Product data sheet
Characteristics

LC1F330BD
contactor TeSys LC1-F - 3 poles - AC-3 - 440V 330 A - coil 24 V DC

Main

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
Control circuit type	DC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	330 A (<= 55 °C) AC AC-3 for power circuit 400 A (<= 40 °C) AC AC-1 for power circuit
Motor power kW	100 kW at 220...230 V AC 50/60 Hz 160 kW at 1000 V AC 50/60 Hz 160 kW at 380...400 V AC 50/60 Hz 180 kW at 415 V AC 50/60 Hz 200 kW at 440 V AC 50/60 Hz 200 kW at 500 V AC 50/60 Hz 220 kW at 660...690 V AC 50/60 Hz
Motor power hp	100 hp at 230/240 V AC 60 Hz conforming to CSA 100 hp at 230/240 V AC 60 Hz conforming to UL 200 hp at 460/480 V AC 60 Hz conforming to CSA 200 hp at 460/480 V AC 60 Hz conforming to UL 250 hp at 575/600 V AC 60 Hz conforming to CSA 250 hp at 575/600 V AC 60 Hz conforming to UL 75 hp at 200/208 V AC 60 Hz conforming to CSA 75 hp at 200/208 V AC 60 Hz conforming to UL
[Uc] control circuit voltage	24 V DC
Connections - terminals	Ring lugs power circuit: 1 cable 240 mm² Control circuit: connector 1 cable 1...4 mm² - cable stiffness: flexible - with cable end Control circuit: connector 1 cable 1...4 mm² - cable stiffness: solid - without cable end Control circuit: connector 2 cable 1...2.5 mm² - cable stiffness: flexible - without cable end Control circuit: connector 2 cable 1...4 mm² - cable stiffness: flexible - with cable end Control circuit: connector 2 cable 1...4 mm² - cable stiffness: solid - without cable end Power circuit: bars 2 - without cable end

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Auxiliary contacts type	Type integrated in coil (1 NO)
Auxiliary contact composition	1 NO
Control circuit voltage limits	0.15...0.2 Uc at <= 55 °C drop-out 0.85...1.1 Uc at <= 55 °C operational
[Ui] rated insulation voltage	1000 V conforming to IEC 60947-1 for power circuit 1500 V conforming to VDE 0110 group C for power circuit
[Uimp] rated impulse withstand voltage	8 kV coil not connected to the power circuit
Mounting support	Plate Rail

Tightening torque	Power circuit: 35 N.m - on bars Power circuit: 35 N.m - on ring lugs - cable 240 mm² Control circuit: 1.2 N.m - on connector - cable 1...2.5 mm² Control circuit: 1.2 N.m - on connector - cable 1...4 mm²
[Ue] rated operational voltage	<= 1000 V AC 16 Hz 2/3...200 Hz for power circuit
[Ith] conventional free air thermal current	400 A at <= 40 °C for power circuit
Irms rated making capacity	3300 A at <= 1000 V AC for power circuit conforming to IEC 60497-4-1
Rated breaking capacity	2640 A at <= 1000 V for power circuit conforming to IEC 60497-4-1
Associated fuse rating	400 A aM at <= 440 V for power circuit 500 A gG at <= 440 V for power circuit
Average impedance	0.28 mOhm at 50 Hz - Ith 400 A for power circuit
Power dissipation per pole	31 W AC-3 44 W AC-1
Inrush power in W	750 W at 20 °C
Hold-in power consumption in W	5 W at 20 °C
Operating time	40...50 ms on closing 40...65 ms on opening
Mechanical durability	10000000 cycles
Operating rate	2400 cyc/h at <= 55 °C
Height	213 mm
Width	206 mm
Depth	219 mm
Product weight	8.6 kg

Environment

Standards	EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038
Product certifications	BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS (Lloyds register of shipping) RINA RMR0S UL
IP degree of protection	IP20 front face with cover conforming to IEC 60529 IP20 front face with cover conforming to VDE 0106
Protective treatment	TH
Ambient air temperature for operation	-60...80 °C
Ambient air temperature for storage	-5...55 °C
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	3000 m without derating in temperature
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	15 gn contactor closed 6 gn contactor opened
Vibration resistance	2 gn 5...300 Hz contactor opened 5 gn 5...300 Hz contactor closed