

# Product data sheet

Specifications



Standard control unit, TeSys Ultra, 3A to 12A, 3P motors, thermal magnetic protection, class 10, coil 24VAC

LUCA12B

**Product availability : Stock - Normally stocked in distribution facility**

## Main

|   |   |
|---|---|
| <b>Range</b>                                | TeSys   |
| <b>Range of Product</b>                     | TeSys Ultra   |
| <b>Product name</b>                         | TeSys Ultra   |
| <b>Device short name</b>                    | LUCA  |
| <b>Product or Component Type</b>            | Standard control unit   |
| <b>Device Application</b>                   | Motor control<br>Motor protection   |
| <b>Product Specific Application</b>         | Basic protection requirements for motor starters: overload and short-circuit  |
| <b>Main function available</b>              | Protection against phase failure and phase imbalance<br>Protection against overload and short-circuit<br>Manual reset<br>Earth fault protection   |
| <b>Product compatibility</b>                | Power base LUB12<br>Power base LUB32<br>Power base LUB38<br>Power base LUB120<br>Power base LUB320<br>Power base LUB380<br>Reversing contactor breaker LU2B12B<br>Reversing contactor breaker LU2B32B |
| <b>[Ue] rated operational voltage</b>       | 690 V AC  |
| <b>Network frequency</b>                    | 40...60 Hz  |
| <b>Load type</b>                            | 3-phase motor self-cooled   |
| <b>Utilisation category</b>                 | AC-44<br>AC-41<br>AC-43   |
| <b>Motor power kW</b>                       | 5.5 kW 400...440 V AC 50/60 Hz<br>5.5 kW 500 V AC 50/60 Hz<br>9 kW 690 V AC 50/60 Hz  |
| <b>Rated motor current adjustment range</b> | 3...12 A  |
| <b>Thermal overload class</b>               | Class 10 40...60 Hz -13...158 °F (-25...70 °C) IEC 60947-6-2<br>Class 10 40...60 Hz -13...158 °F (-25...70 °C) UL 508   |
| <b>Tripping threshold</b>                   | 14.2 x I <sub>r</sub> +/- 20 %  |
| <b>Phase failure sensitivity</b>            | Yes   |
| <b>[Uc] control circuit voltage</b>         | 24 V AC   |

## Complementary

|   |  |
|---|--|
| <b>Control circuit voltage limits</b>         | 20...26.5 V AC 24 V in operation<br>14.5 V AC 24 V drop-out  |
| <b>Typical current consumption</b>            | 140 mA 24 V AC I maximum while closing with LUB12<br>220 mA 24 V AC I maximum while closing with LUB32<br>220 mA 24 V AC I maximum while closing with LUB38<br>70 mA 24 V AC I rms sealed with LUB12<br>90 mA 24 V AC I rms sealed with LUB32<br>90 mA 24 V AC I rms sealed with LUB38 |
| <b>Heat dissipation</b>                       | 2 W control circuit with LUB12<br>3 W control circuit with LUB32<br>3 W control circuit with LUB38   |
| <b>Operating time</b>                         | 35 ms opening with LUB12 control circuit<br>35 ms opening with LUB32 control circuit<br>35 ms opening with LUB38 control circuit<br>70 ms closing with LUB12 control circuit<br>70 ms closing with LUB32 control circuit<br>70 ms closing with LUB38 control circuit                   |
| <b>Standards</b>                              | EN 60947-6-2<br>IEC 60947-6-2<br>UL 60947-4-1, with phase barrier<br>CSA C22.2 No 60947-4-1, with phase barrier  |
| <b>Product Certifications</b>                 | CE<br>UL<br>CSA<br>CCC<br>EAC<br>ASEFA<br>ATEX<br>Marine   |
| <b>[Ui] rated insulation voltage</b>          | 690 V IEC 60947-6-2<br>600 V UL 60947-4-1<br>600 V CSA C22.2 No 60947-4-1  |
| <b>[Uimp] rated impulse withstand voltage</b> | 6 kV IEC 60947-6-2   |
| <b>Safe separation of circuit</b>             | 400 V SELV between the control and auxiliary circuits IEC 60947-1<br>400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1  |
| <b>Fixing mode</b>                            | Plug-in front face)  |
| <b>Width</b>                                  | 1.77 in (45 mm)  |
| <b>Height</b>                                 | 2.60 in (66 mm)  |
| <b>Depth</b>                                  | 2.36 in (60 mm)  |
| <b>Net Weight</b>                             | 0.30 lb(US) (0.135 kg)   |
| <b>Compatibility code</b>                     | LUCA   |

