Product data sheet
Characteristics

LP1D40008BD
Contactor, TeSys Deca, 4P(2NO+2NC),AC-1, <=440V, 60A,24V DC coil, screw clamp terminal



Main

Range	TeSys
Range of product	TeSys Deca Advanced
Product or component type	Contactor
Device short name	LP1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25...400 Hz
[Ie] rated operational current	60 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Compatibility code	LP1D
Pole contact composition	2 NO + 2 NC
Protective cover	With
[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	72 A 40 °C - 10 min for power circuit 165 A 40 °C - 1 min for power circuit 320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s 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
Power dissipation per pole	5.4 W AC-1
[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
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 KV conforming to IEC 60947
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	10 Mcycles
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Control circuit type	DC DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor

Control circuit voltage limits	0.1...0.3 Uc (-40…70 °C):drop-out DC 0.85...1.1 Uc (-40…55 °C):operational DC 1...1.1 Uc (55…70 °C):operational DC
Inrush power in W	22 W (at 20 °C)
Hold-in power consumption in W	22 W at 20 °C
Operating time	4...19 ms opening 12...26 ms closing
Time constant	75 Ms
Maximum operating rate	3600 Cyc/H at 60 °C
Connections - terminals	Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 2.5…16 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 2.5…10 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 2.5…25 mm² - cable stiffness: solid Power circuit: screw clamp terminals 2 2.5…16 mm² - cable stiffness: solid Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid
Tightening torque	Power circuit: 8 N.m - on screw clamp terminals - cable 25…35 mm² hexagonal screw head 4 mm 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: 5 N.m - on screw clamp terminals - cable 1…25 mm² hexagonal screw head 4 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
Mounting support	Plate Rail

Environment

Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 60947-4-1
Product certifications	UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]UKCA[RETURN]CB[RETURN]DNV-G
IP degree of protection	IP20 front face conforming to IEC 60529
Permissible ambient air temperature around the device	-40…60 °C 60…70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	127 Mm
Width	85 Mm
Depth	182 Mm
Net weight	2.21 Kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.0 Cm
Package 1 Width	16.2 Cm
Package 1 Length	21.8 Cm
Package 1 Weight	2.265 Kg
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	15 Cm
Package 2 Width	30 Cm

Package 2 Length	40 Cm
Package 2 Weight	4.828 Kg

Offer Sustainability

Recyclability potential, in %	63
Total lifecycle Carbon footprint	186 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	18.77023424
Carbon footprint of the manufacturing phase [A1 to A3]	19 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.673044542
Carbon footprint of the distribution phase [A4]	0.7 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.097827601
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	160.3690928
REACh free of SVHC	Yes
Carbon footprint of the use phase [B2, B3, B4, B6]	160 kg CO2 eq.
Toxic heavy metal free	Yes
Mercury free	Yes
Sustainable packaging	Yes
Carbon footprint of the end-of-life phase [C1 to C4]	5.845112144
Carbon footprint of the end-of-life phase [C1 to C4]	6 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	186
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
REACh Regulation	Free of Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony tr
PVC free	Yes
End of life manual availability	No need of specific recycling operations
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised