



## Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Motor control Resistive load
Utilisation category	AC-4 AC-1 AC-3
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	≤ 1000 V AC 50/60 Hz ≤ 460 V DC
[Ie] rated operational current	350 A (at <40 °C) at ≤ 440 V AC AC-1 265 A (at <55 °C) at ≤ 440 V AC AC-3
Motor power kW	132 KW at 380...400 V AC 50/60 Hz (AC-3) 140 KW at 415 V AC 50/60 Hz (AC-3) 140 KW at 440 V AC 50/60 Hz (AC-3) 160 KW at 500 V AC 50/60 Hz (AC-3) 160 KW at 660...690 V AC 50/60 Hz (AC-3) 147 KW at 1000 V AC 50/60 Hz (AC-3) 75 KW at 220...230 V AC 50/60 Hz (AC-3) 51 KW at 400 V AC 50/60 Hz (AC-4)
[Uc] control circuit voltage	220 V AC 40...400 Hz

## Complementary

[Uimp] rated impulse withstand voltage	8 KV
Overvoltage category	III
[Ith] conventional free air thermal current	350 A (at 40 °C)
Rated breaking capacity	2120 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	2200 A 40 °C - 10 s 1230 A 40 °C - 30 s 950 A 40 °C - 1 min 620 A 40 °C - 3 min 480 A 40 °C - 10 min
Associated fuse rating	315 A aM at ≤ 440 V 400 A gG at ≤ 440 V
Average impedance	0.3 MOhm - Ith 350 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	37 W AC-1 21 W AC-3
Mounting support	Plate
Standards	JIS C8201-4-1 IEC 60947-4-1 EN 60947-1 IEC 60947-1 EN 60947-4-1
Product certifications	RINA RMRoS CSA CB UL BV ABS LROS (Lloyds register of shipping) DNV
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 32 x 4 mm Power circuit: lugs-ring terminals 1 cable(s) 240 mm <sup>2</sup> Power circuit: connector 1 cable(s) 240 mm <sup>2</sup> Power circuit: bolted connection
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m
Control circuit voltage limits	Operational: 0.85...1.1 U <sub>c</sub> 40...400 Hz (at 55 °C) Drop-out: 0.15...0.2 U <sub>c</sub> 40...400 Hz (at 55 °C)
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)
Heat dissipation	8 W
Operating time	40...65 ms closing 100...170 ms opening
Mechanical durability	10 Mcycles
Maximum operating rate	2400 Cyc/H 55 °C
Compatibility code	LC1F
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	220 V AC standard

## 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	203 Mm
Width	201.5 Mm
Depth	213 Mm
Net weight	7.44 Kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	7.95 Kg
Package 1 Height	25 Cm
Package 1 width	25 Cm
Package 1 Length	25.5 Cm
Unit Type of Package 2	P06
Number of Units in Package 2	12
Package 2 Weight	104.116 Kg
Package 2 Height	80 Cm
Package 2 width	80 Cm
Package 2 Length	60 Cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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Product Life Status : **Commercialised**