Product data sheet Characteristics

LUCA05FU

TeSys U, standard control unit, class 10, 1.25 to 5 A, 110 to 220 V DC/AC





Main Range of product TeSys U Range TeSys Product name TeSys U LUCA Device short name Product or component Standard control unit type Device application Motor control Motor protection Product specific Basic protection requirements for motor starters: application overload and short-circuit Main function available Protection against phase failure and phase imbalance Protection against overload and short-circuit Manual reset 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 LU2B12FU Reversing contactor breaker LU2B32FU Reversing contactor breaker LU2B38FU [Ue] rated operational 690 V AC voltage Network frequency 40...60 Hz Load type 3-phase motor - cooling: self-cooled Utilisation category AC-44 AC-41 AC-43 Motor power kW 1.5 KW at 400...440 V AC 50/60 Hz 2.2 KW at 500 V AC 50/60 Hz 3 kW at 690 V AC 50/60 Hz Rated motor current 1.25...5 A adjustment range Thermal overload class Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C conforming to IEC 60947-6-2 Class 10 - frequency limit: 40...60 Hz - temperature compensation: -25...70 °C conforming to UL 508 Tripping threshold 14.2 x Ir +/- 20 % Phase failure sensitivity Yes [Uc] control circuit 110...240 V AC voltage 110...220 V DC

Complementary

Complementary	
Control circuit voltage limits	88264 V for AC circuit 110240 V in operation 88242 V for DC circuit 110220 V in operation 55 V for AC circuit 110240 V drop-out 55 V for DC circuit 110220 V drop-out
Typical current consumption	280 MA at 110240 V AC I maximum while closing with LUB12 280 MA at 110240 V AC I maximum while closing with LUB32 280 MA at 110240 V AC I maximum while closing with LUB38 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 110220 V DC I maximum while closing with LUB38 35 MA at 110240 V AC I rms sealed with LUB12 25 MA at 110240 V AC I rms sealed with LUB32 25 MA at 110240 V AC I rms sealed with LUB38 35 MA at 110220 V DC I rms sealed with LUB38 35 MA at 110220 V DC I rms sealed with LUB32 25 MA at 110220 V DC I rms sealed with LUB32 25 MA at 110220 V DC I rms sealed with LUB32
Heat dissipation	2 W for control circuit with LUB12 3 W control circuit with LUB32 3 W for 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 for control circuit 50 ms closing with LUB12 for control circuit 50 ms closing with LUB32 control circuit 50 ms closing with LUB33 for control circuit
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 UL CSA CCC EAC ASEFA ATEX Marine
[Ui] rated insulation voltage	690 V conforming to IEC 60947-6-2 600 V conforming to UL 60947-4-1 600 V conforming to CSA C22.2 No 60947-4-1
[Uimp] rated impulse withstand voltage	IEC 60947-6-2 6 kV
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
Fixing mode	Plug-in (front face)
Maximum Width	1.77 in (45 mm)
Height	2.60 in (66 mm)
Depth	2.36 in (60 mm)
Net Weight	0.30 lb(US) (0.135 kg)
Compatibility code	LUCA

Environment

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 IEC 60068
Ambient air temperature for operation	-13158 °F (-2570 °C)
Ambient air temperature for storage	-40185 °F (-4085 °C)
Operating altitude	6561.68 ft (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	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
Immunity to radioelectric fields	10 V conforming to IEC 61000-4-6
Immunity to microbreaks	3 ms
Immunity to voltage dips	70 % / 500 ms conforming to IEC 61000-4-11

Ordering and shipping details

Category	22397 - TESYS U - CNTRL MOD(LUCA,LUCD)
Discount Schedule	l11
GTIN	00785901221883
Nbr. of units in pkg.	1
Package weight(Lbs)	0.26 lb(US) (0.12 kg)
Returnability	Yes
Country of origin	FR

Packing Units

Packing Units	
Unit Type of Package 1	PCE
Package 1 Height	3.46 in (8.8 cm)
Package 1 width	3.23 in (8.2 cm)
Package 1 Length	2.05 in (5.2 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	23
Package 2 Weight	6.55 lb(US) (2.97 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	368
Package 3 Weight	128.90 lb(US) (58.468 kg)
Package 3 Height	30.31 in (77 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant
Mercury free	Yes
RoHS exemption information	€Yes
China RoHS Regulation	China RoHS Declaration
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