## Product data sheet Characteristics

## LUCB05FU

advanced control unit LUCB - class 10 - 1.25...5 A - 110...220 V DC/AC

## Main

| Main                                |  |
|-------------------------------------|--|
| Commercial Status                   | Commercialised   |
| Range of product                    | TeSys U  |
| Device short name                   | LUCB   |
| Product or component type           | Advanced control unit  |
| Product specific application        | Basic protection and advanced functions, communication   |
| Product compatibility               | ASILUFC5 ASILUFC51 LUFC00 LUFDA01 LUFDA10 LUFDH11 LUFN LUFV2 LUFW10 LULC031 LULC033 LULC07 LULC08 LULC09 LULC15  |
| Utilisation category                | AC-41<br>AC-43<br>AC-44  |
| Motor power kW                      | 2.2 kW at 500 V AC 50/60 Hz<br>1.5 kW at 400440 V AC 50/60 Hz<br>3 kW at 690 V AC 50/60 Hz   |
| Thermal protection adjustment range | 1.255 A  |
| [Uc] control circuit voltage        | 110240 V AC<br>110220 V DC   |
| Overload tripping class             | Class 10 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to UL 508 Class 10 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to IEC 60947-6-2 |
|                                     |  |

## Complementary

| Main function available        | Earth fault protection  |
|--------------------------------|---|
|                                | Manual reset  |
|                                | Protection against overload and short-circuit   |
|                                | Protection against overload and short-circuit  Protection against phase failure and phase imbalance |
|                                | Protection against phase failure and phase imbalance  |
| Mounting mode                  | Plug-in   |
| Mounting location              | Front side  |
| Control circuit voltage limits | 88264 V for AC circuit 110240 V in operation  |
|                                | 88242 V for DC circuit 110220 V in operation  |
| Typical current consumption    | 35 mA at 110220 V DC I rms sealed with LUB32  |
|                                | 35 mA at 110220 V DC I rms sealed with LUB12  |
|                                | 280 mA at 110240 V AC I maximum while closing with LUB32  |
|                                | 280 mA at 110240 V AC I maximum while closing with LUB12  |
|                                | 280 mA at 110220 V DC I maximum while closing with LUB32  |
|                                | 280 mA at 110220 V DC I maximum while closing with LUB12  |
|                                | 25 mA at 110240 V AC I rms sealed with LUB32  |
|                                | 25 mA at 110240 V AC I rms sealed with LUB12  |
| Operating time                 | 50 ms closing with LUB32 for control circuit  |
|                                | 50 ms closing with LUB12 for control circuit  |
|                                | 35 ms opening with LUB32 for control circuit  |
|                                | 35 ms opening 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 CSA C22.2 No 14 690 V conforming to IEC 60947-1 600 V conforming to UL 508   |
| [Uimp] rated impulse withstand voltage | 6 kV conforming to IEC 60947-6-2   |
| Safe separation of circuit             | 400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-1 400 V SELV between the control and auxiliary circuits conforming to IEC 60947-1 |
| Product weight                         | 0.14 kg  |
| Environment                            |  |
| Heat dissipation                       | 3 W for control circuit with LUB32<br>2 W for control circuit with LUB12   |
| Immunity to microbreaks                | 3 ms   |
| Immunity to voltage dips               | 70 % 500 ms conforming to IEC 61000-4-11   |
| Standards                              | CSA C22.2 No 14 type E UL 508 type E with phase barrier IEC 60947-6-2 EN 60947-6-2   |
| Product certifications                 | ABS ASEFA ATEX BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) UL  |
| IP degree of protection                | IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP20 front panel and wired terminals conforming to IEC 60947-1       |
| Protective treatment                   | TH conforming to IEC 60068   |
| Ambient air temperature for operation  | -2570 °C with LUCA, LUCB, LUCC, LUCD<br>-2560 °C with LUCM   |
| 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 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             | 2 kV common mode conforming to IEC 60947-6-2<br>1 kV serial 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   |
| RoHS compliance RoHS EUR status        | Compliant  |
| RoHS EUR conformity date(YYWW)         | 1015   |
| Contractual warranty                   |  |
| Period                                 | 18 months  |
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