

# LC7K1210M7

TeSys K contactor - 3P - AC-3  $\leq$  440 V 12 A - 1  
NO aux. - 220...230 V AC coil

Product availability : Non-Stock - Not normally stocked in distribution facility



## Main

|                           |                                 |
|---------------------------|---------------------------------|
| Range                     | TeSys                           |
| Product or component type | Contactor                       |
| Product name              | TeSys K                         |
| Device short name         | LC7K                            |
| Device application        | Control                         |
| Contactor application     | Motor control<br>Resistive load |

## Complementary

|                                |                                                                                                                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category           | AC-3<br>AC-1<br>AC-4                                                                                                                                                                                                                                |
| Poles description              | 3P                                                                                                                                                                                                                                                  |
| Power pole contact composition | 3 NO                                                                                                                                                                                                                                                |
| [Ue] rated operational voltage | Power circuit 690 V AC 50/60 Hz<br>Signalling circuit $\leq$ 690 V AC 50/60 Hz                                                                                                                                                                      |
| [Ie] rated operational current | 20 A 122 °F (50 °C)) $\leq$ 440 V AC AC-1 power circuit<br>12 A $\leq$ 440 V AC AC-3 power circuit<br>16 A 158 °F (70 °C)) 690 V AC AC-1 power circuit                                                                                              |
| Control circuit type           | AC 50/60 Hz silent                                                                                                                                                                                                                                  |
| [Uc] control circuit voltage   | 220...230 V AC 50/60 Hz                                                                                                                                                                                                                             |
| Motor power kW                 | 4 kW 480 V AC 50/60 Hz AC-3<br>4 kW 500...600 V AC 50/60 Hz AC-3<br>4 kW 660...690 V AC 50/60 Hz AC-3<br>2.2 kW 400 V AC 50/60 Hz AC-4<br>3 kW 220...230 V AC 50/60 Hz AC-3<br>5.5 kW 380...415 V AC 50/60 Hz AC-3<br>5.5 kW 440 V AC 50/60 Hz AC-3 |
| Auxiliary contact composition  | 1 NO                                                                                                                                                                                                                                                |

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Ith] conventional free air thermal current | 20 A 122 °F (50 °C) power circuit<br>10 A 122 °F (50 °C) signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Irms rated making capacity                  | 110 A AC signalling circuit IEC 60947<br>144 A AC power circuit NF C 63-110<br>144 A AC power circuit IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Rated breaking capacity                     | 110 A 440 V IEC 60947<br>80 A 500 V IEC 60947<br>70 A 660...690 V IEC 60947                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| [Icw] rated short-time withstand current    | 115 A 122 °F (50 °C) - 1 s power circuit<br>105 A 122 °F (50 °C) - 5 s power circuit<br>100 A 122 °F (50 °C) - 10 s power circuit<br>75 A 122 °F (50 °C) - 30 s power circuit<br>55 A 122 °F (50 °C) - 1 min power circuit<br>50 A 122 °F (50 °C) - 3 min power circuit<br>80 A - 1 s signalling circuit<br>90 A - 500 ms signalling circuit<br>110 A - 100 ms signalling circuit<br>25 A 122 °F (50 °C) - >= 15 min power circuit                                                                                                                                                                                           |
| Associated fuse rating                      | 25 A gG <= 440 V power circuit<br>25 A aM power circuit<br>10 A gG signalling circuit IEC 60947<br>10 A gG signalling circuit VDE 0660                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Average impedance                           | 3 mOhm - Ith 20 A 50 Hz power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| [Ui] rated insulation voltage               | Power circuit 600 V UL 508<br>Power circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-4-1<br>Signalling circuit 690 V IEC 60947-5-1<br>Signalling circuit 600 V UL 508<br>Power circuit 600 V CSA C22.2 No 14<br>Signalling circuit 600 V CSA C22.2 No 14                                                                                                                                                                                                                                                                                                                                                    |
| Insulation resistance                       | > 10 MOhm signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Inrush power in VA                          | 3 VA 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Hold-in power consumption in VA             | 3 VA 68 °F (20 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Heat dissipation                            | 3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control circuit voltage limits              | Operational 0.85...1.1 Uc 122 °F (50 °C))<br>Drop-out 0.1...0.75 Uc 122 °F (50 °C))                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Connections - terminals                     | screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid<br>screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end<br>screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.34...2.5 mm <sup>2</sup> )flexible with cable end<br>screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1.5...4 mm <sup>2</sup> )solid<br>screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> )flexible without cable end<br>screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (0.34...1.5 mm <sup>2</sup> )flexible with cable end |
| Maximum operating rate                      | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Auxiliary contacts type                     | Instantaneous 1 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Signalling circuit frequency                | <= 400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Minimum switching current                   | 5 mA signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Minimum switching voltage                   | 17 V signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Mounting support                            | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Tightening torque                           | 11.51 lbf.in (1.3 N.m) screw clamp terminals Philips No 2<br>11.51 lbf.in (1.3 N.m) screw clamp terminals flat Ø 6 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Operating time                              | 30...40 ms coil energisation and NO closing<br>30 ms coil de-energisation and NO opening                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Safety reliability level                    | B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Non overlap distance                        | 0.02 in (0.5 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Mechanical durability                       | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Electrical durability                       | 0.3 Mcycles 20 A AC-1 <= 440 V<br>1.3 Mcycles 12 A AC-3 <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Mechanical robustness                       | Shocks contactor closed, on X axis10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Y axis15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Z axis15 Gn for 11 ms IEC 60068-2-27                                                                                                                                                                                                                                                                                                                                                                                                                     |

|            |                                                                                                                                                                                                                                                                                                                                   |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|            | Shocks contactor opened, on X axis6 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Y axis10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Z axis10 Gn for 11 ms IEC 60068-2-27<br>Vibrations contactor closed4 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor opened2 Gn, 5...300 Hz IEC 60068-2-6 |
| Depth      | 2.24 in (57 mm)                                                                                                                                                                                                                                                                                                                   |
| Net weight | 0.50 lb(US) (0.225 kg)                                                                                                                                                                                                                                                                                                            |

## Environment

|                                     |                                                                    |
|-------------------------------------|--------------------------------------------------------------------|
| Standards                           | BS 5424<br>IEC 60947<br>NF C 63-110<br>VDE 0660                    |
| Product certifications              | CSA<br>UL                                                          |
| IP degree of protection             | IP2x VDE 0106                                                      |
| Protective treatment                | TC IEC 60068<br>TC DIN 50016                                       |
| Ambient air temperature for storage | -58...176 °F (-50...80 °C)                                         |
| Operating altitude                  | 6561.68 ft (2000 m) without                                        |
| Flame retardance                    | V1 UL 94<br>Requirement 2 NF F 16-101<br>Requirement 2 NF F 16-102 |

## Ordering and shipping details

|                   |                                   |
|-------------------|-----------------------------------|
| Category          | 22326 - CTR,K-LINE,AC,OPEN,NONREV |
| Discount Schedule | I12                               |
| GTIN              | 03389110849943                    |
| Returnability     | No                                |
| Country of origin | FR                                |

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                             |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide which is known to the State of California to cause Carcinogen harm. For more information go to <a href="http://www.p65warnings.ca.gov">www.p65warnings.ca.gov</a> |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                                  |
| Mercury free               | Yes                                                                                                                                                                                                                                                               |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                               |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information.                                                                                                                                            |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                                     |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                                                                                                                                                           |
| 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 |
|----------|-----------|