Product datasheet

Specifications

Green Premium™

Standard control unit, TeSys Ultra, 3P, 0.35 to 1.4A, 690VAC, thermal magnetic protection, class 10, 24VDC coil

LUCA1XBL

Main

Range	TeSys
Range Of Product	TeSys Ultra
Product Name	TeSys Ultra
Device Short Name	LUCA
Product Or Component Type	Standard control unit
Device Application	Motor control Motor protection
Product Specific Application	Basic protection requirements for motor starters: overload and short-circuit
Main Function Available	Protection against overload and short-circuit Protection against phase failure and phase imbalance Manual reset Earth fault protection
Product Compatibility	Power base LUB12 Power base LUB32 Power base LUB38 Power base LUB120 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B12BL Reversing contactor breaker LU2B32BL Reversing contactor breaker LU2B38BL
[Ue] Rated Operational Voltage	690 V AC
Network Frequency	40...60 Hz
Load Type	3-phase motor - cooling: self-cooled
Utilisation Category	AC-44 AC-43 AC-41
Motor Power Kw	0.25 kW at 400...440 V AC 50/60 Hz
Rated Motor Current Adjustment Range	0.35…1.4 A
Thermal Overload Class	Class 10 - frequency limit: 40…60 Hz - temperature compensation: -25…70 °C conforming to IEC 60947-6-2 Class 10 - frequency limit: 40…60 Hz - temperature compensation: -25…70 °C conforming to UL 508
Tripping Threshold	14.2 x Ir +/- 20 %
Phase Failure Sensitivity	Yes
[Uc] Control Circuit Voltage	24 V DC

Complementary

Control Circuit Voltage Limits	20...27 V for DC circuit 24 V in operation 14.5 V for DC circuit 24 V drop-out

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	130 mA at 24 V DC I maximum while closing with LUB12 220 mA at 24 V DC I maximum while closing with LUB32 220 mA at 24 V DC I maximum while closing with LUB38 60 mA at 24 V DC I rms sealed with LUB12 80 mA at 24 V DC I rms sealed with LUB32 80 mA at 24 V DC I rms sealed with LUB38
Heat Dissipation	2 W for control circuit with LUB12 3 W for control circuit with LUB32 3 W for control circuit with LUB38
Operating Time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 35 ms opening with LUB38 for control circuit 70 ms closing with LUB12 for control circuit 70 ms closing with LUB32 for control circuit 70 ms closing with LUB38 for control circuit
Standards	EN 60947-6-2 IEC 60947-6-2 UL 60947-4-1, with phase barrier CSA C22.2 No 60947-4-1, with phase barrier
Product Certifications	CE UL CSA CCC EAC ASEFA ATEX Marine
[Ui] Rated Insulation Voltage	690 V conforming to IEC 60947-6-2 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1
[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
Fixing Mode	Plug-in (front face)
Width	45 mm
Height	66 mm
Depth	60 mm
Net Weight	0.135 kg
Compatibility Code	LUCA

Environment

Ip Degree Of Protection	IP20 front panel and wired terminals conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP40 front panel outside connection zone conforming to IEC 60947-1
Protective Treatment	TH conforming to IEC 60068
Ambient Air Temperature For Operation	-25…70 °C
Ambient Air Temperature For Storage	-40…85 °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	10 gn power poles open conforming to IEC 60068-2-27 15 gn power poles closed conforming to IEC 60068-2-27
Vibration Resistance	2 gn, 5…300 Hz, power poles open conforming to IEC 60068-2-6 4 gn, 5…300 Hz, power poles closed conforming to IEC 60068-2-6

Resistance To Electrostatic Discharge	8 kV level 3 in open air conforming to IEC 61000-4-2 8 kV level 4 on contact conforming to IEC 61000-4-2
Resistance To Radiated Fields	10 V/m 3 conforming to IEC 61000-4-3
Resistance To Fast Transients	2 kV class 3 serial link conforming to IEC 61000-4-4 4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4
Immunity To Radioelectric Fields	10 V conforming to IEC 61000-4-6
Immunity To Microbreaks	3 ms
Immunity To Voltage Dips	70 % / 500 ms conforming to IEC 61000-4-11

Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	10.100 cm
Package 1 Width	5.300 cm
Package 1 Length	8.000 cm
Package 1 Weight	117.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	23
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	3.009 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	
Halogen Free Plastic Parts Product	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant with Exemptions
China Rohs Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information