Product datasheet
Characteristics

LUCA05BL
standard control unit LUCA - class 10 - 1.25...5 A - 24 V DC

Main

Range of product	TeSys U
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 ASILUFC51 ASILUFC5
Utilisation category	AC-44 AC-43 AC-41
Motor power kW	2.2 kW at 500 V AC 50/60 Hz 1.5 kW at 400...440 V AC 50/60 Hz 3 kW at 690 V AC 50/60 Hz
Thermal protection adjustment range	1.25...5 A
Control circuit voltage	24 V DC
Overload tripping class	Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C - conforming to UL 508 Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C - conforming to IEC 60947-6-2

Complementary

Function available	Manual reset Protection against phase failure and phase imbalance Earth fault protection Protection against overload and short-circuit
Mounting mode	Plug-in
Mounting location	Front side
Control circuit voltage limits	20...27 V for DC circuit 24 V in operation

Typical current consumption	60 mA at 24 V DC I rms sealed with LUB12 220 mA at 24 V DC I maximum while closing with LUB32 80 mA at 24 V DC I rms sealed with LUB32 130 mA at 24 V DC I maximum while closing with LUB12
Operating time	35 ms opening with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 70 ms closing with LUB32 for control circuit 70 ms closing with LUB12 for control circuit
Load type	3-phase motor - cooling: self-cooled
Tripping threshold	14.2 x Ir +/- 20 %
[Ui] rated insulation voltage	690 V conforming to IEC 60947-1 600 V conforming to UL 508 600 V conforming to CSA C22.2 No 14
[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	0.135 kg
Compatibility code	LUCA

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	IEC 60947-6-2 UL 508 type E with phase barrier CSA C22.2 No 14 type E EN 60947-6-2
Product certifications	CCC GOST LROS (Lloyds register of shipping) GL ATEX ASEFA DNV CSA ABS BV UL
IP degree of protection	IP20 other faces conforming to IEC 60947-1 IP20 front panel and wired terminals 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	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 5...300 Hz power poles closed conforming to IEC 60068-2-6 2 gn 5...300 Hz power poles open 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

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

Contractual warranty

Warranty period	18 months