

# TeSys K reversing contactor , 3P , AC-3 <= 440 V 12 A , 1 NO , 110 V DC coil

LP2K1210FD3

#### ! Discontinued

#### Main

Range	TeSys
Product Name	TeSys K
Product Or Component Type	Reversing contactor
Device Short Name	LP2K
Device Application	Control
Contactor Application	Motor control Resistive load
Utilisation Category	AC-1 AC-3 AC-4
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: 690 V AC 50/60 Hz Signalling circuit: <= 690 V AC 50/60 Hz
[le] Rated Operational Current	20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit 16 A (at <70 °C) at 690 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit
Motor Power Kw	4 kW at 480 V AC 50/60 Hz 4 kW at 500600 V AC 50/60 Hz 4 kW at 660690 V AC 50/60 Hz 3 kW at 220230 V AC 50/60 Hz 5.5 kW at 380415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	110 V DC
Auxiliary Contact Composition	1 NO
[Uimp] Rated Impulse Withstand Voltage	8 kV
Overvoltage Category	Ш
[Ith] Conventional Free Air Thermal Current	20 A (at 50 °C) for power circuit 10 A (at 50 °C) for signalling circuit
Irms Rated Making Capacity	110 A AC for signalling circuit conforming to IEC 60947 144 A AC for power circuit conforming to NF C 63-110 144 A AC for power circuit conforming to IEC 60947
Rated Breaking Capacity	110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit
	50 A 50 °C - 3 min for power circuit
	80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit
	110 A - 100 ms for signalling circuit
	25 A 50 °C - >= 15 min for power circuit
Associated Fuse Rating	25 A gG at <= 440 V for power circuit 25 A aM for power circuit
	10 A gG for signalling circuit conforming to IEC 60947
	10 A gG for signalling circuit conforming to VDE 0660
Average Impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 600 V conforming to UL 508
	Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1
	Signalling circuit: 690 V conforming to IEC 60947-5-1
	Signalling circuit: 600 V conforming to UL 508
	Power circuit: 600 V conforming to CSA C22.2 No 14
	Signalling circuit: 600 V conforming to CSA C22.2 No 14
Electrical Durability	0.3 Mcycles 20 A AC-1 at Ue <= 440 V
	1.3 Mcycles 12 A AC-3 at Ue <= 440 V
Interlocking Type	Mechanical
Mounting Support	Plate Rail
Standards	IEC 60947
	NF C 63-110
	VDE 0660 BS 5424
Product Certifications	CB Scheme CCC
	UL
	CSA
	EAC
	CE UKCA
Connections - Terminals	Screw clamp terminals 1 cable(s) 1.54 mm²solid
	Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end
	Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end
	Screw clamp terminals 2 cable(s) 1.54 mm²solid
	Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end
	Colon diality (citiminals 2 dashe(o) 0.0 1 1.0 film floxible that dashe did
Tightening Torque	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat $\varnothing$ 6 mm
Operating Time	3040 ms coil energisation and NO closing
	10 ms coil de-energisation and NO opening
Safety Reliability Level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical Durability	5 Mcycles
Maximum Operating Rate	3600 cyc/h
Complementary	
Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	Operational: 0.81.15 Uc (at <50 °C) Drop-out: 0.10.75 Uc (at <50 °C)
Inrush Power In W	3 W (at 20 °C)
Hold-In Power Consumption In W	3 W at 20 °C

Heat Dissipation	3 W
Auxiliary Contacts Type	type instantaneous 1 NO
Minimum Switching Current	5 mA for signalling circuit
Minimum Switching Voltage	17 V for signalling circuit
Non Overlap Distance	0.5 mm
Insulation Resistance	> 10 MOhm for signalling circuit

### **Environment**

Ip Degree Of Protection	IP20 conforming to VDE 0106
Protective Treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient Air Temperature For Operation	-2550 °C
Ambient Air Temperature For Storage	-5080 °C
Operating Altitude	2000 m without derating
Flame Retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical Robustness	Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 Hz conforming to IEC 60068-2-6 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on X axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27
Height	58 mm
Width	90 mm
Depth	57 mm
Net Weight	0.48 kg

## **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

## **Contractual warranty**

Warranty	18 months