

# LC1D65AKUE

TeSys D contactor 3P 65A AC-3 up to 440V  
coil 100-250V AC/DC EverLink





## Main

|   |   |
|---|---|
| Range                                       | TeSys   |
| Product name                                | TeSys D Green   |
| Product or component type                   | Contacteur  |
| Device short name                           | LC1D  |
| Contacteur application                      | Motor control<br>Resistive load   |
| Utilisation category                        | AC-1<br>AC-3  |
| Poles description                           | 3P  |
| Power pole contact composition              | 3 NO  |
| [Ue] rated operational voltage              | Power circuit: ≤ 690 V AC 25...400 Hz   |
| [Ie] rated operational current              | 80 A (at <60 °C) at ≤ 440 V AC-1 for power circuit<br>65 A (at <60 °C) at ≤ 440 V AC-3 for power circuit  |
| Motor power kW                              | 18.5 KW at 220...230 V AC 50 Hz (AC-3)<br>30 KW at 380...400 V AC 50 Hz (AC-3)<br>37 KW at 415 V AC 50 Hz (AC-3)<br>37 KW at 440 V AC 50 Hz (AC-3)<br>37 KW at 500 V AC 50 Hz (AC-3)<br>37 kW at 660...690 V AC 50 Hz (AC-3)  |
| Motor power HP (UL / CSA)                   | 5 Hp at 115 V AC 60 Hz for 1 phase motors<br>10 Hp at 230/240 V AC 60 Hz for 1 phase motors<br>20 Hp at 200/208 V AC 60 Hz for 3 phases motors<br>20 Hp at 230/240 V AC 60 Hz for 3 phases motors<br>40 Hp at 460/480 V AC 60 Hz for 3 phases motors<br>50 hp at 575/600 V AC 60 Hz for 3 phases motors |
| [Uc] control circuit voltage                | 100...250 V AC 50/60 Hz<br>100...250 V DC   |
| Coil type                                   | AC/DC electronic  |
| Auxiliary contact composition               | 1 NO + 1 NC   |
| [Uimp] rated impulse withstand voltage      | 6 kV conforming to IEC 60947  |
| Overvoltage category                        | III   |
| [Ith] conventional free air thermal current | 80 A (at 60 °C) for power circuit<br>10 A (at 60 °C) for signalling circuit   |
| Irms rated making capacity                  | 1000 A at 440 V for power circuit conforming to IEC 60947<br>140 A AC for signalling circuit conforming to IEC 60947-5-1<br>250 A DC for signalling circuit conforming to IEC 60947-5-1   |
| Rated breaking capacity                     | 1000 A at 440 V for power circuit conforming to IEC 60947   |
| [Icw] rated short-time withstand current    | 110 A 40 °C - 10 min for power circuit<br>260 A 40 °C - 1 min for power circuit<br>520 A 40 °C - 10 s for power circuit<br>900 A 40 °C - 1 s for power circuit<br>100 A - 1 s for signalling circuit<br>120 A - 500 ms for signalling circuit<br>140 A - 100 ms for signalling circuit                  |
| Associated fuse rating                      | 125 A gG at ≤ 690 V coordination type 1 for power circuit<br>125 A gG at ≤ 690 V coordination type 2 for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947-5-1  |
| Average impedance                           | 1.5 mOhm - Ith 80 A 50 Hz for power circuit   |
| [Ui] rated insulation voltage               | Power circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-1   |
| Electrical durability                       | 1.8 Mcycles 57 A AC-3 at Ue ≤ 440 V<br>0.5 Mcycles 80 A AC-1 at Ue ≤ 440 V  |

|                            |  |
|----------------------------|--|
| Power dissipation per pole | 9.6 W AC-1<br>6.3 W AC-3   |
| Front cover                | With   |
| Mounting support           | Rail<br>Plate  |
| Standards                  | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1   |
| Product certifications     | CCC<br>CSA<br>EAC<br>UL<br>KC<br>DNV-GL<br>LROS (Lloyds register of shipping)  |
| Connections - terminals    | Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> solid<br>Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm <sup>2</sup> solid<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> flexible without cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> flexible with cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm <sup>2</sup> solid<br>Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end<br>Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end<br>Power circuit: EverLink BTR screw connectors 2 cable(s) 1...25 mm <sup>2</sup> solid |
| Tightening torque          | Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm<br>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm<br>Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm   |
| Operating time             | 55...65 ms closing<br>20...120 ms opening (date code >= 17221)<br>20...80 ms opening (date code >= 18011)  |
| 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   |
| Mechanical durability      | 6 Mcycles  |
| Maximum operating rate     | 3600 cyc/h 60 °C   |

## Complementary

|                                 |  |
|---------------------------------|--|
| Coil technology                 | Built-in bidirectional peak limiting   |
| Control circuit voltage limits  | <= 0.1 Uc 60 °C drop-out <= 0.1 Uc 60 °C drop-out<br>0.85...1.1 Uc 60 °C operational 0.85...1.1 Uc 60 °C operational     |
| Inrush power in VA              | 18 VA 50/60 Hz (at 20 °C)  |
| Inrush power in W               | 14 W at 20 °C  |
| Hold-in power consumption in VA | 1.8 VA (at 20 °C) 50/60 Hz   |
| Hold-in power consumption in W  | 1.2 W at 20 °C   |
| Heat dissipation                | 1.2 W at 50/60 Hz  |
| Auxiliary contacts type         | Type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1<br>Type mirror contact 1 NC conforming to IEC 60947-4-1 |

|                              |   |
|------------------------------|---|
| Signalling circuit frequency | 25...400 Hz   |
| Minimum switching current    | 5 mA for signalling circuit   |
| Minimum switching voltage    | 17 V for signalling circuit   |
| Non-overlap time             | 1.5 Ms on de-energisation between NC and NO contact<br>1.5 ms on energisation between NC and NO contact |
| Insulation resistance        | > 10 MOhm for signalling circuit  |
| Compatibility code           | LC1D  |

## Environment

|                                     |  |
|-------------------------------------|--|
| IP degree of protection             | IP20 front face conforming to IEC 60529  |
| Protective treatment                | TH conforming to IEC 60068-2-30  |
| Pollution degree                    | 3  |
| Ambient air temperature for storage | -60...80 °C  |
| Operating altitude                  | 3000 m without derating  |
| Fire resistance                     | 850 °C conforming to IEC 60695-2-1   |
| Flame retardance                    | V1 conforming to UL 94   |
| Mechanical robustness               | Vibrations contactor open: 2 Gn, 5...300 Hz<br>Vibrations contactor closed: 4 Gn, 5...300 Hz<br>Shocks contactor open: 10 Gn for 11 ms<br>Shocks contactor closed: 15 Gn for 11 ms |
| Height                              | 122 mm   |
| Width                               | 55 mm  |
| Depth                               | 120 mm   |
| Net weight                          | 1.002 kg   |
| Colour                              | Grey (SE GREY 6)<br>Green (SE GREEN 2)   |

## Packing Units

|                  |          |
|------------------|----------|
| Package 1 Weight | 1.074 kg |
| Package 1 Height | 0.650 dm |
| Package 1 width  | 1.400 dm |
| Package 1 Length | 1.520 dm |

## Offer Sustainability

|                             |   |
|-----------------------------|---|
| Sustainable offer status    | Green Premium product   |
| EU RoHS Directive           | Compliant <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>  |
| 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 |
| Halogen content performance | Halogen free plastic parts & cables product   |

## Contractual warranty

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|