





Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LP1D
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 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	60 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
[Uc] control circuit voltage	12 V DC
Coil type	DC standard
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	60 A 140 °F (60 °C) power circuit
Irms rated making capacity	800 A 440 V power circuit IEC 60947
Rated breaking capacity	800 A 440 V power circuit IEC 60947
[Icw] rated short-time withstand current	72 A 104 °F (40 °C) - 10 min power circuit 165 A 104 °F (40 °C) - 1 min power circuit 320 A 104 °F (40 °C) - 10 s power circuit 720 A 104 °F (40 °C) - 1 s power circuit
Associated fuse rating	80 A gG <= 690 V type 1 power circuit 80 A gG <= 690 V type 2 power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL
Electrical durability	1.4 Mcycles 60 A AC-1 <= 440 V
Power dissipation per pole	5.4 W AC-1
Front cover	Without
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	BV CCC CSA DNV EAC GL LROS (Lloyds register of shipping) UL

Connections - terminals	Power circuit screw clamp terminals 1 0.00...0.05 in ² (1...35 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.04 in ² (1...25 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.05 in ² (1...35 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.04 in ² (1...25 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.05 in ² (1...35 mm ²)solid Power circuit screw clamp terminals 2 0.00...0.04 in ² (1...25 mm ²)solid Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid
Tightening torque	Power circuit 70.81 lbf.in (8 N.m) screw clamp terminals 0.04...0.05 in ² (25...35 mm ²) hexagonal 0.16 in (4 mm) 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 Power circuit 44.25 lbf.in (5 N.m) screw clamp terminals 0.00...0.04 in ² (1...25 mm ²) hexagonal 0.16 in (4 mm)
Operating time	4...19 ms opening 12...26 ms closing
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	10 Mcycles
Maximum operating rate	3600 cyc/h 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC 0.85...1.1 Uc -40...131 °F (-40...55 °C) operational DC 1...1.1 Uc 131...158 °F (55...70 °C) operational DC
Time constant	75 ms
Inrush power in W	22 W 68 °F (20 °C)
Hold-in power consumption in W	22 W 68 °F (20 °C)
Contact compatibility	M3
Compatibility code	LP1D

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	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient air temperature for storage	-76...176 °F (-60...80 °C)
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms

Height	5.00 in (127 mm)
Maximum Width	3.35 in (85 mm)
Depth	7.17 in (182 mm)
Net Weight	4.87 lb(US) (2.21 kg)

Ordering and shipping details

Category	22358 - CTR, TESYS D, OPEN, 40-65A DC
Discount Schedule	I12
GTIN	03389110200218
Nbr. of units in pkg.	1
Package weight(Lbs)	4.87 lb(US) (2.21 kg)
Returnability	No
Country of origin	CZ

Packing Units

Package 1 Height	1.950 dm
Package 1 width	1.000 dm
Package 1 Length	1.400 dm

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 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.
PVC free	Yes

Contractual warranty

Warranty	18 months
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