# Product data sheet Characteristics

# LC2DT20B7

TeSys D changeover contactor - 4P(4 NO) - AC-1 - <= 440 V 20 A - 24 V AC coil





## Main

Main	
Range	TeSys
Product name	TeSys D
Product or component type	Changeover contactor
Device short name	LC2D
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preassembled, with prewired power connections
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] rated operational current	20 A (at <60 $^{\circ}$ C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
[Uc] control circuit voltage	24 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 20 A (at 60 °C) for power circuit
Irms rated making capacity	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	30 A 40 °C - 10 min for power circuit 61 A 40 °C - 1 min for power circuit 105 A 40 °C - 10 s for power circuit 210 A 40 °C - 1 s for power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	25 A gG at <= 690 V coordination type 1 for power circuit 20 A gG at <= 690 V coordination type 2 for power circuit 10 A gG signalling circuit IEC 60947-5-1
Average impedance	2.5 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Power dissipation per pole	1.56 W AC-1
Front cover	With
Interlocking type	Mechanical
Mounting support	Plate Rail
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	CCC CSA RINA UL LROS (Lloyds register of shipping) DNV GL BV GOST
Connections - terminals	Power circuit: screw clamp terminals 1 cable(s) 1 4 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1 4 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 1 4 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1 2.5 mm²flexible with cable end Power circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid Power circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid Control circuit screw clamp terminals 1 0.00 0.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.00 0.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.00 0.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.00 0.00 in² (12.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.00 0.01 in² (14 mm²)solid Control circuit screw clamp terminals 2 0.00 0.01 in² (14 mm²)solid
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 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2
Operating time	1222 ms closing 419 ms opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	15 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.30.6 Uc -40158 °F (-4070 °C) drop-out AC 50/60 Hz 0.81.1 Uc -40140 °F (-4060 °C) operational AC 50 Hz 0.851.1 Uc -40140 °F (-4060 °C) operational AC 60 Hz 11.1 Uc 140158 °F (6070 °C) operational AC 50/60 Hz	
Inrush power in VA	70 VA 60 Hz 0.75 68 °F (20 °C)) 70 VA 50 Hz 0.75 68 °F (20 °C))	
Hold-in power consumption in VA	7.5 VA 60 Hz 0.3 68 °F (20 °C)) 7 VA 50 Hz 0.3 68 °F (20 °C))	
Heat dissipation	23 W 50/60 Hz	
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1	
Signalling circuit frequency	25400 Hz	
Minimum switching current	5 mA signalling circuit	
Minimum switching voltage	17 V signalling circuit	
Non-overlap time	<ul><li>1.5 Ms on de-energisation between NC and NO contact</li><li>1.5 ms on energisation between NC and NO contact</li></ul>	
Insulation resistance	> 10 MOhm signalling circuit	
Contact compatibility	M6	
Compatibility code	LC2D	

#### Environment

IP degree of protection	IP20 front face IEC 60529	
Protective treatment	TH IEC 60068-2-30	
Pollution degree	3	
Ambient air temperature for operation	-40140 °F (-4060 °C) 140158 °F (6070 °C) with derating	
Ambient air temperature for storage	-76176 °F (-6080 °C)	
Operating altitude	09842.52 ft (03000 m)	
Fire resistance	1562 °F (850 °C) IEC 60695-2-1	
Flame retardance	V1 UL 94	
Mechanical robustness	Vibrations contactor open2 Gn, 5300 Hz Vibrations contactor closed4 Gn, 5300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms	
Height	3.35 in (85 mm)	
Maximum Width	3.54 in (90 mm)	
Depth	3.54 in (90 mm)	
Net Weight	1.61 lb(US) (0.73 kg)	

# Ordering and shipping details

Category	22354 - CTR,TESYS D,OPEN,9-38A AC
Discount Schedule	112
GTIN	00785901610656
Nbr. of units in pkg.	1
Package weight(Lbs)	1.9 lb(US) (0.86 kg)
Returnability	No
Country of origin	FR

# Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	3.34 in (8.48 cm)	
Package 1 width	3.54 in (9 cm)	
Package 1 Length	3.62 in (9.2 cm)	

## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₫Yes
China RoHS Regulation	☑ China RoHS Declaration
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