# Product datasheet Characteristics

# LC1F1854

TeSys F contactor - 4P(4 NO)-AC-1 <= 440V 275A with coil LX9 - 24...575V AC 40/400Hz, LX4 - 24...460V DC, LXE - 100...250V AC 50/60Hz or 100...380V DC



Price\*: 558.97 GBP



#### Main

Man		
Range	TeSys	
Product name	TeSys F	
Product or component type	Contactor	
Device short name	LC1F	
Contactor application	Resistive load	
Utilisation category	AC-1	. <u>.</u>
Poles description	4P	;
Power pole contact composition	4 NO	
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz	Ψ
[le] rated operational current	275 A (at <40 °C) at <= 440 V AC-1	9

#### Complementary

Complementary	
[Uc] control circuit voltage	24575 V AC 40400 Hz with LX9 coil 24460 V DC with LX4 coil 100250 V AC 50/60 Hz with LXE coil 100380 V DC with LXE coil
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[lth] conventional free air thermal current	275 A (at 40 °C)
Irms rated making capacity	1850 A conforming to IEC 60947-4-1
Rated breaking capacity	1480 A conforming to IEC 60947-4-1
[lcw] rated short-time withstand current	1500 A 40 °C - 10 s 920 A 40 °C - 30 s 740 A 40 °C - 1 min 500 A 40 °C - 3 min

 $400~\text{A}~40~^\circ\text{C}$  - 10~min

	400 A 40 °C - 10 min	
Associated fuse rating	315 A gG at <= 440 V	
Average impedance	0.33 mOhm - Ith 275 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	25 W AC-1	
Control circuit voltage limits	Operational: 0.851.1 Uc AC 40400 Hz with LX9 coil Drop-out: 0.20.55 Uc AC 40400 Hz with LX9 coil Operational: 0.851.1 Uc DC with LX4 coil Drop-out: 0.150.2 Uc DC with LX4 coil Operational: 85275 V AC 50/60 Hz with LXE coil Drop-out: 060 V AC 50/60 Hz with LXE coil Operational: 85418 V DC with LXE coil Drop-out: 045 V DC with LXE coil	
Heat dissipation	89.8 W 2.22.5 W	
Operating time	35 ms closing for with LX9 coil 130 ms opening for with LX9 coil 3040 ms closing for with LX4 coil 3050 ms opening for with LX4 coil 4080 ms closing for with LXE coil 654 ms opening for with LXE coil	
Mounting support	Plate	
Standards	EN 60947-4-1 IEC 60947-1 EN 60947-1 JIS C8201-4-1 IEC 60947-4-1	
Product certifications	ABS CSA DNV BV UL CB RMRoS LROS (Lloyds register of shipping) RINA	
Connections - terminals	Power circuit: bar 2 cable(s) - busbar cross section: 25 x 3 mm  Power circuit: lugs-ring terminals 1 cable(s) 150 mm²  Power circuit: connector 1 cable(s) 150 mm²  Power circuit: bolted connection  Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end  Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible with 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 mm²  Control circuit: screw clamp terminals 2 cable(s) 14 mm²  Control circuit: screw clamp terminals 2 cable(s) 14 mm²  Control circuit: screw clamp terminals 1.0 cable(s) 0.22.5 mm²flexible without cable end  Control circuit: screw clamp terminals 1.0 cable(s) 0.252.5 mm²flexible with cable end  Control circuit: screw clamp terminals 1.0 cable(s) 0.22.5 mm²flexible with cable end	
Tightening torque	Power circuit: 18 N.m Control circuit: 1.2 N.m Control circuit: 0.6 N.m	
Mechanical durability	10 Mcycles	
Inrush power in VA	9501180 VA, 40400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 737902 VA (at 20 °C)with LX4 coil 280310 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 270320 VA (at 20 °C)with LXE coil	
Hold-in power consumption in VA	8.910.9 VA, 40400 Hz cos phi 0.9 (at 20 °C)with LX9 coil 4.135.07 VA (at 20 °C)with LX4 coil 4.57.0 VA, 50/60 Hz cos phi 0.5 (at 20 °C)with LXE coil 2.54.0 VA (at 20 °C)with LXE coil	
Maximum operating rate	2400 cyc/h 55 °C	
Maximum operating rate	= · · · · · · · · · · · ·	

### Environment

IP degree of protection IP2x front face with shrouds conforming to IEC 60529

#### IP2x 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
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 5 Gn, 5300 Hz Shocks contactor open: 7 Gn for 1/2 sine wave (11 ms) Shocks contactor closed: 15 Gn for 1/2 sine wave (11 ms)
Height	174 mm
Width	208.5 mm
Depth	181 mm
Product weight	5.45 kg

#### Offer Sustainability

Sustainable offer status	Green Premium product	
REACh Regulation	REACh Declaration	
EU RoHS Directive	Compliant EU RoHS Declaration	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

## Contractual warranty

Warranty	18 months