

# Product data sheet

Specifications



Advanced control unit, TeSys Ultra, 3A to 12A, 1P motors, protection & diagnostic, class 10, coil 110-240VAC/DC

LUC12FU

Product availability: Stock - Normally stocked in distribution facility

## Main

|                                      |                                                                                                                                                                                                                                                 |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                                | TeSys                                                                                                                                                                                                                                           |
| Range of Product                     | TeSys Ultra                                                                                                                                                                                                                                     |
| Product name                         | TeSys Ultra                                                                                                                                                                                                                                     |
| Device short name                    | LUC                                                                                                                                                                                                                                             |
| Product or Component Type            | Advanced control unit                                                                                                                                                                                                                           |
| Device Application                   | Motor control<br>Motor protection                                                                                                                                                                                                               |
| Product Specific Application         | Basic protection and advanced functions, communication                                                                                                                                                                                          |
| main function available              | Protection against overload and short-circuit<br>Earth fault protection<br>Manual reset<br>Protection against phase failure and phase imbalance                                                                                                 |
| Product compatibility                | 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 LU2B12FU<br>Reversing contactor breaker LU2B32FU<br>Reversing contactor breaker LU2B38FU |
| [Ue] rated operational voltage       | 690 V AC                                                                                                                                                                                                                                        |
| Network frequency                    | 40...60 Hz                                                                                                                                                                                                                                      |
| Load type                            | Single-phase motor                                                                                                                                                                                                                              |
| Utilisation category                 | AC-43<br>AC-41<br>AC-44                                                                                                                                                                                                                         |
| Motor power kW                       | 2.2 kW 400...440 V AC 50/60 Hz 1 phase                                                                                                                                                                                                          |
| rated motor current adjustment range | 3...12 A                                                                                                                                                                                                                                        |
| Thermal overload class               | Class 10 40...60 Hz -13...131 °F (-25...55 °C) IEC 60947-6-2<br>Class 10 40...60 Hz -13...131 °F (-25...55 °C) UL 508                                                                                                                           |
| Tripping threshold                   | 14.2 x Ir +/- 20 %                                                                                                                                                                                                                              |
| [Uc] control circuit voltage         | 110...240 V AC<br>110...220 V DC                                                                                                                                                                                                                |

## Complementary

|                                |                                                                                                                                                  |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| Control circuit voltage limits | 88...264 V AC 110...240 V in operation<br>88...242 V DC 110...220 V in operation<br>55 V AC 110...240 V drop-out<br>55 V DC 110...220 V drop-out |
|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Typical current consumption            | 280 mA 110...240 V AC I maximum while closing with LUB12<br>280 mA 110...240 V AC I maximum while closing with LUB32<br>280 mA 110...240 V AC I maximum while closing with LUB38<br>280 mA 110...220 V DC I maximum while closing with LUB12<br>280 mA 110...220 V DC I maximum while closing with LUB32<br>280 mA 110...220 V DC I maximum while closing with LUB38<br>35 mA 110...240 V AC I rms sealed with LUB12<br>25 mA 110...240 V AC I rms sealed with LUB32<br>25 mA 110...240 V AC I rms sealed with LUB38<br>35 mA 110...220 V DC I rms sealed with LUB12<br>25 mA 110...220 V DC I rms sealed with LUB32<br>25 mA 110...220 V DC I rms sealed with LUB38 |
| Heat dissipation                       | 2 W control circuit with LUB12<br>3 W control circuit with LUB32<br>3 W control circuit with LUB38                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Operating time                         | 35 ms opening with LUB12 control circuit<br>35 ms opening with LUB32 control circuit<br>35 ms opening with LUB38 control circuit<br>50 ms closing with LUB12 control circuit<br>50 ms closing with LUB32 control circuit<br>50 ms closing with LUB38 control circuit                                                                                                                                                                                                                                                                                                                                                                                                 |
| Reset                                  | Manual reset                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Standards                              | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Product Certifications                 | CE<br>UL<br>CSA<br>CCC<br>EAC<br>ASEFA<br>ATEX<br>Marine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ui] rated insulation voltage          | 690 V IEC 60947-6-2<br>600 V UL 60947-4-1<br>600 V CSA C22.2 No 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [Uimp] rated impulse withstand voltage | 6 kV IEC 60947-6-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Safe separation of circuit             | 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Fixing mode                            | Plug-in (front face)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Width                                  | 1.8 in (45 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Height                                 | 2.6 in (66 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Depth                                  | 2.4 in (60 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Compatibility code                     | LUCC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                                                                                          |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | 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 |
| Protective treatment                  | TH IEC 60068                                                                                                                             |
| Ambient air temperature for operation | -13...158 °F (-25...70 °C)                                                                                                               |
| Ambient Air Temperature for Storage   | -40...185 °F (-40...85 °C)                                                                                                               |
| Operating altitude                    | 6561.68 ft (2000 m)                                                                                                                      |
| Fire resistance                       | 1760 °F (960 °C) parts supporting live components IEC 60695-2-12<br>1202 °F (650 °C) IEC 60695-2-12                                      |
| Shock resistance                      | 10 gn power poles open IEC 60068-2-27<br>15 gn power poles closed IEC 60068-2-27                                                         |

