


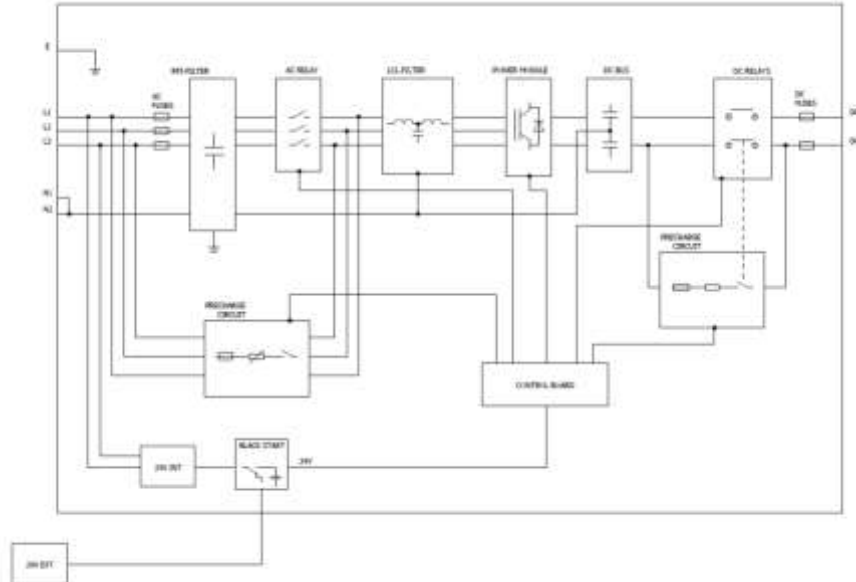
|   |   |
|---|---|
| <b>Product Certificate Number</b>   | <b>20618-3-CER</b>  |
| <b>Applicant</b>  | ABB Power Grids Belgium n.v. – Power Quality Products<br>Allée Centrale, 10 – Z.I. Jumet<br>B-6040 Charleroi, Belgium   |
| <b>Series</b>   | PQstorl Series  |
| <b>Models</b>   | PQstorl-M<br>PQstorl-WM<br>PQstorl-C  |
| <b>Type of generating unit</b>  | Battery Energy Storage Inverter   |
| <b>Technical Data</b>   | See page 2  |
| <b>Software version</b>   | v0.1-Rev10, / DSP V56.1 rev 34  |
| <b>Network connection code</b>  | <b>ENA-EREC G99</b><br>Issue 1 Amendment 5 November 2019.<br>Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019. |
| <p>Having assessed the report number: 20618-3-TR performed by CERE (Accredited Laboratory N° 5314.01) based on the requirements of the EN ISO/IEC 17025: 2017.</p> <p>The above-mentioned generating unit complies with the requirements of the:</p> <p><b>ENA-EREC G99</b> Issue 1 Amendment 5 November 2019. Requirements for the connection of generation equipment in parallel with public distribution networks on or after 27 April 2019.</p> <p>This certification is according the CERE internal process PET-CERE-09 Rev 27 based on the requirements of the EN ISO/IEC 17065:2012. For this certification process the conformity assessment activities were based on:</p> <ul style="list-style-type: none"> <li>• Testing of production samples selected by CERE.</li> <li>• Audit of quality system according ISO 9001 with certificate number: BE05/051523 issued by a certification body accredited according EN ISO/IEC 17021.</li> <li>• Inspection of the manufacturing process.</li> </ul> |   |
| <p>Madrid, August 05, 2020. This certificate is valid until August 05, 2023</p> <div style="text-align: right; margin-top: 100px;"> <br/> Miguel Martínez Lavin<br/> Certification Manager </div>  |   |

## Technical data

### PQstorl:

| Specification                         | PQstorl - M   | PQstorl - WM                   | PQstorl - C        |
|---------------------------------------|---|--------------------------------|--------------------|
|                                       | Module  | Wall-mounted                   | Standalone cabinet |
| <b>Electrical characteristics</b>     |   |                                |                    |
| Connection method                     | 3-wires   |                                |                    |
| Network voltage (+/-10%)              | 208 - 415 V   |                                |                    |
| Network frequency (+/-5%)             | 50  |                                |                    |
| Rated power (at 400 V)                | 30 kW   |                                |                    |
| Line current rating per base unit (A) | 40 A  | Full cubicle: 40 A...<br>600 A |                    |
| Inverter technology                   | Three level inverter  |                                |                    |
| Modularity                            | Up to 16 modules can be combined. Different module ratings are allowed  |                                |                    |
| Equipment losses                      | <2% of the equipment power typically  |                                |                    |
| <b>Inverter characteristics</b>       |   |                                |                    |
| DC voltage (min)                      | 620 V for 3W application (note 1)<br>Note 1: Limited High voltage ride through support at lower DC voltage  |                                |                    |
| DC voltage (max)                      | 830 V (890 V with reduced power)  |                                |                    |
| Response time                         | <1 network cycle  |                                |                    |
| <b>Programming/ communication</b>     |   |                                |                    |
| Wi-Fi communication                   | Webserver on smartphone or computer for simple diagnostics and parameters setup   |                                |                    |
| USB                                   | With dedicated optional software (servicing / programming)  |                                |                    |
| HMI                                   | 7-inch color TFT screen (800 x 480 pixels)<br>198 x 141 x 40 mm<br>IP65 front side / IP20 backside<br>CAN 2B (internal) - RJ12<br>Ethernet (Modbus TCP) - RJ45<br>USB 2.0 |                                |                    |
| Digital I/O on HMI                    | 2 insulated digital input - +24 V (AC or DC)<br>6 digital NO output - 250 Vac/ 5A (one common polarity), dry contacts   |                                |                    |

Electrical Diagram of PQstorl



The sample selected to test was representative of the production.

s.a ABB Power Grids Belgium n.v. – Power Quality Products  
Allée Centrale 10 – Z.I. Jumet.  
6040, Charleroi, Hainut, Belgium

The sample was selected in:

ABB Power Grids Belgium n.v.  
CC8701-BEPGJ c/o ABB Business Services GmbH Kallstadter Str. 1 / 68129 Mannheim, Germany.

Sample Report Number:

20461-TM/

The inspection of manufacturing process was performed in:  
On December 12, 2019

s.a ABB Power Grids Belgium n.v. – Power Quality Products  
Allée Centrale 10 – Z.I. Jumet.  
6040, Charleroi, Hainut, Belgium

Inspection Report Number:

20303-19-1-IF

### RECORD OF CHANGES

| Revision | Modification / Changes | Date       |
|----------|------------------------|------------|
| 0        | Initial version        | 05/08/2020 |
|          |                        |            |
|          |                        |            |

