## **Product datasheet** Characteristics

# LUCA18FU standard control unit LUCA - class 10 - 4.5...18 A - 110...220 V DC/AC



### Main

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	LUFC00 LUFN
Utilisation category	AC-43 AC-44 AC-41
Motor power kW	15 kW at 690 V AC 50/60 Hz 9 kW at 500 V AC 50/60 Hz 7.5 kW at 400440 V AC 50/60 Hz
Thermal protection adjustment range	4.518 A
Control circuit voltage	110220 V DC 110240 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 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	
Function available	Protection against overload and short-circuit Protection against phase failure and phase imbalance Manual reset Earth fault protection
Mounting mode	Plug-in
Mounting location	Front side

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Control circuit voltage limits	<ul> <li>88242 V for DC circuit 110220 V in operation</li> <li>88264 V for AC circuit 110240 V in operation</li> <li>25 mA at 110240 V AC I rms sealed with LUB12</li> <li>25 mA at 110240 V AC I rms sealed with LUB32</li> <li>280 mA at 110220 V DC I maximum while closing with LUB12</li> <li>280 mA at 110220 V DC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB12</li> <li>280 mA at 110240 V AC I maximum while closing with LUB32</li> <li>35 mA at 110220 V DC I rms sealed with LUB12</li> </ul>			
Typical current consumption				
Operating time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 50 ms closing with LUB12 for control circuit 50 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	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

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

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		
	Product environmental		
Product end of life instructions	Available		
	🛃 End of life manual		

#### Contractual warranty

Warranty period 18 months					
	Warranty period				