



## NAC3M-TRUE1-L

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

- |                                                                                                                         |                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"><li>• Heavy duty sealed power connector for harsh and demanding environment</li></ul> | <ul style="list-style-type: none"><li>• Uses high impact UV-resistant materials</li></ul>                                                                  |
| <ul style="list-style-type: none"><li>• Lockable single phase connector</li></ul>                                       | <ul style="list-style-type: none"><li>• Extremely robust and reliable</li></ul>                                                                            |
| <ul style="list-style-type: none"><li>• ENEC and VDE certified according to IEC 60320-1 and EN IEC 60320-1</li></ul>    | <ul style="list-style-type: none"><li>• UL and CSA Certified According to UL 60320-1 and CSA 22.2 No. 60320-1</li></ul>                                    |
| <ul style="list-style-type: none"><li>• IP65 and IP67 (mated or with closed cap)</li></ul>                              | <ul style="list-style-type: none"><li>• True mains connector with breaking capacity (CBC)</li></ul>                                                        |
| <ul style="list-style-type: none"><li>• Easy and reliable twist lock system</li></ul>                                   | <ul style="list-style-type: none"><li>• Unique NEUTRIK locking bushing and strain relief for cable diameters 10 mm to 16 mm (0.39 – 0.63 inches)</li></ul> |

## 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?                      | <p>This standard applies for "Cord Sets And Interconnection Cord Sets" and therefore covers cables to the mains and cables acting as power interconnections.</p>                                                                                                                                                                                                                                                     |
| Why is the bushing loose in one direction?           | <p>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.</p>                                                                                                                                                                                                                                                                 |

## Technical Information

| Product        |                 |
|----------------|-----------------|
| Title          | NAC3M-TRUE1-L   |
| 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<br>20 A / 250 V AC according to CSA C22.2 No. 60320-1 |

| Mechanical                  |                                 |
|-----------------------------|---------------------------------|
| Cable O.D.                  | 10 - 16 mm (0.39 – 0.63 inches) |
| Lifetime                    | > 5000 mating cycles            |
| Wiresize (mm <sup>2</sup> ) | 1.0 – 2.5mm <sup>2</sup>        |
| Wiresize (AWG)              | 14 - 12 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<br>-5°C to +40°C according to IEC 60320-1 |