

# Product datasheet

Specifications



Contactor, TeSys K, 3P, AC-3/  
AC-3e,440V 9A, aux. 1NO, 230V  
AC coil,faston connectors

LC1K09105P7

## Main

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

## Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                         |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Utilisation category                        | AC-3<br>AC-3e<br>AC-1<br>AC-4                                                                                                                                                                                                                                                                                                                                           |
| Poles description                           | 3P                                                                                                                                                                                                                                                                                                                                                                      |
| power pole contact composition              | 3 NO                                                                                                                                                                                                                                                                                                                                                                    |
| [Ue] rated operational voltage              | Power circuit: <= 690 V AC <= 400 Hz<br>Signalling circuit: <= 690 V AC <= 400 Hz                                                                                                                                                                                                                                                                                       |
| [Ie] rated operational current              | 9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit<br>9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit<br>20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit                                                                                                                                                                                               |
| Control circuit type                        | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                          |
| [Uc] control circuit voltage                | 230 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                       |
| Motor power kW                              | 2.2 kW at 220...230 V AC 50/60 Hz AC-3<br>4 kW at 380...415 V AC 50/60 Hz AC-3<br>4 kW at 440/690 V AC 50/60 Hz AC-3<br>2.2 kW at 220...230 V AC 50/60 Hz AC-3e<br>4 kW at 380...415 V AC 50/60 Hz AC-3e<br>4 kW at 440/690 V AC 50/60 Hz AC-3e<br>2.2 kW at 220...230 V AC 50/60 Hz AC-4<br>4 kW at 380...415 V AC 50/60 Hz AC-4<br>4 kW at 440/690 V AC 50/60 Hz AC-4 |
| Auxiliary contact composition               | 1 NO                                                                                                                                                                                                                                                                                                                                                                    |
| [Uimp] rated impulse withstand voltage      | 8 kV                                                                                                                                                                                                                                                                                                                                                                    |
| Overvoltage category                        | III                                                                                                                                                                                                                                                                                                                                                                     |
| [Ith] conventional free air thermal current | 20 A (at 60 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit                                                                                                                                                                                                                                                                                             |
| Irms rated making capacity                  | 110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947                                                                                                                                                                                                                                                           |
| Rated breaking capacity                     | 110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>110 A at 415 V conforming to IEC 60947<br>110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947                                                                                                |

Excluding VAT, FCA Jabal Ali & are subject to change – check with your local distributor.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Icw] rated short-time withstand current | 90 A 50 °C - 1 s for power circuit<br>85 A 50 °C - 5 s for power circuit<br>80 A 50 °C - 10 s for power circuit<br>60 A 50 °C - 30 s for power circuit<br>45 A 50 °C - 1 min for power circuit<br>40 A 50 °C - 3 min for power circuit<br>20 A 50 °C - >= 15 min for power circuit<br>80 A - 1 s for signalling circuit<br>90 A - 500 ms for signalling circuit<br>110 A - 100 ms for signalling circuit                                                                                                                                                                                                                                                                      |
| Associated fuse rating                   | 25 A gG at <= 440 V for power circuit<br>25 A aM for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947<br>10 A gG for signalling circuit conforming to VDE 0660                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Average impedance                        | 3 mOhm - lth 20 A 50 Hz for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Insulation resistance                    | > 10 MOhm for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Inrush power in VA                       | 30 VA (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Hold-in power consumption in VA          | 4.5 VA (at 20 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Heat dissipation                         | 1.3 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Control circuit voltage limits           | Operational: 0.8...1.15 Uc (at <50 °C)<br>Drop-out: >= 0.20 Uc (at <50 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Connections - terminals                  | Solder pins (external diameter: 0.035 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Maximum operating rate                   | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Coil technology                          | Without built-in suppressor module                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Auxiliary contacts type                  | type instantaneous 1 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Signalling circuit frequency             | <= 400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Minimum switching current                | 5 mA for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Minimum switching voltage                | 17 V for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Operating time                           | 10...20 ms coil de-energisation and NO opening<br>10...20 ms coil energisation and NO closing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Safety reliability level                 | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Non overlap distance                     | 0.5 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Mechanical durability                    | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Electrical durability                    | 1.3 Mcycles 9 A AC-3 at Ue <= 440 V<br>1.3 Mcycles 9 A AC-3e at Ue <= 440 V<br>0.16 Mcycles 20 A AC-1 at Ue <= 690 V<br>0.02 Mcycles 54 A AC-4 at Ue <= 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Mechanical robustness                    | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 |
| Height                                   | 58 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Width                                    | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Depth                                    | 57 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |

