

NAC3F-TRUE1-S

The powerCON TRUE1 is a locking true mains connector for harsh and demanding applications. It replaces appliance couplers wherever a very rugged solution in combination with a locking device is needed in order to guarantee a safe power connection.

The powerCON TRUE1 is a connector series with breaking capacity (CBC), i.e. it can be connected or disconnected under load or live.



Features and Benefits

- ✓ Heavy duty sealed power connector for harsh and demanding environment
- ✓ Uses high impact UV-resistant materials
- ✓ Lockable single phase connector
- ✓ Extremely robust and reliable
- ✓ ENEC and VDE certified according to IEC 60320-1 and EN IEC 60320-1
- ✓ UL and CSA Certified According to UL 60320-1 and CSA 22.2 No. 60320-1
- ✓ UL Certified According to UL 498
- ✓ IP65 and IP67 (mated or with closed cap)
- ✓ True mains connector with breaking capacity (CBC)
- ✓ Easy and reliable twist lock system
- ✓ Unique NEUTRIK locking bushing and strain relief for cable diameters 6 mm to 12 mm (0.23 – 0.47 inches)

Product related questions and answers

Question	Answer
What is the different between the -S and -L Version?	Both versions are fully certified according to EN IEC 60320-1, UL 60320-1 and CSA 22.2 No. 60320-1. The S-version is certified other Cables then the L-version, cables as follows: S-Version: H05VV-F 3G1.5mm², H05VV-F 3G2.5mm², H07RN-F 3G 1.5 mm² and SJOOW 14/3 AWG. L-Version: H07RN-F 3G 2.5 mm², SOOW 16/3, SJOOW 16/3 and SJOOW 14/3
When is the IEC 60799 relevant?	This standard applies for "Cord Sets And Interconnection Cord Sets" and therefore covers cables to the mains and cables acting as power interconnections.
Why is the bushing loose in one direction?	This is to meet the standards requirement to prevent disassembling by hand. In order to open the cable entry a special tool will be required.

Technical Information

Product	
Title	NAC3F-TRUE1-S
Product family	powerCON® TRUE1

Electrical

Contact resistance	$\leq 2 \text{ m}\Omega$
Dielectric strength	4 kVdc / 2.8 kVac
Insulation resistance	$>0.1 \text{ G}\Omega$ (after damp and heat test IEC 68-2-30)
Number of electrical contacts	2 + PE
Rating Europe	16 A / 250 V AC according to EN IEC 60320-1
Rating America	20 A / 250 V AC according to UL 60320-1 20 A / 250 V AC according to CSA C22.2 No. 60320-1 20A/ 250 V AC according to UL 498

Mechanical

Cable O.D.	6 - 12 mm (0.23 – 0.47 inches)
Lifetime	> 5000 mating cycles
Wiresize (mm ²)	1.5 – 2.5mm ²
Wiresize (AWG)	14 AWG

Material

Contact plating	2 μm Ag
Locking element	Polyamide (PA 66)
Contacts	Copper Alloy
Insert	Polyamide (PA 66)
Shell	Polyamide (PA 66)
Strain relief	Polyketon

Environmental	
Flammability	UL 94 V-0
Protection class	IP 65 / 67 (mated or with closed caps)
UV resistance	F1 rated material withstands UV exposure
Temperature range	-30°C to +80°C according to IEC 61984 -5°C to +40°C according to IEC 60320-1