# Product datasheet Characteristics

# LC1D258GD

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 40 A - 125 V DC coil



Price\*: 146.86 GBP



#### Main

		4
Range	TeSys	
Product name	TeSys D	- 5
Product or component type	Contactor	
Device short name	LC1D	, .
Contactor 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 25400 Hz Power circuit: <= 300 V DC	is not to be used for determining suitability or of these products f
[le] rated operational current	40 A (at <60 °C) at <= 440 V AC AC-1 for power circuit	2
Control circuit type	DC standard	9
[Uc] control circuit voltage	125 V DC	
Auxiliary contact composition	1 NO + 1 NC	-
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	
Overvoltage category	III	<u> </u>
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 40 A (at 60 °C) for power circuit	‡ ‡ †
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947	national services and services are services and services and services and services and services are services and services are services and services and services are services and services
Rated breaking capacity	450 A at 440 V for power circuit conforming to IEC 60947	<u>.</u>
[lcw] rated short-time withstand current	240 A 40 °C - 10 s for power circuit 380 A 40 °C - 1 s for power circuit 50 A 40 °C - 10 min for power circuit 120 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit	isrlasinas This documentation is not intended as a suffertitute for and
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1	

	63 A gG at <= 690 V coordination type 1 for power circuit 40 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Electrical durability	1.4 Mcycles 40 A AC-1 at Ue <= 440 V
Power dissipation per pole	3.2 W AC-1
Safety cover	With
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	DNV CCC CSA UL GOST BV LROS (Lloyds register of shipping) GL RINA
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible without cable end Power circuit: connector 1 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 2 cable(s) 2.510 mm²flexible with cable end Power circuit: connector 1 cable(s) 2.516 mm²solid without cable end Power circuit: connector 2 cable(s) 2.516 mm²solid without cable end
Tightening torque	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: 1.8 N.m - on connector - with screwdriver flat Ø 6 mm Power circuit: 1.8 N.m - on connector - with screwdriver Philips No 2
Operating time	53.5572.45 ms closing 1624 ms opening
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	30 Mcycles
Maximum operating rate	3600 cyc/h 60 °C
Complementary	
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	Drop-out: 0.10.25 Uc DC (at 60 °C) Operational: 0.71.25 Uc DC (at 60 °C)
Time constant	28 ms
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W at 20 °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
Signalling circuit frequency	25400 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
Insulation resistance	> 10 MOhm for signalling circuit

## Environment

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	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °C at Uc
Operating altitude	3000 m without
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 closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms
Height	91 mm
Width	45 mm
Depth	107 mm
Product weight	0.585 kg

## 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
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

#### Contractual warranty

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Warranty	18 months