

# Commeo HV-C Smart Power System | 782 V | 33.0 kWh

esr20U750B5C112E10S20

## Technical data

|                                        |                                                                                           |  |        |
|----------------------------------------|-------------------------------------------------------------------------------------------|--|--------|
| technology description                 | Lithium ion battery system (NMC)                                                          |  |        |
| communication interface                | CAN-Bus   Ethernet                                                                        |  |        |
| nom. energy                            | 33.0 kWh                                                                                  |  |        |
| nom. voltage                           | 782.0 V $\pm$                                                                             |  |        |
| nom. capacity                          | 42.2 Ah                                                                                   |  |        |
| max. discharge power (at nom. voltage) | 132.0 kW                                                                                  |  |        |
| expected cycles                        | (0.8C charge   4C discharge   25 °C   80 % SOH)<br>1,200 @ 100 % DoD                      |  |        |
| expected operating life (calendric)    | 12 years                                                                                  |  |        |
| installation site                      | indoors   non-condensing                                                                  |  |        |
| IP Code                                | IP 20 (increasing IP Code by using optional accessories)                                  |  |        |
| protection class                       | 2                                                                                         |  |        |
| interconnection                        | 2P15S                                                                                     |  |        |
| standard scope of delivery             | energy storage block esbC112S                                                             |  | 20 qty |
|                                        | energy storage block esbC112E                                                             |  | 10 qty |
|                                        | control unit ccuHV200U                                                                    |  | 1 qty  |
|                                        | Rittal industry cabinet<br>(600 x 2000 x 600 mm) excl. base                               |  | 1 qty  |
|                                        | accessories                                                                               |  |        |
| weight                                 | approx. 454.5 kg                                                                          |  |        |
| EU directives                          | 2006/66/EG (BattG), 2014/30/EU (EMC), 2014/35/EU (LVD),<br>2011/65/EU, 2015/863/EU (RoHS) |  |        |
| norms and standards                    | DIN EN 62619, UN 38.3, DIN EN 61010-1, DIN EN 61000-6-2/4,<br>DIN EN ISO 13849-1          |  |        |

## Operating window

|                             |           |           |                                                                                                           |
|-----------------------------|-----------|-----------|-----------------------------------------------------------------------------------------------------------|
| operation mode              |           |           | guided by the State-of-Power (SoP) according to the specifications of the battery management system (BMS) |
| max. charge current         |           |           | 33.8 A (0.8C)                                                                                             |
| end-of-charge current       |           |           | 2.1 A (0.05C)                                                                                             |
| max. discharge current      |           |           | 168.8 A (4C)                                                                                              |
| rel. humidity               |           |           | < 80 % (temperature-dependent)   non-condensing                                                           |
| operating temperature range |           |           | 5 – 45°C charge   5 – 55 °C discharge                                                                     |
| operating voltage range     |           |           | 714.0 – 874.0 V $\pm$                                                                                     |
| temperature range           | transport | < 1 month | -20 – 40 °C                                                                                               |
|                             | storage   | < 6 month | -20 – 25 °C                                                                                               |
| max. operating altitude     |           |           | 2,000 m above sea level                                                                                   |

 The user manual has to be strictly followed. The operating window of the battery has to be complied with.