Product data sheet
Characteristics

LUCD05ES
Advanced control unit, TeSys Ultra, 1.25A to 5A, 3P motors, protection & diagnostic, class 20, coil 48-72VAC/DC

Main

Range	TeSys
Range of Product	TeSys Ultra
Product name	TeSys Ultra
Device short name	LUCD
Product or Component Type	Advanced control unit
Device Application	Motor control Motor protection
Product Specific Application	Basic protection and advanced functions, communication
Main function available	Manual reset Protection against overload and short-circuit Protection against phase failure and phase imbalance Earth fault protection
Product compatibility	Power base LUB12 Power base LUB32 Power base LUB38 Power base LUB120 Power base LUB320 Power base LUB380 Reversing contactor breaker LU2B12ES Reversing contactor breaker LU2B32ES
[Ue] rated operational voltage	690 V AC
Network frequency	40...60 Hz
Load type	3-phase motor self-cooled
Utilisation category	AC-41 AC-44 AC-43
Motor power kW	1.5 KW 400...440 V AC 50/60 Hz 2.2 KW 500 V AC 50/60 Hz 3 kW 690 V AC 50/60 Hz
Rated motor current adjustment range	1.25…5 A
Thermal overload class	Class 20 40…60 Hz -13…158 °F (-25…70 °C) IEC 60947-6-2 Class 20 40…60 Hz -13…158 °F (-25…70 °C) UL 508
Tripping threshold	14.2 x Ir +/- 20 %
Phase failure sensitivity	Yes
[Uc] control circuit voltage	48 V AC 48...72 V DC

Complementary

Control circuit voltage limits	38.5...72 V AC 48 V in operation 38.5...93 V DC 48...72 V in operation 29 V AC 48 V drop-out 29 V DC 48...72 V drop-out
Typical current consumption	280 MA 48 V AC I maximum while closing with LUB12 280 MA 48 V AC I maximum while closing with LUB32 280 MA 48 V AC I maximum while closing with LUB38 280 MA 48...72 V DC I maximum while closing with LUB12 280 MA 48...72 V DC I maximum while closing with LUB32 280 MA 48...72 V DC I maximum while closing with LUB38 35 MA 48 V AC I rms sealed with LUB12 45 MA 48 V AC I rms sealed with LUB32 45 MA 48 V AC I rms sealed with LUB38 35 MA 48...72 V DC I rms sealed with LUB12 45 MA 48...72 V DC I rms sealed with LUB32 45 mA 48...72 V DC I rms sealed with LUB38
Heat dissipation	2 W control circuit with LUB12 3 W control circuit with LUB32 3 W control circuit with LUB38
Operating time	35 ms opening with LUB12 control circuit 35 ms opening with LUB32 control circuit 35 ms opening with LUB38 control circuit 60 ms closing with LUB12 control circuit 60 ms closing with LUB32 control circuit 60 ms closing with LUB38 control circuit
Reset	Manual reset
Standards	EN 60947-6-2 IEC 60947-6-2 UL 60947-4-1, with phase barrier CSA C22.2 No 60947-4-1, with phase barrier
Product Certifications	CE[RETURN]UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]ASEFA[RETURN]ATEX[
[Ui] rated insulation voltage	690 V IEC 60947-6-2 600 V UL 60947-4-1 600 V CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	6 kV IEC 60947-6-2
Safe separation of circuit	400 V SELV between the control and auxiliary circuits IEC 60947-1 400 V SELV between the control or auxiliary circuit and the main circuit IEC 60947-1
Fixing mode	Plug-in (front face)
Width	1.77 in (45 mm)
Height	2.60 in (66 mm)
Depth	2.36 in (60 mm)
Compatibility code	LUCD

Environment

IP degree of protection	IP20 front panel and wired terminals IEC 60947-1 IP20 other faces IEC 60947-1 IP40 front panel outside connection zone IEC 60947-1
Protective treatment	TH IEC 60068
Ambient air temperature for operation	-13…158 °F (-25…70 °C)
Ambient Air Temperature for Storage	-40…185 °F (-40…85 °C)
Operating altitude	6561.68 ft (2000 m)
Fire resistance	1760 °F (960 °C) parts supporting live components IEC 60695-2-12 1202 °F (650 °C) IEC 60695-2-12
Shock resistance	10 gn power poles open IEC 60068-2-27 15 gn power poles closed IEC 60068-2-27
Vibration resistance	2 gn 5…300 Hz power poles open IEC 60068-2-6 4 gn 5…300 Hz power poles closed IEC 60068-2-6
Resistance to electrostatic discharge	8 KV 3 in open air IEC 61000-4-2 8 kV 4 on contact IEC 61000-4-2
Non-dissipating shock wave	1 KV serial mode IEC 60947-6-2 2 kV common mode IEC 60947-6-2
Resistance to radiated fields	9.14 V/m (10 V/m) 3 IEC 61000-4-3

Resistance to fast transients	2 KV 3 serial link IEC 61000-4-4 4 kV 4 all circuits except for serial link IEC 61000-4-4
Immunity to radioelectric fields	10 V IEC 61000-4-6
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % / 500 ms IEC 61000-4-11

Ordering and shipping details

Category	US10I1122397
Discount Schedule	0I11
GTIN	3389110364873
Returnability	No
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.13 in (10.5 cm)
Package 1 Width	2.17 in (5.5 cm)
Package 1 Length	3.35 in (8.5 cm)
Package 1 Weight	4.94 oz (140.0 g)

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes
Halogen content performance	Halogen free plastic parts product

Contractual warranty

Warranty	18 months