



Main

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 25...400 Hz
[Ie] rated operational current	80 A (at <60 °C) at ≤ 440 V AC AC-3 for power circuit
Motor power kW	37 kW at 220/230 V AC 50/60 Hz 75 kW at 380/400 V AC 50/60 Hz 75 kW at 415 V AC 50/60 Hz 75 kW at 440 V AC 50/60 Hz
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	110 V AC 50/60 Hz
Auxiliary contact composition	1 NC for KM2 line contactor 1 NO for KM3 delta contactor
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 1000 V conforming to IEC 60947-1
Electrical durability	10 Mcycles 80 A AC-3 at Ue ≤ 440 V
Interlocking type	Mechanical

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

Complementary

Connections - terminals	Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1...4 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 4...25 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 4...16 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 4...50 mm ² - cable stiffness: solid without cable end Power circuit: screw clamp terminals 2 4...25 mm ² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 1 1...2.5 mm ² - cable stiffness: flexible with cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on screw clamp terminals - with screwdriver flat Ø 6...8 mm
Mechanical durability	4 Mcycles
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: 0.3...0.6 U _c at 50/60 Hz (at <55 °C) Operational: 0.8...1.1 U _c at 50 Hz (at <55 °C) Operational: 0.85...1.1 U _c at 60 Hz (at <55 °C)
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	4...5 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	25...400 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
Width	311 mm
Height	143 mm
Depth	183 mm
Net weight	5.4 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	-60...80 °C
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Operating altitude	3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open: 2 Gn, 5...300 Hz Shocks contactor open: 8 Gn for 11 ms Vibrations contactor closed: 3 Gn, 5...300 Hz Shocks contactor closed: 10 Gn for 11 ms

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	6.53 kg
Package 1 Height	26.5 cm
Package 1 width	22.5 cm
Package 1 Length	37.5 cm

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 Pro-active China RoHS declaration (out of China RoHS legal scope)
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

Contractual warranty

Warranty	18 months
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