|                                       |                                                                                                    |
|---------------------------------------|----------------------------------------------------------------------------------------------------|
| Vibration resistance                  | 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 |
| Resistance to electrostatic discharge | 8 kV 3 in open air IEC 61000-4-2<br>8 kV 4 on contact IEC 61000-4-2                                |
| Non-dissipating shock wave            | 1 kV serial mode IEC 60947-6-2<br>2 kV common mode IEC 60947-6-2                                   |
| Resistance to radiated fields         | 9.1 V/m (10 V/m) 3 IEC 61000-4-3                                                                   |
| Resistance to fast transients         | 2 kV 3 serial link IEC 61000-4-4<br>4 kV 4 all circuits except for serial link IEC 61000-4-4       |
| Immunity to radioelectric fields      | 10 V IEC 61000-4-6                                                                                 |
| Immunity to microbreaks               | 3 ms                                                                                               |
| Immunity to voltage dips              | 70 % / 500 ms IEC 61000-4-11                                                                       |

## Ordering and shipping details

|                   |               |
|-------------------|---------------|
| Category          | US10I1122397  |
| Discount Schedule | 0I11          |
| GTIN              | 3389110364767 |
| Returnability     | Yes           |
| Country of origin | FR            |

## Packing Units

|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Nbr. of units in pkg.        | 1                       |
| Package 1 Height             | 4.134 in (10.500 cm)    |
| Package 1 Width              | 2.165 in (5.500 cm)     |
| Package 1 Length             | 3.150 in (8.000 cm)     |
| Package weight(Lbs)          | 4.515 oz (128.000 g)    |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 23                      |
| Package 2 Height             | 5.906 in (15.000 cm)    |
| Package 2 Width              | 11.811 in (30.000 cm)   |
| Package 2 Length             | 15.748 in (40.000 cm)   |
| Package 2 Weight             | 7.114 lb(US) (3.227 kg) |

## 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                       | 17 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]     | 15 kg CO2 eq.                                 |
| Carbon footprint of the end-of-life phase [C1 to C4]   | 0.3 kg CO2 eq.                                |
| Environmental Disclosure                               | <a href="#">Product Environmental Profile</a> |

### Use Better

| Materials and Substances               |                                                                                                                                                                                                                                                                                             |
|----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                                                                                                                                                                                                                         |
| Packaging without single use plastic   | Yes                                                                                                                                                                                                                                                                                         |
| SCIP Number                            | 0f22867c-27de-46b9-965c-a40bbb8a3f0a                                                                                                                                                                                                                                                        |
| EU RoHS Directive                      | <a href="#">Compliant By Exemption</a>                                                                                                                                                                                                                                                      |
| REACH Regulation                       | <a href="#">Reference contains Substances of Very High Concern above the threshold</a>                                                                                                                                                                                                      |
| California proposition 65              | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| Halogen content performance            | Halogen free plastic parts product                                                                                                                                                                                                                                                          |
| PVC free                               | Yes                                                                                                                                                                                                                                                                                         |

### Use Longer

| Lifetime extension |    |
|--------------------|----|
| Repair             | No |

### Use Again

| Repack and remanufacture      |                                         |
|-------------------------------|-----------------------------------------|
| Recyclability potential, in % | 56                                      |
| Circularity Profile           | <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.

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