Product datasheet Characteristics

LUCA12FU

standard control unit LUCA - class 10 - 3...12 A - 110...220 V DC/AC



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-44 AC-43 AC-41
Motor power kW	9 kW at 690 V AC 50/60 Hz 5.5 kW at 400440 V AC 50/60 Hz 5.5 kW at 500 V AC 50/60 Hz
Thermal protection adjustment range	312 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	Earth fault protection Protection against overload and short-circuit Manual reset Protection against phase failure and phase imbalance	
Mounting mode	Plug-in	
Mounting location	Front side	

Typical current consumption 25 mA at 110240 V AC I rms sealed with LUB12 25 mA at 1110220 V DC I maximum while closing with LUB12 280 mA at 110220 V DC I maximum while closing with LUB32 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 LUB12 280 mA at 110220 V DC I rms sealed with LUB12 35 mA at 110220 V DC I rms sealed with LUB32 Operating time 35 ms opening with LUB12 for control circuit 35 ms opening with LUB12 for control circuit 50 ms closing with LUB32 for control circuit 50 when the control circuit conforming to LU 508 690 V con	Control circuit voltage limits	88242 V for DC circuit 110220 V in operation 88264 V for AC circuit 110240 V in operation
35 ms opening with LUB32 for control circuit 50 ms closing with LUB32 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 60947-7	Typical current consumption	25 mA at 110240 V AC I rms sealed with LUB32 280 mA at 110220 V DC I maximum while closing with LUB12 280 mA at 110220 V DC I maximum while closing with LUB32 280 mA at 110240 V AC I maximum while closing with LUB12 280 mA at 110240 V AC I maximum while closing with LUB32 35 mA at 110220 V DC I rms sealed with LUB12
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 60947-7	Operating time	35 ms opening with LUB32 for control circuit 50 ms closing with LUB12 for control circuit
[Uir] 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 60947-7	Load type	3-phase motor - cooling: self-cooled
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	Tripping threshold	14.2 x lr +/- 20 %
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	[Ui] rated insulation voltage	600 V conforming to UL 508
400 V SELV between the control or auxiliary circuit and the main circuit conforming to IEC 60947-	[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947-6-2
Product weight 0.135 kg	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

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

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

Contraction warranty		
Warranty period	18 months	