Product data sheet Characteristics

LC1F780

TeSys F contactor - 3P(3 NO) - AC-3 - <= 440 V 780 A - without coil



Main

IVIAIII		
Commercial Status	Commercialised	
Range of product	TeSys F	
Product or component type	Contactor	
Device short name	LC1F	
Contactor application	Motor control Resistive load	
Utilisation category	AC-1 AC-3	
Poles description	3P	
Power pole contact composition	3 NO	
[Ue] rated operational voltage	<= 460 V DC <= 1000 V AC 50/60 Hz	
[le] rated operational	1600 A (<= 40 °C) at <= 440 V AC AC-1	
current	780 A (<= 55 °C) at <= 440 V AC AC-3	
Motor power kW	475 kW at 660690 V AC 50/60 Hz 220 kW at 220240 V AC 50/60 Hz 450 kW at 500 V AC 50/60 Hz 450 kW at 1000 V AC 50/60 Hz 425 kW at 440 V AC 50/60 Hz 425 kW at 415 V AC 50/60 Hz 400 kW at 380400 V AC 50/60 Hz	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[lth] conventional free air thermal current	1600 A at <= 40 °C	
Irms rated making capacity	7800 A AC conforming to IEC 60947-4-1	
Rated breaking capacity	6240 kA conforming to IEC 60947-4-1	
[lcw] rated short-time withstand current	2200 A <= 40 °C 10 min 3000 A <= 40 °C 3 min 4600 A <= 40 °C 1 min 5600 A <= 40 °C 30 s 6250 A <= 40 °C 10 s	
Associated fuse rating	800 A aM at <= 440 V	
Average impedance	0.10 mOhm at 50 Hz - Ith 1600 A	
[Ui] rated insulation voltage	1500 V conforming to VDE 0110 group C 1000 V conforming to IEC 60947-4-1	
Power dissipation per pole	250 W AC-1 60 W AC-3	
Mounting support	Plate	
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038	
Product certifications	BV CSA DNV GL RINA RMRoS UL LROS	

Connections - terminals	Power circuit: bar 2 x (100 x 5 mm) Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable
Tightening torque	Power circuit: 58 N.m Control circuit: 1.2 N.m

Environment

IP degree of protection	IP20 front face with shrouds (ordered separately) conforming to VDE 0106 IP20 front face with shrouds (ordered separately) conforming to IEC 60529
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
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks contactor open 5 Gn for 11 ms Vibrations contactor closed 5.5 Gn, 5300 Hz Vibrations contactor open 2.5 Gn, 5300 Hz Shocks contactor closed 15 Gn for 11 ms
Height	434 mm
Width	702 mm
Depth	255 mm
Product weight	48 kg

RoHS compliance

RoHS EUR status	Compliant
RoHS EUR conformity date(YYWW)	0843

Contractual warranty

Period	18 months

