



## Main

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| Range of product                            | TeSys U  |
| Device short name                           | LUB  |
| Product or component type                   | Non reversing power base   |
| Poles description                           | 3P   |
| Suitability for isolation                   | Yes  |
| [Ith] conventional free air thermal current | 32 A   |
| Utilisation category                        | AC-41<br>AC-43<br>AC-44  |
| Control circuit voltage                     | 110...220 V DC<br>110...240 V AC 50/60 Hz<br>24 V AC 50/60 Hz<br>24 V DC<br>48 V AC 50/60 Hz<br>48...72 V DC |

## Complementary

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| Auxiliary contact composition          | 1 NO + 1 NC  |
| Auxiliary contacts type                | Type linked contacts (1 NO + 1 NC) conforming to IEC 60947-4-1<br>Type mirror contact (1 NC) state of the power conforming to draft IEC 60947-1  |
| [Ue] rated operational voltage         | 230 V<br>440 V<br>500 V<br>690 V   |
| Network frequency                      | 40...60 Hz   |
| [Ie] rated operational current         | 21 A at 690 V<br>23 A at 500 V<br>32 A at <= 440 V   |
| [Ics] rated service breaking capacity  | 10 kA 500 V<br>4 kA 690 V<br>50 kA 230 V<br>50 kA 440 V  |
| Typical current consumption            | 200 mA at 24 V DC I maximum while closing with LUCM<br>220 mA at 24 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>220 mA at 24 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>25 mA at 110...220 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>25 mA at 110...240 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>280 mA at 110...220 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 mA at 110...240 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 mA at 48...72 V AC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>280 mA at 48...72 V DC I maximum while closing with LUCA, LUCB, LUCC, LUCD<br>45 mA at 48...72 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>45 mA at 48...72 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>75 mA at 24 V DC I rms sealed with LUCM<br>80 mA at 24 V DC I rms sealed with LUCA, LUCB, LUCC, LUCD<br>90 mA at 24 V AC I rms sealed with LUCA, LUCB, LUCC, LUCD |
| 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   |
| Operating time                         | 35 ms opening with LUCA, LUCB, LUCC, LUCD, LUCM for control circuit<br>50 ms at >= 72 V closing with LUCA, LUCB, LUCC, LUCD for control circuit<br>60 ms at 48 V closing with LUCA, LUCB, LUCC, LUCD for control circuit<br>65 ms closing with LUCM for control circuit<br>70 ms at 24 V closing with LUCA, LUCB, LUCC, LUCD for control circuit   |
| Mechanical durability                  | 15000000 cycles  |
| Operating rate                         | 60 cyc/mn  |
| [Uij] rated insulation voltage         | 600 V conforming to CSA C22-2 No 14<br>600 V conforming to UL 508<br>690 V conforming to IEC 60947-1 3   |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947-6-2   |

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| Safe separation of circuit | 400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 appendix N<br>400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 appendix N  |
| Connections - terminals    | Control circuit: screw clamp terminals 1 cable 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 1 cable 0.75...1.5 mm <sup>2</sup> - cable stiffness: rigid - without cable end<br>Control circuit: screw clamp terminals 2 cable 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit: screw clamp terminals 2 cable 0.75...1.5 mm <sup>2</sup> - cable stiffness: rigid - without cable end<br>Power circuit: screw clamp terminals 1 cable 1...10 mm <sup>2</sup> - cable stiffness: rigid - without cable end<br>Power circuit: screw clamp terminals 1 cable 1...6 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 1 cable 2.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Power circuit: screw clamp terminals 2 cable 1...6 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit: screw clamp terminals 2 cable 1...6 mm <sup>2</sup> - cable stiffness: rigid - without cable end<br>Power circuit: screw clamp terminals 2 cable 1.5...6 mm <sup>2</sup> - cable stiffness: flexible - without cable end |
| Tightening torque          | Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm flat<br>Control circuit: 0.8...1.2 N.m - with screwdriver 5 mm Phillips no 1<br>Power circuit: 1.9...2.5 N.m - with screwdriver 6 mm flat<br>Power circuit: 1.9...2.5 N.m - with screwdriver 6 mm Phillips No 2   |
| Width                      | 45 mm  |
| Height                     | 145 mm   |
| Depth                      | 126 mm   |
| Product weight             | 0.9 kg   |

## Environment

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| Heat dissipation                      | 3 W for control circuit with LUCA, LUCB, LUCC, LUCD<br>1.8 W for control circuit with LUCM   |
| Immunity to microbreaks               | 3 ms   |
| Immunity to voltage dips              | 70 % 500 ms conforming to IEC 61000-4-11   |
| Product certifications                | ABS<br>ASEFA<br>ATEX<br>BV<br>CCC<br>CSA<br>DNV<br>GL<br>GOST<br>LROS (Lloyds register of shipping)<br>UL  |
| Standards                             | CSA C22-2 No 14 type E<br>EN 60947-6-2<br>IEC 60947-6-2<br>UL 508 type E with phase barrier  |
| IP degree of protection               | IP20 front panel and wired terminals conforming to IEC 60947-1<br>IP20 other faces conforming to IEC 60947-1<br>IP40 front panel outside connection zone conforming to IEC 60947-1 |
| Protective treatment                  | TH conforming to IEC 60068   |
| Ambient air temperature for operation | -25...60 °C with LUCM<br>-25...70 °C with LUCA, LUCB, LUCC, LUCD   |
| Ambient air temperature for storage   | -40...85 °C  |
| Fire resistance                       | 650 °C conforming to IEC 60695-2-12<br>960 °C parts supporting live components conforming to IEC 60695-2-12  |
| Operating altitude                    | 2000 m   |
| Shock resistance                      | 10 gn power poles open conforming to IEC 60068-2-27<br>15 gn power poles closed conforming to IEC 60068-2-27   |

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| Vibration resistance                  | 2 gn 5...300 Hz power poles open conforming to IEC 60068-2-27<br>4 gn 5...300 Hz power poles closed conforming to IEC 60068-2-27   |
| Resistance to electrostatic discharge | 8 kV level 3 in open air conforming to IEC 61000-4-2<br>8 kV level 4 on contact conforming to IEC 61000-4-2  |
| Resistance to radiated fields         | 10 V/m 3 conforming to IEC 61000-4-3   |
| Resistance to fast transients         | 2 kV class 3 serial link conforming to IEC 61000-4-4<br>4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4   |
| Non-dissipating shock wave            | 1 kV serial mode 24...240 V AC conforming to IEC 60947-6-2<br>1 kV serial mode 48...220 V DC conforming to IEC 60947-6-2<br>2 kV common mode 24...240 V AC conforming to IEC 60947-6-2<br>2 kV common mode 48...220 V DC conforming to IEC 60947-6-2 |
| Immunity to radioelectric fields      | 10 V conforming to IEC 61000-4-6   |