# Product data sheet Characteristics

## LC3D32AV7

TeSys D - star delta starter - 3 x 3P (3 NO) - 32 A - 400 V AC coil





#### Main

THOUSE THE STATE OF THE STATE O		
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	32 A (at <60 °C) at <= 440 V AC AC-3 for power circuit	
Motor power kW	15 kW at 220/230 V AC 50/60 Hz 25 kW at 380/400 V AC 50/60 Hz 30 kW at 415 V AC 50/60 Hz 30 kW at 440 V AC 50/60 Hz	
Control circuit type	AC at 50/60 Hz	
[Uc] control circuit voltage	400 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 32 A AC-3 at Ue <= 440 V	
Safety cover	Protective cover	
Interlocking type	Mechanical	F
Mounting support	Plate	

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

Complementary

Control circuit: screw clamp terminals 1 14 mm² - cable st Control circuit: screw clamp terminals 2 14 mm² - cable st Control circuit: screw clamp terminals 1 14 mm² - cable st Control circuit: screw clamp terminals 1 14 mm² - cable st Control circuit: screw clamp terminals 2 12.5 mm² - cable st Control circuit: screw clamp terminals 1 14 mm² - cable st Control circuit: screw clamp terminals 1 14 mm² - cable st Power circuit: screw clamp terminals 1 210 mm² - cable she Power circuit: screw clamp terminals 1 2.510 mm² - cable shower circuit: screw clamp terminals 2 2.510 mm² - cable shower circuit: screw clamp terminals 1 110 mm² - cable shower circuit: screw clamp terminals 1 1.510 mm² - cable shower circuit: screw clamp terminals 1 1.510 mm² - cable shower circuit: screw clamp terminals 1 1.510 mm² - cable shower circuit: screw clamp terminals 1 1.510 mm² - cable shower circuit: screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m - on screw clamp terminals - with screw circuit: 2.5 N.m	
Control circuit: 1.7 N.m - on screw clamp terminals - with scr Power circuit: 2.5 N.m - on screw clamp terminals - with scr Power circuit: 2.5 N.m - on screw clamp terminals - with scr Power circuit: 2.5 N.m - on screw clamp terminals - with scr Power circuit: 2.5 N.m - on screw clamp terminals - with scr Mechanical durability 15 Mcycles 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)  Hold-in power consumption in VA 7.5 VA 60 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 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 contact 1.5 ms on energisation between NC and NO contact	iffness: flexible without cable end iffness: flexible with cable end stiffness: flexible with cable end iffness: solid without cable end iffness: solid without cable end stiffness: flexible without cable end stiffness: flexible without cable end tiffness: flexible with cable end stiffness: flexible with cable end stiffness: flexible with cable end stiffness: solid without cable end
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)  Noperational: 0.851.1 Uc at 60 Hz (at <60 °C) Operational: 0.851.1 Uc at 60 Hz (at <60 °C)  To VA 60 Hz cos phi 0.75 (at 20 °C) To VA 50 Hz cos phi 0.3 (at 20 °C) To VA 50 Hz cos phi 0.3 (at 20 °C) To 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 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 contact 1.5 ms on energisation between NC and NO contact	rewdriver Philips No 2 ewdriver flat Ø 6 mm
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) To VA 50 Hz cos phi 0.3 (at 20 °C) To VA 50 Hz cos phi 0.75 (at 20 °C) To VA 5	
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) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 70 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 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 contact 1.5 ms on energisation between NC and NO contact	
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: 0.81.1 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) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 70 VA 50 Hz cos phi 0.3 (at 20 °C) 80 Heat dissipation  23 W at 50/60 Hz  Auxiliary contacts type  Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO 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 contact 1.5 ms on energisation between NC and NO contact	
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) 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 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 contact 1.5 ms on energisation between NC and NO contact	
To 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  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 contact  1.5 ms on energisation between NC and NO contact	
T 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 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 contact 1.5 ms on energisation between NC and NO contact	
Auxiliary contacts type  Mechanically linked conforming to IEC 60947-5-1 3 x 1 NO 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 contact 1.5 ms on energisation between NC and NO contact	
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 contact 1.5 ms on energisation between NC and NO contact	
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 contact 1.5 ms on energisation between NC and NO contact	+ 1 NC
Minimum switching voltage  17 V for signalling circuit  Non-overlap time  1.5 ms on de-energisation between NC and NO contact  1.5 ms on energisation between NC and NO contact	
Non-overlap time  1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact	
1.5 ms on energisation between NC and NO contact	
Width 166 mm	
Height 124 mm	
Depth 149 mm	
Net weight 2.03 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 closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms

### Offer Sustainability

WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information
Environmental Disclosure	Product Environmental Profile
China RoHS Regulation	China RoHS declaration
RoHS exemption information	Yes
Mercury free	Yes
Toxic heavy metal free	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
REACh free of SVHC	Yes
REACh Regulation	REACh Declaration
Sustainable offer status	Green Premium product

#### Contractual warranty

<u></u>		
Warranty	18 months	