Product data sheet
Characteristics

LC1F2254BD
TeSys F contactor - 4P (4 NO) - AC-1 - <= 440 V 315 A - coil 24 V DC

Main

Range	TeSys
Product name	TeSys F
Product or component type	Contactor
Device short name	LC1F
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	<= 460 V DC <= 1000 V AC 50/60 Hz
[Ie] rated operational current	315 A (<= 40 °C) at <= 440 V AC AC-1
Control circuit type	DC standard
Control circuit voltage	24 V DC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	315 A at <= 40 °C
Irms rated making capacity	2250 A AC conforming to IEC 60947-4-1
Rated breaking capacity	1800 A conforming to IEC 60947-4-1
[Icw] rated short-time withstand current	440 A <= 40 °C 10 min 560 A <= 40 °C 3 min 850 A <= 40 °C 1 min 1000 A <= 40 °C 30 s 1800 A <= 40 °C 10 s
Associated fuse rating	250 A aM at <= 440 V 315 A gG at <= 440 V
Average impedance	0.32 mOhm at 50 Hz - Ith 315 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	32 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 : connector 1 cable(s) 185 mm² Power circuit : lugs-ring terminals 1 cable(s) 185 mm² Power circuit : bar 2 x (32 x 4 mm) Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit : 35 N.m Control circuit : 1.2 N.m
Operating time	30...50 ms opening 30...40 ms closing
Mechanical durability	10 Mcycles
Operating rate	2400 cyc/h at <= 55 °C

Complementary

Control circuit voltage limits	0.15...0.2 Uc at 55 °C drop-out 0.85...1.1 Uc at 55 °C operational
Inrush power in W	800 W at 20 °C
Hold-in power consumption in W	5 W at 20 °C
Heat dissipation	5 W

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	-5...55 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C
Operating altitude	3000 m without derating in temperature
Mechanical robustness	Shocks contactor open 7 Gn for 11 ms Vibrations contactor closed 5 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz
Height	197 mm
Width	208.5 mm
Depth	181 mm
Product weight	5.55 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0852 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Available Download End Of Life Manual