# Product datasheet Characteristics

# LUCB12B

advanced control unit LUCB - class 10 - 3...12 A - 24 V AC



#### Main

| Range of product Range Product name Device short name | TeSys U TeSys TeSys U LUCB   |  |
|---|--|--|
| Product name  | TeSys U  |  |
|   | •  |  |
| Device short name                                     | LUCB   |  |
|   |  |  |
| Product or component type                             | Advanced control unit  |  |
| Product specific application                          | Basic protection and advanced functions, communication   |  |
| Product compatibility                                 | LUFC00 LUFV2 LUFN LUFDA10 LUFDH11 LUFW10 LUFDA01   |  |
| Utilisation category                                  | AC-41<br>AC-44<br>AC-43  |  |
| Motor power kW  | 5.5 kW at 400440 V AC 50/60 Hz<br>9 kW at 690 V AC 50/60 Hz<br>5.5 kW at 500 V AC 50/60 Hz   |  |
| Thermal protection adjustment range                   | 312 A  |  |
| Control circuit voltage                               | 24 V AC  |  |
| Overload tripping class                               | Class 10 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to IEC 60947-6-2 Class 10 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to UL 508 |  |

## Complementary

| Function available | Manual reset   | ğ        |
|--------------------|--|----------|
|                    | Protection against phase failure and phase imbalance | 5        |
|                    | Protection against overload and short-circuit        | و .      |
|                    | Earth fault protection                               | Ė        |
| Mounting mode      | Plug-in  | <u> </u> |
|                    |  |          |

| Mounting location                      | Front side  |  |
|--|---|--|
| Control circuit voltage limits         | 2026.5 V for AC circuit 24 V in operation   |  |
| Typical current consumption            | 140 mA at 24 V AC I maximum while closing with LUB12 220 mA at 24 V AC I maximum while closing with LUB32 90 mA at 24 V AC I rms sealed with LUB32 70 mA at 24 V AC I rms sealed with LUB12 |  |
| Operating time                         | 70 ms closing with LUB32 for control circuit 35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 70 ms closing with LUB12 for control circuit         |  |
| Load type                              | 3-phase motor - cooling: self-cooled  |  |
| Tripping threshold                     | 14.2 x lr +/- 20 %  |  |
| [Ui] rated insulation voltage          | 600 V conforming to UL 508<br>690 V conforming to IEC 60947-1<br>600 V conforming to CSA C22.2 No 14  |  |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947-6-2  |  |
| Safe separation of circuit             | 400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1          |  |
| Compatibility code                     | LUCB  |  |

#### Environment

| Environment                           |  |  |  |
|---------------------------------------|--|--|--|
| Heat dissipation                      | 2 W for control circuit with LUB12<br>3 W for control circuit with LUB32   |  |  |
| Immunity to microbreaks               | 3 ms   |  |  |
| Immunity to voltage dips              | 70 % 500 ms conforming to IEC 61000-4-11   |  |  |
| Standards                             | EN 60947-6-2<br>CSA C22.2 No 14 type E<br>UL 508 type E with phase barrier<br>IEC 60947-6-2  |  |  |
| Product certifications                | UL DNV GL CSA BV LROS (Lloyds register of shipping) ASEFA CCC ATEX ABS GOST  |  |  |
| IP degree of protection               | IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 front panel and wired terminals conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 |  |  |
| Protective treatment                  | TH conforming to IEC 60068   |  |  |
| Ambient air temperature for operation | -2570 °C   |  |  |
| Ambient air temperature for storage   | -4085 °C   |  |  |
| Operating altitude                    | 2000 m   |  |  |
| Fire resistance                       | 960 °C parts supporting live components conforming to IEC 60695-2-12 650 °C conforming to IEC 60695-2-12   |  |  |
| Shock resistance                      | 15 gn power poles closed conforming to IEC 60068-2-27 10 gn power poles open conforming to IEC 60068-2-27  |  |  |
| Vibration resistance                  | 4 gn 5300 Hz power poles closed conforming to IEC 60068-2-6<br>2 gn 5300 Hz power poles open conforming to IEC 60068-2-6   |  |  |
| Resistance to electrostatic discharge | 8 kV level 4 on contact conforming to IEC 61000-4-2<br>8 kV level 3 in open air conforming to IEC 61000-4-2  |  |  |
| Non-dissipating shock wave            | 1 kV serial mode conforming to IEC 60947-6-2<br>2 kV common mode conforming to IEC 60947-6-2   |  |  |
| Resistance to radiated fields         | 10 V/m 3 conforming to IEC 61000-4-3   |  |  |
| Resistance to fast transients         | 4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4 2 kV class 3 serial link conforming to IEC 61000-4-4  |  |  |
| Immunity to radioelectric fields      | 10 V conforming to IEC 61000-4-6   |  |  |



### Offer Sustainability

| Sustainable offer status         | Green Premium product   |  |
|----------------------------------|---|--|
| RoHS (date code: YYWW)           | Compliant - since 1015 - Schneider Electric declaration of conformity |  |
|                                  | Schneider Electric declaration of conformity                          |  |
| REACh                            | Reference not containing SVHC above the threshold                     |  |
|                                  | Reference not containing SVHC above the threshold                     |  |
| Product environmental profile    | Available   |  |
|                                  | 🚰 End of life manual  |  |
| Product end of life instructions | Available   |  |
|                                  | ☑ End of life manual  |  |

### Contractual warranty

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