B220089

Dreieretningv. 18A 230VAC

Partnumber: LC2D18P7

Wholesalernumber: 4176680

EAN 13 code: 3389110386639

TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 18 A - 230 V AC coil

Technical information

Usage / Application

contactor application	motor control
	resistive load

Compatibility

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

Functional

auxiliary contact composition	1 NO + 1 NC
interlocking type	mechanical
operating rate	3600 cyc/h at <= 60 °C
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
non-overlap time	1.5 ms on de-energisation (between NC and NO contact)
	1.5 ms on energisation (between NC and NO contact)

Electrical

utilisation category	AC-1
	AC-3
poles description	3P
pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V DC for power circuit
	<= 690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	32 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
	18 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit
motor power kW	10 kW at 500 V AC 50/60 Hz
	10 kW at 660...690 V AC 50/60 Hz
	4 kW at 220...230 V AC 50/60 Hz
	7.5 kW at 380...400 V AC 50/60 Hz
	9 kW at 415...440 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
control circuit voltage	230 V AC 50/60 Hz
[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
[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
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
power dissipation per pole	0.8 W AC-3
	2.5 W AC-1
coil technology	without built-in suppressor module
control circuit voltage limits	0.3...0.6 Uc at 60 °C drop-out 50/60 Hz
	0.8...1.1 Uc at 60 °C operational 50 Hz
	0.85...1.1 Uc at 60 °C operational 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
signalling circuit frequency	25...400 Hz
minimum switching current	5 mA for signalling circuit
minimum switching voltage	17 V for signalling circuit
insulation resistance	> 10 MOhm for signalling circuit

Performance

rated breaking capacity	300 A at 440 V for power circuit conforming to IEC 60947
operating time	4...19 ms opening
	12...22 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 cycles

Connections

connections - terminals	control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end power circuit: screw clamp terminals 1 cable(s) 1.5...6 mm² - cable stiffness: flexible - without cable end power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm² - cable stiffness: flexible - without cable end power circuit: screw clamp terminals 1 cable(s) 1...6 mm² - cable stiffness: flexible - with cable end power circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end power circuit: screw clamp terminals 1 cable(s) 1.5...6 mm² - cable stiffness: solid - without cable end power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm² - cable stiffness: solid - without cable end

Installation

mounting support	plate
	rail

Product identification

range of product	TeSys D
product or component type	reversing contactor

device short name	LC2D
device presentation	preassembled with reversing power busbar

Physical characteristics

protective cover	with
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
mechanical robustness	vibrations contactor open 2 Gn, 5...300 Hz vibrations contactor closed 4 Gn, 5...300 Hz shocks contactor open 10 Gn for 11 ms shocks contactor closed 15 Gn for 11 ms
height	77 mm mm
width	90 mm mm
depth	86 mm mm
product weight	0.707 kg kg

Environment

heat dissipation	2...3 W at 50/60 Hz
IP degree of protection	IP2x front face conforming to IEC 60529
protective treatment	TH conforming to IEC 60068-2-30
pollution degree	3
ambient air temperature for operation	-5…60 °C °C
ambient air temperature for storage	-60…80 °C °C
permissible ambient air temperature around the device	-40…70 °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

Certifications and standards

standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 n°14
product certifications	LROS BV CCC CSA DNV GL GOST RINA UL

Supplier information

Supplier: Schneider Electric Norge AS
Adress: Deliveien 10, 1540 Vestby
Fax: + 47 64 98 57 01
Phone: +47 64 98 56 00
Web: http://www.schneider-electric.no
e-Mail: kundesenter@no.schneider-electric.com