Product data sheet Characteristics

LC2D18M7 TeSys D reversing contactor - 3P(3 NO) - AC-3 -<= 440 V 18 A - 220 V AC coil





Main

2- 4- 00 4- 00	-	
Main		
Range of product	TeSys D	
Range	TeSys	
Product name	TeSys D	
Product or component type	Reversing contactor	
Device short name	LC2D	
Contactor application	Resistive load Motor control	
Utilisation category	AC-3 AC-1	
Device presentation	Preassembled with reversing power busbar	
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25400 Hz for power circuit	
[le] rated operational current	18 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 32 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit	
Motor power kW	10 kW at 500 V AC 50/60 Hz 10 kW at 660690 V AC 50/60 Hz 4 kW at 220230 V AC 50/60 Hz 7.5 kW at 380400 V AC 50/60 Hz 9 kW at 415440 V AC 50/60 Hz	
Motor power hp	1 hp at 115 V AC 50/60 Hz for 1 phase motors 3 hp at 230/240 V AC 50/60 Hz for 1 phase motors 5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 230/240 V AC 50/60 Hz for 3 phases motors 10 hp at 460/480 V AC 50/60 Hz for 3 phases motors 15 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Control circuit type	AC 50/60 Hz	
[Uc] control circuit voltage	220 V AC 50/60 Hz	
Auxiliary contact composition	1 NO + 1 NC	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	



Overvoltage category	III
[Ith] conventional free air thermal current	32 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	300 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	145 A <= 40 °C 10 s power circuit 240 A <= 40 °C 1 s power circuit 40 A <= 40 °C 10 min power circuit 84 A <= 40 °C 1 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	35 A gG at <= 690 V coordination type 2 for power circuit 50 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2.5 mOhm at 50 Hz - Ith 32 A for power circuit
[Ui] rated insulation voltage	 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1.65 Mcycles 18 A AC-3 at Ue <= 440 V 1 Mcycles 32 A AC-1 at Ue <= 440 V
Power dissipation per pole	0.8 W AC-3 2.5 W AC-1
Protective cover	With
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	RINA GL LROS (Lloyds register of shipping) CCC GOST CSA UL DNV BV
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 12.5 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable(s) 16 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 14 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 1 cable(s) 1.56 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 14 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminals 2 cable(s) 1.56 mm ² - 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

Operating time	419 ms opening 1222 ms closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	15 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.30.6 Uc drop-out at 60 °C, AC 50/60 Hz 0.81.1 Uc operational at 60 °C, AC 50 Hz 0.851.1 Uc operational at 60 °C, AC 60 Hz
Inrush power in VA	70 VA at 20 °C (cos φ 0.75) 60 Hz 70 VA at 20 °C (cos φ 0.75) 50 Hz
Hold-in power consumption in VA	7.5 VA at 20 °C (cos φ 0.3) 60 Hz 7 VA at 20 °C (cos φ 0.3) 50 Hz
Heat dissipation	23 W at 50/60 Hz
Auxiliary contacts type	Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1 Type mirror contact (1 NC) conforming to IEC 60947-4-1
Signalling circuit frequency	25400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V 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)
Insulation resistance	> 10 MOhm for signalling circuit
Power range	711 kW 380440 V 3 phases 711 kW 480500 V 3 phases 46 kW 200240 V 3 phases
Motor starter type	Reversing contactor
Contactor coil voltage	220 V AC standard

Environment

ID de sus e ef austaction	
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 operation	-2060 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without derating in temperature
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
Height	77 mm
Width	90 mm
Depth	86 mm
Product weight	0.707 kg

Offer Sustainability

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Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0627 - Schneider Electric declaration of conformity
	Schneider Electric declaration of conformity

REACh	Reference not containing SVHC above the threshold
	Reference not containing SVHC above the threshold
Product environmental profile	Available
	Product environmental
Product end of life instructions	Available
	End of life manual

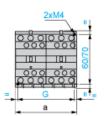
Warranty period

Product data sheet Dimensions Drawings

LC2D18M7

Dimensions

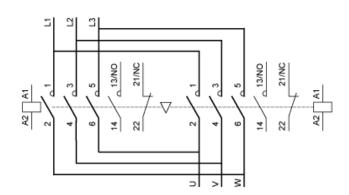




LC2 or 2 x LC1	а	b	c ⁽¹⁾	e1	e2	G
D09 to D18 (AC)	90	77	86	4	1.5	80
D093 to D123 (AC)	90	99	86	-	-	80
D09 to D18 (DC)	90	77	95	4	1.5	80
D093 to D123 (DC)	90	99	95	-	-	80
D25 to D38 (AC)	90	85	92	9	5	80
D183 to D383 (AC)	90	99	92	-	-	80
D25 to D32 (DC)	90	85	101	9	5	80
D183 to D383 (DC)	90	99	101	-	-	80
e1 and e2: including cabling.						
(1) With safety cover, without add-on block.						

Product data sheet Connections and Schema

Wiring



ICU (kA)	Breaker	Contactor (*)	
15			
		15	15

Non contractual pictures.

Type 1 coordination requires that in a short-circuit condition, the contactor or starter must not present any danger to personnel or installations and must not be able to resume operation without repair or the replacement of parts.