Product data sheet
Characteristics

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



Main

Commercial Status	Commercialised
Range of product	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	ASILUFC5 ASILUFC51 LUFC00 LUFN..
Utilisation category	AC-41 AC-43 AC-44
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
[Uc] 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

Main function available	Earth fault protection Manual reset Protection against overload and short-circuit Protection against phase failure and phase imbalance
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	80 mA at 24 V DC I rms sealed with LUB32 60 mA at 24 V DC I rms sealed with LUB12 220 mA at 24 V DC I maximum while closing with LUB32 130 mA at 24 V DC I maximum while closing with LUB12
Operating time	70 ms closing with LUB32 for control circuit 70 ms closing with LUB12 for control circuit 35 ms opening with LUB32 for control circuit 35 ms opening with LUB12 for control circuit
Load type	3-phase motor - cooling: self-cooled
Tripping threshold	14.2 x Ir +/- 20 %
[Ui] rated insulation voltage	600 V conforming to CSA C22.2 No 14 690 V conforming to IEC 60947-1 600 V conforming to UL 508
[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

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Environment

Heat dissipation	3 W for control circuit with LUB32 2 W for control circuit with LUB12
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 UL 508 type E with phase barrier IEC 60947-6-2 EN 60947-6-2
Product certifications	ABS ASEFA ATEX BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) UL
IP degree of protection	IP40 front panel outside connection zone conforming to IEC 60947-1 IP20 other faces conforming to IEC 60947-1 IP20 front panel and wired terminals 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 4 on contact conforming to IEC 61000-4-2 8 kV level 3 in open air conforming to IEC 61000-4-2
Resistance to radiated fields	10 V/m 3 conforming to IEC 61000-4-3
Resistance to fast transients	4 kV class 4 all circuits except for serial link conforming to IEC 61000-4-4 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	Compliant - since 1015 - Schneider Electric declaration of conformity
REACh	Reference contains SVHC above the threshold - go to CaP for more details
Product environmental profile	Available Download Product Environmental
Product end of life instructions	Available Download End Of Life Manual