## Environment

|                        |                                                                                                                                                                             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards              | EN/IEC 60947-4-1<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1<br>IEC 60335-1:Clause 30.2<br>IEC 60335-2-40:Annex JJ<br>UL 60335-2-40:Annex JJ |
| Product certifications | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                          |
| Protective treatment   | TC conforming to IEC 60068<br>TC conforming to DIN 50016                                                                                                                    |
| Operating altitude     | 2000 m without derating                                                                                                                                                     |
| Flame retardance       | V1 conforming to UL 94<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102                                                                |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 4.900 cm  |
| Package 1 Width              | 6.200 cm  |
| Package 1 Length             | 6.800 cm  |
| Package 1 Weight             | 204.000 g |

## Contractual warranty

|                      |    |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|



## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



### Environmental footprint

|                                                        |                |
|--------------------------------------------------------|----------------|
| Total lifecycle Carbon footprint                       | 53 kg CO2 eq.  |
| Carbon footprint of the manufacturing phase [A1 to A3] | 1 kg CO2 eq.   |
| Carbon footprint of the distribution phase [A4]        | 0.1 kg CO2 eq. |
| Carbon footprint of the installation phase [A5]        | 0 kg CO2 eq.   |
| Carbon footprint of the use phase [B2, B3, B4, B6]     | 51 kg CO2 eq.  |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.3 kg CO2 eq. |

## Use Better



### Materials and Substances

|                                        |                                   |
|----------------------------------------|-----------------------------------|
| Packaging made with recycled cardboard | Yes                               |
| Packaging without single use plastic   | Yes                               |
| <a href="#">EU RoHS Directive</a>      | Compliant                         |
| REACH Regulation                       | <a href="#">REACH Declaration</a> |

## Use Longer



### Lifetime extension

|        |    |
|--------|----|
| Repair | No |
|--------|----|

## Use Again



### Repack and remanufacture

|                                 |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Recyclability potential, in %   | 64                                                                                                                                                                                                              |
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Offer Marketing Illustration

Product benefits / Features

TeSys K  
Contactors



Flexibility

Designed with control voltages, low consumption, minimal noise levels, robust power connections, and a range of auxiliaries, and application-specific variants to meet diverse needs.



Safety

It provide ultimate protection with IP20 finger-safe terminals, built-in NO/NC auxiliary contacts, and IEC-certified mirror and mechanically linked contacts for safety applications.



Compact size

Up to 50% less volume is captured in your panels. One of he smallest contactors offerings in the market



Offer Marketing Illustration

Product benefits / Features

A black Schneider TeSys K contactor, model LC1K09105P7, is shown against a green circular background. The device has multiple terminal blocks on top and bottom, labeled with numbers and letters. The Schneider logo and 'TeSys K' are visible on the front. The bottom label reads 'LC1K09 105P7 220-230V 50/60Hz'.

### TeSys K

#### Technical Benefits

- Built-in all 3 pole versions: 1NO or 1NC
- Up to 4 more by add-on blocks
- Up to 16 A for motor control (AC3/ AC3E) and 20A for resistive load control (AC1)
- Available as single contactors, star-delta, and reversing combos, with a wealth of options and accessories
- Control Options:
  - AC: 24 to 660/690 V, standard or low-noise versions
  - DC: 12 to 250V, standard or low consumption (1.8 W) versions
- Thermal protection relays
- It Features specific versions for railway (TeSys S207) and electrodomeestic (TeSys S335) applications

Technical Illustration

Assembly's dimensions

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