

## NAC3M-TRUE1-CG

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. The new cable entry achieves IP65, IP66 and IP67.



## Features & 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
- ✓ IP65, IP66 and IP67 (mated)
- ✓ True mains connector with breaking capacity (CBC)
- ✓ Easy and reliable twist lock system
- ✓ Unique NEUTRIK locking bushing and strain relief for cable diameters 8 mm to 13 mm (0.31– 0.51 inches)

**Product related questions and answers**

| Question                                   | Answer                                                                                                                                                    |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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          | NAC3M-TRUE1-CG  |
| Product family | powerCON® TRUE1 |

**Electrical**

|                               |                                                                                               |
|-------------------------------|-----------------------------------------------------------------------------------------------|
| Contact resistance            | $\leq 2 \text{ m}\Omega$                                                                      |
| Dielectric strength           | 4 kVdc / 2.8 kVac                                                                             |
| Insulation resistance         | $> 1 \text{ G}\Omega$ (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 |

**Mechanical**

|                             |                                |
|-----------------------------|--------------------------------|
| Cable O.D.                  | 8 - 13 mm (0.31 – 0.51 inches) |
| Lifetime                    | $> 5000$ mating cycles         |
| Wiresize (mm <sup>2</sup> ) | 1.5 - 2.5 mm <sup>2</sup>      |
| Wiresize (AWG)              | 12 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          |

| Environmental               |                                                                                 |
|-----------------------------|---------------------------------------------------------------------------------|
| Flammability                | UL 94 V-0                                                                       |
| Protection class            | IP65, IP66 and IP67 (mated )                                                    |
| UV resistance               | F1 rated material withstands UV exposure                                        |
| Operating temperature range | -30°C to +80°C according to IEC 61984<br>-5°C to +40°C according to IEC 60320-1 |