Product data sheet Characteristics

LC3D18AE7

TeSys D - star delta starter - 3 x 3P (3 NO) - 18 A - 48 V AC coil





Main

Range	TeSys	— for s
Product name	TeSys D	of these products for
Product or component type	Star delta starter	— pro
Device short name	LC3D	—these
Contactor application	Motor control	
Utilisation category	AC-3	Suitability or reliability
Device presentation	Pre-wired	— i
Poles description	3 x 3P	
Power pole contact composition	3 x 3 NO	——ins bi
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz	<u>—</u> ; <u>i</u>
[le] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	deter—
Motor power kW	11 kW at 220/230 V AC 50/60 Hz 22 kW at 415 V AC 50/60 Hz 22 kW at 440 V AC 50/60 Hz 18.5 kW at 380/400 V AC 50/60 Hz	not to be used for determining
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	48 V AC 50/60 Hz	for and is
Auxiliary contact composition	1 NC for KM1 star contactor	itute 1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	substitute
Overvoltage category	III	a
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified	Disclaimer: This documentation is not intended as
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V	
Safety cover	Protective cover	— sir
Interlocking type	Mechanical	—
Mounting support	Plate	 Disclaim

Standards	CSA C22.2 No 14 EN 60947-4-1 IEC 60947-5-1 EN 60947-5-1 UL 508 IEC 60947-4-1
Product certifications	CSA LROS (Lloyds register of shipping) RINA BV DNV GOST GL UL CCC

Complementary

Complementary	
Connections - terminals	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1.56 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 16 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 16 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 16 mm² - cable stiffness: solid without cable end
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2
Maximum operating rate	30 cyc/h 60 °C
Starting time	30 s
Coil technology	Without built-in suppressor module
Control circuit voltage limits	Drop-out: 0.30.6 Uc at 50/60 Hz (at <60 °C) Operational: 0.81.1 Uc at 50 Hz (at <60 °C) Operational: 0.851.1 Uc at 60 Hz (at <60 °C)
Inrush power in VA	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	23 W at 50/60 Hz
Auxiliary contacts type	Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO + 1 NC Mirror contact conforming to IEC 60947-4-1 3 x 1 NC
Signalling circuit frequency	25400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contact1.5 ms on energisation between NC and NO contact
Width	144 mm
Height	124 mm
Depth	143 mm
Net weight	1.73 kg

Environment

Insulation resistance	> 10 MOhm for signalling circuit
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for storage	-6080 °C

Ambient air temperature for operation	-4070 °C at Uc
Operating altitude	3000 m without
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
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

Contractual warranty

Warranty	18 months