

**Extract from Test report for NS protection: 28111159 007
"Determination of electrical properties"**

Seite 1 von 1
Page 1 of 1

Extract No: 2 _ Annex F.4 (VDE-AR-N 4105)

Table: Construction of the power generation system/network and system protection (NS-protection)

| Central NS protection | | | | | | |
|--|---|---|---|--|--|--|
| NS protection as central NS protection | | <input type="checkbox"/> YES | <input checked="" type="checkbox"/> NO | | | |
| Type of NS protection | --- | Other manufacturer's data | | | | |
| Software version | --- | --- | | | | |
| Manufacturer | --- | --- | | | | |
| Measuring period | | --- | | | | |
| Protection function | | Setting value | Tripping Value | | | |
| Voltage drop protection U < | 0,8 * Un | * Un | - ms | | | |
| Rise-in-voltage protection U > | 1,1 * Un | * Un | - s | | | |
| Rise-in-voltage protection U >> | 1,15 * Un | * Un | - ms | | | |
| Frequency decrease protection f < | 47,5 Hz | Hz | - ms | | | |
| Frequency increase protection f > | 51,5 Hz | Hz | - ms | | | |
| Integrated NS protection | | | | | | |
| NS protection as integrated NS protection | | <input checked="" type="checkbox"/> YES | <input type="checkbox"/> NO | | | |
| Type of NS protection | AC contactors | Other manufacturer's data | | | | |
| Software version | Not less than 1749F for PVS-100-TL (NOTE *) | Assigned to PGU Type : PVS-100-TL | | | | |
| Manufacturer | POWER-ONE ITALY S.P.A. Via S. Giorgio, 642 52028 Terranuova Bracciolini, Arezzo, Italy | Integrated interface switch Type of switching equipment 1: AC contactor Type of switching equipment 2: AC contactor | | | | |
| Measuring period | | 01/09/2017 - 15/11/2017 | | | | |
| Protection function | | Setting value | Tripping Value | | | |
| Voltage drop protection U < | 0.8 * Un | 183.4V | 172.0 ms | | | |
| Rise-in-voltage protection U > | 1.1 * Un | 1.1 * Un | 483.6 s (1 → 1.2 * Un) 4.78 s (1.06 → 1.14 * Un) | | | |
| Rise-in-voltage protection U >> | 1.15 * Un | 264.40V | 166.0 ms | | | |
| Frequency decrease protection f < | 47.5 Hz | 47.50Hz | 194.9 ms | | | |
| Frequency increase protection f > | 51.5 Hz | 51.50Hz | 185.7 ms | | | |
| proper time of interface switch | 20 ms Max. | | | | | |
| The break time (sum of tripping time NS protection plus proper time of interface switch) shall not exceed 200ms. The verification of the full function chain "NS-protection – Interface switch" has yield to intended disconnection | | | | | | |
| NOTE *: Update Version identifies the Firmware Bundle Update Version by a sequential code: xxxx y (where xxxx is a number and y is a letter from A to G) | | | | | | |