3
Overvoltage category	III
Pole contact composition	3 NO
Motor power kW	160 kW at 380...400 V AC 50/60 Hz (AC-3) 180 kW at 415 V AC 50/60 Hz (AC-3) 200 kW at 440 V AC 50/60 Hz (AC-3)

	200 kW at 500 V AC 50/60 Hz (AC-3) 220 kW at 660...690 V AC 50/60 Hz (AC-3) 160 kW at 1000 V AC 50/60 Hz (AC-3) 100 kW at 220...230 V AC 50/60 Hz (AC-3) 59 kW at 400 V AC 50/60 Hz (AC-4)
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)
Mechanical durability	10 Mcycles
Inrush power in VA	650 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Hold-in power consumption in VA	10 VA, 40...400 Hz cos phi 0.9 (at 20 °C)
Maximum operating rate	2400 cyc/h 55 °C
Operating time	40...65 ms closing 100...170 ms opening
Connections - terminals	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: lugs-ring terminals 1 cable(s) 240 mm ² Power circuit: bar 2 cable(s) - busbar cross section: 30 x 5 mm Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
mounting support	Plate
Heat dissipation	8 W
Power range	55...100 kW at 200...240 V 3 phases 110...220 kW at 480...500 V 3 phases 110...220 kW at 380...440 V 3 phases
Motor starter type	Direct on-line contactor
Contactor coil voltage	230 V AC standard
Standards	IEC 60947-1 IEC 60947-4-1 JIS C8201-4-1 EN 60947-1 EN 60947-4-1
Product certifications	UL CSA RINA BV RMRoS ABS DNV CB LROS (Lloyds register of shipping) UKCA
Compatibility code	LC1F
Control circuit type	AC at 40...400 Hz

Environment

IP degree of protection	IP20 front face with shrouds conforming to IEC 60529 IP20 front face with shrouds conforming to VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Height	206 mm
Width	213 mm
Depth	219 mm
Operating altitude	3000 m without derating
net weight	8.6 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	24.000 cm
Package 1 Width	25.000 cm
Package 1 Length	32.500 cm
Package 1 Weight	9.204 kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30.000 cm
Package 2 Width	40.000 cm
Package 2 Length	60.000 cm
Package 2 Weight	19.058 kg
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	84.232 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	Product out of China RoHS scope. Substance declaration for your information
RoHS exemption information	Yes
Environmental Disclosure	ENVPEP1505009EN
Circularity Profile	ENVEOLI1505009EN
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins