## Product data sheet

### Characteristics

**LUCA05FU**

TeSys U, standard control unit, class 10, 1.25 to 5 A, 110 to 220 V DC/AC

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

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### Main

<table>
<thead>
<tr>
<th>Range</th>
<th>TeSys</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>TeSys U</td>
</tr>
<tr>
<td>Device short name</td>
<td>LUCA</td>
</tr>
<tr>
<td>Product or component type</td>
<td>Standard control unit</td>
</tr>
<tr>
<td>Product specific application</td>
<td>Basic protection requirements for motor starters: overload and short-circuit</td>
</tr>
<tr>
<td>Product compatibility</td>
<td>LUFN, LUFCD00</td>
</tr>
<tr>
<td>Utilisation category</td>
<td>AC-44, AC-41, AC-43</td>
</tr>
<tr>
<td>Motor power kW</td>
<td>3 kW 690 V AC 50/60 Hz, 1.5 kW 400...440 V AC 50/60 Hz, 2.2 kW 500 V AC 50/60 Hz</td>
</tr>
<tr>
<td>Thermal protection adjustment range</td>
<td>1.25…5 A</td>
</tr>
<tr>
<td>[Uc] control circuit voltage</td>
<td>110...220 V DC, 110...240 V AC</td>
</tr>
<tr>
<td>Thermal overload class</td>
<td>Class 10 40...60 Hz -13…158 °F (-25…70 °C) IEC 60947-6-2, Class 10 40...60 Hz -13…158 °F (-25…70 °C) UL 508, Class 20 40...60 Hz -13…158 °F (-25…70 °C) IEC 60947-6-2, Class 20 40...60 Hz -13…158 °F (-25…70 °C) UL 508</td>
</tr>
</tbody>
</table>

### Complementary

**Main function available**
- Protection against phase failure and phase imbalance
- Protection against overload and short-circuit
- Manual reset
- Earth fault protection

**Mounting mode**
Plug-in

**Mounting location**
Front side

**Control circuit voltage limits**
88...242 V DC 110...220 V in operation
88...264 V AC 110...240 V in operation

**Typical current consumption**
- 25 MA 110...240 V AC I rms sealed with LUB12
- 280 MA 110...220 V DC I maximum while closing with LUB12
- 280 MA 110...220 V DC I maximum while closing with LUB12
- 280 MA 110...220 V DC I maximum while closing with LUB12
- 35 MA 110...220 V DC I rms sealed with LUB12
- 35 mA 110...220 V DC I rms sealed with LUB32

**Operating time**
- 35 ms opening with LUB12 control circuit
- 35 ms opening with LUB32 control circuit
- 50 ms closing with LUB12 control circuit
- 50 ms closing with LUB32 control circuit

**Load type**
3-phase motor self-cooled

**Tripping threshold**
14.2 x Ir +/- 20 %

**[U] rated insulation voltage**
- 600 V UL 508
- 690 V IEC 60947-1
- 600 V CSA C22.2 No 14

**[Uimp] rated impulse withstand voltage**
6 kV IEC 60947-6-2
<table>
<thead>
<tr>
<th>Safe separation of circuit</th>
<th>400 V SELV between the control and auxiliary circuits IEC 60947-1 400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Net weight</td>
<td>0.30 lb(US) (0.135 kg)</td>
</tr>
</tbody>
</table>

### Environment

<table>
<thead>
<tr>
<th>Heat dissipation</th>
<th>2 W control circuit with LUB12 3 W control circuit with LUB32</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunity to microbreaks</td>
<td>3 ms</td>
</tr>
<tr>
<td>Immunity to voltage dips</td>
<td>70 % / 500 ms IEC 61000-4-11</td>
</tr>
</tbody>
</table>

### Standards

- UL 508 type E, with phase barrier
- EN 60947-6-2
- IEC 60947-6-2
- CSA C22.2 No 14 type E

### Product certifications

- LROS (Lloyds register of shipping)
- GL
- CSA
- BV
- CCC
- ATEX
- ASEFA
- UL
- GOST
- ABS
- DNV

### IP degree of protection

- IP20 front panel and wired terminals IEC 60947-1
- IP20 other faces IEC 60947-1
- 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
- 1202 °F (650 °C) IEC 60695-2-12

### Shock resistance

- 10 gn power poles open IEC 60068-2-27
- 15 gn power poles closed IEC 60068-2-27

### Vibration resistance

- 2 gn 5...300 Hz power poles open IEC 60068-2-6
- 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
- 8 KV 4 on contact IEC 61000-4-2

### Non-dissipating shock wave

- 1 KV serial mode IEC 60947-6-2
- 2 KV common mode IEC 60947-6-2

### Resistance to radiated fields

- 9.14 V/m (10 V/m) 3 IEC 61000-4-3

### Resistance to fast transients

- 2 KV 3 serial link IEC 61000-4-4
- 4 KV 4 all circuits except for serial link IEC 61000-4-4

### Immunity to radioelectric fields

- 10 V IEC 61000-4-6

### Ordering and shipping details

<table>
<thead>
<tr>
<th>Category</th>
<th>22397 - TESYS U - CNTRL MOD(LUCA,LUCD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Schedule</td>
<td>I11</td>
</tr>
<tr>
<td>GTIN</td>
<td>00785901221883</td>
</tr>
<tr>
<td>Package weight(Lbs)</td>
<td>0.12 kg (0.26 lb(US))</td>
</tr>
<tr>
<td>Returnability</td>
<td>Yes</td>
</tr>
<tr>
<td>Country of origin</td>
<td>FR</td>
</tr>
</tbody>
</table>

### Offer Sustainability

- **Sustainable offer status**: Green Premium product
- **REACH Regulation**: ![REACH Declaration](https://example.com/reach_declaration.png)
- **EU RoHS Directive**: Compliant ![EU RoHS Declaration](https://example.com/rohs_declaration.png)
- **Mercury free**: Yes
- **RoHS exemption information**: Yes
<table>
<thead>
<tr>
<th>China RoHS Regulation</th>
<th><a href="#">China RoHS Declaration</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental Disclosure</td>
<td><a href="#">Product Environmental Profile</a></td>
</tr>
<tr>
<td>Circularity Profile</td>
<td><a href="#">End Of Life Information</a></td>
</tr>
<tr>
<td>WEEE</td>
<td>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.</td>
</tr>
</tbody>
</table>

**Contractual warranty**

| Warranty | 18 months |