## Environment

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| <b>IP degree of protection</b>               | IP20 front panel and wired terminals IEC 60947-1<br>IP20 other faces IEC 60947-1<br>IP40 front panel outside connection zone IEC 60947-1 |
| <b>Protective treatment</b>                  | TH IEC 60068   |
| <b>Ambient air temperature for operation</b> | -13...158 °F (-25...70 °C)   |
| <b>Ambient Air Temperature for Storage</b>   | -40...185 °F (-40...85 °C)   |
| <b>Operating altitude</b>                    | 6561.68 ft (2000 m)  |
| <b>Fire resistance</b>                       | 1760 °F (960 °C) parts supporting live components IEC 60695-2-12<br>1202 °F (650 °C) IEC 60695-2-12                                      |
| <b>Shock resistance</b>                      | 10 gn power poles open IEC 60068-2-27<br>15 gn power poles closed IEC 60068-2-27   |
| <b>Vibration resistance</b>                  | 2 gn 5...300 Hz power poles open IEC 60068-2-6<br>4 gn 5...300 Hz power poles closed IEC 60068-2-6                                       |

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| <b>Resistance to electrostatic discharge</b> | 8 kV 3 in open air IEC 61000-4-2<br>8 kV 4 on contact IEC 61000-4-2                          |
| <b>Non-dissipating shock wave</b>            | 1 kV serial mode IEC 60947-6-2<br>2 kV common mode IEC 60947-6-2                             |
| <b>Resistance to radiated fields</b>         | 9.14 V/m (10 V/m) 3 IEC 61000-4-3  |
| <b>Resistance to fast transients</b>         | 2 kV 3 serial link IEC 61000-4-4<br>4 kV 4 all circuits except for serial link IEC 61000-4-4 |
| <b>Immunity to radioelectric fields</b>      | 10 V IEC 61000-4-6   |
| <b>Immunity to microbreaks</b>               | 3 ms   |
| <b>Immunity to voltage dips</b>              | 70 % / 500 ms IEC 61000-4-11   |

## Ordering and shipping details

|                          |                                      |
|--------------------------|--------------------------------------|
| <b>Category</b>          | 22397-TESYS U - CNTRL MOD(LUCA,LUCD) |
| <b>Discount Schedule</b> | l11                                  |
| <b>GTIN</b>              | 3389110363913                        |
| <b>Returnability</b>     | No                                   |
| <b>Country of origin</b> | FR                                   |

## Packing Units

|                                     |                        |
|-------------------------------------|------------------------|
| <b>Unit Type of Package 1</b>       | PCE                    |
| <b>Number of Units in Package 1</b> | 1                      |
| <b>Package 1 Height</b>             | 4.06 in (10.3 cm)      |
| <b>Package 1 Width</b>              | 2.05 in (5.2 cm)       |
| <b>Package 1 Length</b>             | 3.15 in (8.0 cm)       |
| <b>Package 1 Weight</b>             | 4.30 oz (122.0 g)      |
| <b>Unit Type of Package 2</b>       | S02                    |
| <b>Number of Units in Package 2</b> | 23                     |
| <b>Package 2 Height</b>             | 5.91 in (15.0 cm)      |
| <b>Package 2 Width</b>              | 11.81 in (30.0 cm)     |
| <b>Package 2 Length</b>             | 15.75 in (40.0 cm)     |
| <b>Package 2 Weight</b>             | 6.76 lb(US) (3.065 kg) |

## Offer Sustainability

|                                    |  |
|------------------------------------|--|
| <b>Sustainable offer status</b>    | Green Premium product  |
| <b>REACH Regulation</b>            | <a href="#">REACH Declaration</a>  |
| <b>EU RoHS Directive</b>           | Compliant<br><a href="#">EU RoHS Declaration</a>   |
| <b>Mercury free</b>                | Yes  |
| <b>China RoHS Regulation</b>       | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information.       |
| <b>RoHS exemption information</b>  | <a href="#">Yes</a>  |
| <b>Environmental Disclosure</b>    | <a href="#">Product Environmental Profile</a>  |
| <b>Circularity Profile</b>         | <a href="#">End of Life Information</a>  |
| <b>WEEE</b>                        | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins. |
| <b>PVC free</b>                    | Yes  |
| <b>Halogen content performance</b> | Halogen free plastic parts product   |

# Contractual warranty

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Warranty 18 months

Recommended replacement(s)