# Product data sheet Characteristics

# LC1F500M7

TeSys F contactor - 3P (3 NO) - AC-3 - <= 440 V 500 A - coil 220 V AC





#### 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-1 AC-4 AC-3	
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 1000 V AC 50/60 Hz <= 460 V DC	
[le] rated operational current	700 A (at <40 °C) at <= 440 V AC AC-1 500 A (at <55 °C) at <= 440 V AC AC-3	
Motor power kW	250 KW at 380400 V AC 50/60 Hz (AC-3) 280 KW at 415 V AC 50/60 Hz (AC-3) 295 KW at 440 V AC 50/60 Hz (AC-3) 355 KW at 500 V AC 50/60 Hz (AC-3) 335 KW at 660690 V AC 50/60 Hz (AC-3) 335 KW at 1000 V AC 50/60 Hz (AC-3) 147 KW at 220230 V AC 50/60 Hz (AC-3) 80 KW at 400 V AC 50/60 Hz (AC-4)	
[Uc] control circuit voltage	220 V AC 40400 Hz	

#### Complementary

[Uimp] rated impulse withstand voltage	8 KV	
Overvoltage category	III	
[Ith] conventional free air thermal current	700 A (at 40 °C)	
Rated breaking capacity	4000 A conforming to IEC 60947-4-1	
[lcw] rated short-time withstand current	4200 A 40 °C - 10 s 3200 A 40 °C - 30 s 2400 A 40 °C - 1 min 1500 A 40 °C - 3 min 1200 A 40 °C - 10 min	
Associated fuse rating	500 A aM at <= 440 V 800 A gG at <= 440 V	
Average impedance	0.18 MOhm - Ith 700 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	88 W AC-1 45 W AC-3	
Mounting support	Plate	
Standards	EN 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 IEC 60947-4-1	
Product certifications	CSA CB RMRoS ABS LROS (Lloyds register of shipping) UL RINA BV DNV	
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: bar 2 cable(s) - busbar cross section: 40 x 5 mm Power circuit: lugs-ring terminals 2 cable(s) 240 mm² Power circuit: bolted connection	
Tightening torque	Control circuit: 1.2 N.m Power circuit: 35 N.m	
Control circuit voltage limits	Operational: 0.851.1 Uc 40400 Hz (at 55 °C) Drop-out: 0.30.5 Uc 40400 Hz (at 55 °C)	
Inrush power in VA	1100 VA 40400 Hz cos phi 0.9 (at 20 °C)	
Hold-in power consumption in VA	18 VA 40400 Hz cos phi 0.9 (at 20 °C)	
Heat dissipation	18 W	
Operating time	4065 ms closing 100170 ms opening	
Mechanical durability	10 Mcycles	
Maximum operating rate	2400 Cyc/H 55 °C	
Compatibility code	LC1F	
Power range	250500 KW at 380440 V 3 phases 110220 KW at 380440 V 3 phases 110220 KW at 200240 V 3 phases 250500 KW at 480500 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	-555 °C	
Ambient air temperature for storage	-6080 °C	

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	-555 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C
Height	238 Mm
Width	233 Mm
Depth	232 Mm
Net weight	11.35 Kg



## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	11.612 Kg
Package 1 Height	27.5 Cm
Package 1 width	30 Cm
Package 1 Length	30 Cm
Unit Type of Package 2	P06
Number of Units in Package 2	8
Package 2 Weight	101.412 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	☑ REACh Declaration	
EU RoHS Directive	Compliant EPEU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	₫Yes	
China RoHS Regulation	☐ China RoHS Declaration	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	<sup>©</sup> End Of Life Information	
WEEE	The product must be disposed on European Union markets following speci- fic waste collection and never end up in rubbish bins	
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 www.P65Warnings.ca.gov	

### Contractual warranty

Warranty	18 months	

Product Life Status : Commercialised