Product data sheet Characteristics

LC3D18AN7

TeSys; TeSys Deca, star delta starter , $3 \times 3P$ (3 NO) , 18 A , 415 V AC coil



Main Range

Range	TeSys
Product name	TeSys D
Product or component type	Star delta starter
Device short name	LC3D
Contactor application	Motor control
Utilisation category	AC-3
Device presentation	Pre-wired
Poles description	3 x 3P
Power pole contact composition	3 x 3 NO
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz
[le] rated operational current	18 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
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
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	415 V AC 50/60 Hz
Auxiliary contact composition	1 NC for KM1 star contactor
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[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
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V
Safety cover	Protective cover
Interlocking type	Mechanical
Mounting support	Plate
Standards	IEC 60947-4-1 IEC 60947-5-1 EN 60947-4-1 CSA C22.2 No 14 EN 60947-5-1 UL 508
Product certifications	GOST[RETURN]RINA[RETURN]CCC[RETURN]UL[RE (Lloyds register of shipping) [RETURN]CSA[RETURN]DNV

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 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 2 1.56 mm ² - cable stiffness: flexible without cable end
	Power circuit: screw clamp terminals 1 16 mm ² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible with cable end
	Power circuit: screw clamp terminals 1 1.56 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 1.56 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
11.2.14	124 mm
Height	
Depth	143 mm

Environment

Insulation resistance	> 10 MOhm for signalling circuit	
IP degree of protection	IP20 front face conforming to IEC 60529	
Climatic withstand	Conforming to IACS E10 Conforming to IEC 60947-1 Annex Q category D	
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 derating	
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	

Packing Units

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	18 cm	
Package 1 Width	16 cm	
Package 1 Length	23.5 cm	
Package 1 Weight	1.73 kg	

Offer Sustainability

PVC free	Yes
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
RoHS exemption information	€Yes
China RoHS Regulation	☑ China RoHS Declaration
Mercury free	Yes
Toxic heavy metal free	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
REACh free of SVHC	Yes

Contractual warranty

Warranty	18 months	