

Product data sheet Characteristics

LP1D80004BW

TeSys, Contactor, TeSys Deca, 4P(4NO), AC-1, 440V, 125A, 24V DC coil





Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LP1D
Contactor application	Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 55 A (at <60 °C) at <= 400 V AC AC-4 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Compatibility code	LP1D
Pole contact composition	4 NO
Protective cover	Without
[Ith] conventional free air thermal current	125 A (at 60 °C) for power circuit
Irms rated making capacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[lcw] rated short-time withstand current	135 A 40 °C - 10 min for power circuit 320 A 40 °C - 1 min for power circuit 640 A 40 °C - 10 s for power circuit 990 A 40 °C - 1 s for power circuit
Associated fuse rating	200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power dissipation per pole	12.5 W AC-1
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified[RETURN]Power circuit: 600 V UL certified[RETURN]Power circuit: 1000 V conforming to IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 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	4 Mcycles

Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
Control circuit type	DC wide range
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.10.3 Uc (-4070 °C):drop-out DC 0.751.2 Uc (-4055 °C):operational DC 11.2 Uc (5570 °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	620 ms opening 2035 ms closing
Time constant	75 ms
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid Power circuit: connector 1 450 mm² - cable stiffness: flexible without cable end Power circuit: connector 2 425 mm² - cable stiffness: flexible with cable end Power circuit: connector 1 450 mm² - cable stiffness: flexible with cable end Power circuit: connector 2 416 mm² - cable stiffness: solid Power circuit: connector 1 450 mm² - cable stiffness: solid Control circuit: screw clamp terminals 1 12.5 mm² - cable stiffness: flexible with cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on lugs-ring terminals - with screwdriver pozidriv No 2
Mounting support	Rail Plate
Environment	
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[RETURN]CCC[RETURN]CSA[RETURN]DNV[RETURN]EAC[RETURN]GL[RETURN]LRC (Lloyds register of shipping)[RETURN]UL[RETURN]UKCA
IP degree of protection	IP20 front face conforming to IEC 60529
Permissible ambient air temperature around the device	-4060 °C 6070 °C with derating
Operating altitude	03000 m
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 (3 Gn, 5300 Hz) Shocks contactor open (8 Gn for 11 ms) Shocks contactor closed (10 Gn for 11 ms)
Height	127 mm

127 mm

96 mm

181 mm

2.685 kg

Life Is On

Height

Width

Depth

2

Net weight

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	11.000 cm
Package 1 Width	14.000 cm
Package 1 Length	20.500 cm
Package 1 Weight	2.677 kg
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	5.604 kg
Unit Type of Package 3	P06
Number of Units in Package 3	32
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	97.664 kg

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant EEU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	China RoHS Declaration
RoHS exemption information	€Yes
Environmental Disclosure	Product Environmental Profile
Circularity Profile	No need of specific recycling operations
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

Contractual warranty		
Warranty	18 months	