Product data sheet Characteristics

LC1F630

TeSys F contactor - 3P(3 NO) - AC-3 - <= 440 V 630 A - without coil



Main

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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 current	630 A (<= 55 °C) at <= 440 V AC AC-3 1000 A (<= 40 °C) at <= 440 V AC AC-1
Motor power kW	450 kW at 660690 V AC 50/60 Hz 200 kW at 220240 V AC 50/60 Hz 450 kW at 1000 V AC 50/60 Hz 400 kW at 500 V AC 50/60 Hz 400 kW at 440 V AC 50/60 Hz 375 kW at 415 V AC 50/60 Hz 335 kW at 380400 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[lth] conventional free air thermal current	1250 A 1000 A at <= 40 °C
Irms rated making capacity	6300 A AC conforming to IEC 60947-4-1
Rated breaking capacity	5040 kA conforming to IEC 60947-4-1
[lcw] rated short-time withstand current	1600 A <= 40 °C 10 min 2200 A <= 40 °C 3 min 3400 A <= 40 °C 1 min 4400 A <= 40 °C 30 s 5050 A <= 40 °C 10 s
Associated fuse rating	630 A aM at <= 440 V
Average impedance	0.12 mOhm at 50 Hz - Ith 1000 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	48 W AC-3 120 W AC-1
Mounting support	Plate
Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038
Product certifications	BV CCC CSA DNV GL RINA RMRoS UL LROS

Connections - terminals	Power circuit: bar 2 x (60 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 end
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	Vibrations contactor closed 4 Gn, 5300 Hz Shocks contactor open 6 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5300 Hz
Height	255 mm
Width	309 mm
Depth	304 mm
Product weight	15.5 kg

RoHS compliance

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

Contractual warranty

Period	18 months

