



## 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? | <p>Both versions are fully certified according to EN IEC 60320-1, UL 60320-1 and CSA 22.2 No. 60320-1.</p> <p>The S-version is certified other Cables then the L-version, cables as follows:</p> <p>S-Version: H05VV-F 3G1.5mm<sup>2</sup>, H05VV-F 3G2.5mm<sup>2</sup>, H07RN-F 3G 1.5 mm<sup>2</sup> and SJOOW 14/3 AWG.</p> <p>L-Version: H07RN-F 3G 2.5 mm<sup>2</sup>, SOOW 16/3, SJOOW 16/3 and SJOOW 14/3</p> |
| 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

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

**Elektrisch**

|                               |                                                                                                                                    |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 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<br>20 A / 250 V AC according to CSA C22.2 No. 60320-1<br>20A/ 250 V AC according to UL 498 |

**Mechanische Daten**

|                             |                                |
|-----------------------------|--------------------------------|
| Cable O.D.                  | 6 - 12 mm (0.23 – 0.47 inches) |
| Lifetime                    | > 5000 mating cycles           |
| Wiresize (mm <sup>2</sup> ) | 1.0 – 2.5mm <sup>2</sup>       |
| Wiresize (AWG)              | 14 AWG                         |

**Material**

|                 |                    |
|-----------------|--------------------|
| Contact plating | 2 $\mu\text{m}$ Ag |
| Locking element | Polyamide (PA 66)  |
| Contacts        | Copper Alloy       |
| Insert          | Polyamide (PA 66)  |
| Shell           | Polyamide (PA 66)  |
| Strain relief   | Polyketon          |

| Umwelt            |                                                                                 |
|-------------------|---------------------------------------------------------------------------------|
| 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<br>-5°C to +40°C according to IEC 60320-1 |