## Product data sheet Characteristics

# **LUCA1XES**

standard control unit LUCA - class 10 - 0.35...1.4 A - 48...72 V DC/AC





#### Main

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Main	
Range	TeSys
Product name	TeSys U
Device short name	LUCA
Product or component type	Standard control unit
Product specific application	Basic protection requirements for motor starters: overload and short-circuit
Product compatibility	LUFN LUFC00
Utilisation category	AC-41 AC-44 AC-43
Motor power kW	0.25 kW at 400440 V AC 50/60 Hz
Thermal protection adjustment range	0.351.4 A
[Uc] control circuit voltage	48 V AC 4872 V DC
Thermal overload 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 Class 20 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to IEC 60947-6-2 Class 20 - frequency limit: 4060 Hz - temperature compensation: -2570 °C - conforming to UL 508
Complementary	

#### Complementary

Complementary		
Main function available	Protection against phase failure and phase imbalance Manual reset Earth fault protection Protection against overload and short-circuit	
Mounting mode	Plug-in	-
Mounting location	Front side	F
Control circuit voltage limits	38.572 V for AC circuit 48 V in operation 38.593 V for DC circuit 4872 V in operation	

Typical current consumption	280 mA at 48 V AC I maximum while closing with LUB12	
	280 mA at 48 V AC I maximum while closing with LUB32	
	280 mA at 4872 V DC I maximum while closing with LUB12	
	280 mA at 4872 V DC I maximum while closing with LUB32	
	35 mA at 48 V AC I rms sealed with LUB12	
	35 mA at 4872 V DC I rms sealed with LUB12	
	45 mA at 48 V AC I rms sealed with LUB32	
	45 mA at 4872 V DC I rms sealed with LUB32	
Operating time	35 ms opening with LUB12 for control circuit	
	35 ms opening with LUB32 for control circuit	
	60 ms closing with LUB12 for control circuit	
	60 ms closing with LUB32 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	
	600 V conforming to UL 508	
	690 V conforming to IEC 60947-1	
[Uimp] rated impulse withstand voltage	e 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	
Product weight	0.135 kg	

#### **Environment**

Environment					
Heat dissipation	2 W for control circuit with LUB12 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	CSA C22.2 No 14 type E EN 60947-6-2 IEC 60947-6-2 UL 508 type E with phase barrier				
Product certifications	BV ASEFA GOST DNV UL ATEX CCC LROS (Lloyds register of shipping) CSA GL ABS				
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	-2570 °C				
Ambient air temperature for storage	-4085 °C				
Operating altitude	2000 m				
Fire resistance	650 °C conforming to IEC 60695-2-12 960 °C parts supporting live components 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 5300 Hz power poles open conforming to IEC 60068-2-6 4 gn 5300 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				
Non-dissipating shock wave	1 kV serial mode conforming to IEC 60947-6-2 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	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				

## Offer Sustainability

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

### Contractual warranty

Warranty period	18 months		
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