

## Technical specifications: 3:1 and 3:3

| Rated power (kVA/kW)                             | 10/8 (3:3 only)  | 15/12 | 20/16 | 30/24  | 40/32 |
|--|--|-------|-------|--|-------|
| <b>Normal AC supply input</b>                    |  |       |       |  |       |
| Input voltage (V)                                | 380/400/415 V (three-phase + neutral)                                |       |       |  |       |
| Frequency (Hz)                                   | Synchronized to mains  |       |       |  |       |
| Input power factor                               | > 0.98 at load > 50%   |       |       |  |       |
| THDI   | < 5% at full load  |       |       |  |       |
| Input voltage tolerance utility operation        | 304 V to 477 V at full load, 200 V to 477 V at half load (for 400 V) |       |       |  |       |
| Dual mains input                                 | Yes  |       |       |  |       |
| Input voltage tolerance bypass                   | ±10% standard ±4, 6, 8, 10% (programmable)                           |       |       |  |       |
| Backfeed protection                              | Built-in backfeed contactor  |       |       |  |       |
| <b>Output</b>                                    |  |       |       |  |       |
| Nominal output voltage (V)                       | 3:1 (220/230/240 V)  |       |       |  |       |
|  | 3:3 (380/400/415 V) three-phase + neutral                            |       |       |  |       |
| Efficiency at full load (AC-AC at nominal mains) | 94.5%  | 95.8% | 95.5% | 95.8%  | 96.0% |
| Efficiency at 50% load (AC-AC at nominal mains)  | 94.7%  | 95.3% | 95.7% | 95.5%  | 95.5% |
| DC-AC nominal battery voltage                    | 94.1%  | 95.1% | 94.9% | 95.2%  | 95.0% |
| Load power factor                                | 0.5 leading to 0.5 lagging   |       |       |  |       |
| Output frequency                                 | Mains synchronized in normal operation 50 Hz ± 0.05% free-running    |       |       |  |       |
| Overload capacity utility operation              | 125% for 10 minutes, 150% for 60 seconds                             |       |       |  |       |
| Overload battery utility operation               | 150% for 60 seconds  |       |       |  |       |
| V THD  | < 2% from 0 to 100% linear load, < 3.5% full nonlinear load          |       |       |  |       |
| Output voltage tolerance                         | ±1% static, ±5% at 100% load step                                    |       |       |  |       |
| <b>Communication and management</b>              |  |       |       |  |       |
| Communication interface                          | Network management card with environmental monitor                   |       |       |  |       |
| Control panel                                    | Power view multi-function LCD, status, and control console           |       |       |  |       |
| Emergency power off                              | Yes  |       |       |  |       |
| <b>Dimensions and weights</b>                    |  |       |       |  |       |
| Dimensions (H x W x D) narrow tower              | 1,490 x 352 x 838 mm   |       |       | N/A  |       |
| Dimensions (H x W x D) wide tower                | 1,490 x 523 x 838 mm   |       |       |  |       |
| Weight (kg) — narrow tower                       | 214 (3:3 only)   | 402   | N/A   |  |       |
| Weight (kg) — wide tower                         | 443 (3:3 only)   | 472   | 656   | 662  |       |
| <b>Protection</b>                                |  |       |       |  |       |
| Surge  | IEC 61000-4-5  |       |       |  |       |
| Thermal, short circuit                           | Yes  |       |       |  |       |
| <b>Regulatory</b>                                |  |       |       |  |       |
| Safety   | IEC/EN62040 1-1  |       |       |  |       |
| EMC/EMI/RFI                                      | EN50091-2, IEC 62040-2   |       |       |  |       |
| Approvals  | ANSI, IEEE   |       |       |  |       |
| <b>Environmental</b>                             |  |       |       |  |       |
| Operation temperature                            | 0 to 40 °C   |       |       |  |       |
| Storage temperature                              | -15 to 45 °C   |       |       |  |       |
| Relative humidity                                | 0 to 95% noncondensing   |       |       |  |       |
| Operating elevation                              | 0 to 1,000 m   |       |       |  |       |
| Storage elevation                                | 0 to 15,000 m  |       |       |  |       |
| Maximum audible noise at 1 m from unit           | < 43.3 dBA at < 70% load,<br>< 51.3 dBA at 100% load                 |       |       | < 46.2 dBA at < 70% load,<br>< 55.0 dBA at 100% load |       |
| Protection class                                 | IP51   |       |       |  |       |