

# Product data sheet

Specifications



## TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 <= 440 V 60 A 220 V AC 50/60 Hz coil

LC1D40008M7

### Main

Range	TeSys
Product name	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	AC at 50/60 Hz
[Uc] control circuit voltage	220 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	60 A (at 60 °C) for power circuit
Irms rated making capacity	800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit 72 A 40 °C - 10 min for power circuit 165 A 40 °C - 1 min for power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1
Front cover	Without
Mounting support	Plate

<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
<b>Product certifications</b>	RINA GL UL GOST BV LROS (Lloyds register of shipping) DNV CCC CSA
<b>Connections - terminals</b>	Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> solid without cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1...35 mm <sup>2</sup> solid without cable end Power circuit: screw clamp terminals 2 cable(s) 1...25 mm <sup>2</sup> solid without cable end
<b>Tightening torque</b>	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 Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm Power circuit: 5 N.m - on screw clamp terminals - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm
<b>Operating time</b>	4...19 ms opening 12...26 ms closing
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	6 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h 60 °C

## Complementary

<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 U <sub>c</sub> (-40...70 °C):drop-out AC 50/60 Hz 0.8...1.1 U <sub>c</sub> (-40...60 °C):operational AC 50 Hz 0.85...1.1 U <sub>c</sub> (-40...60 °C):operational AC 60 Hz 1...1.1 U <sub>c</sub> (60...70 °C):operational AC 50/60 Hz
<b>Inrush power in VA</b>	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
<b>Hold-in power consumption in VA</b>	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
<b>Heat dissipation</b>	4...5 W at 50/60 Hz

## Environment

<b>IP degree of protection</b>	IP20 front face conforming to IEC 60529
<b>Protective treatment</b>	TH conforming to IEC 60068-2-30
<b>Pollution degree</b>	3
<b>Ambient air temperature for operation</b>	-40...60 °C 60...70 °C with derating
<b>Ambient air temperature for storage</b>	-60...80 °C
<b>Operating altitude</b>	0...3000 m
<b>Fire resistance</b>	850 °C conforming to IEC 60695-2-1
<b>Mechanical robustness</b>	Vibrations contactor open: 2 Gn, 5...300 Hz Vibrations contactor closed: 4 Gn, 5...300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 10 Gn for 11 ms

Height	127 mm
Width	85 mm
Depth	125 mm
Net weight	1.44 kg

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	1.47 kg
Package 1 Height	11.2 cm
Package 1 width	13.5 cm
Package 1 Length	15.2 cm
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Weight	7.605 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm
Package 3 Height	73.5 cm

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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