| Model | EVR1000-30000A(E) | EVR1000-40000(E) | EVR1000-40000A(B) |
|---|---|---|---|
| **Input Parameters** | | | |
| Connection Type | U/V/W+PE | 3-Phase, U/V/W+PE | 3-Phase, U/V/W+PE |
| Rated Input Voltage | 400 Vac / 480 Vac | 3-Phase, 380 Vac / 480 Vac | 3-Phase, 380 Vac / 480 Vac |
| Input Voltage Range | 260 ~ 530 Vac | 320 ~ 530 Vac (full load) | 320 ~ 530 Vac (full load) |
| Low-Voltage Operating Range | — | 260 ~ 320 Vac (linear derating to half | 260 ~ 320 Vac (linear derating to half |
| Input Frequency | 50 Hz / 60 Hz | 45 Hz ~ 65 Hz | 45 Hz ~ 65 Hz |
| Rated Power | 30 kW | — | — |
| Input Current | ≤ 63 A | ≤ 76 A | ≤ 76 A |
| Power Factor (PF) | ≥ 0.99 (Maximum value) | ≥ 0.99 | ≥ 0.99 |
| THDi | ≤ 5% | ≤ 5% | ≤ 5% |
| Max. Efficiency | ≥ 96.5% | ≥ 96.0% (full load), ≥ 96.5% (peak) | ≥ 96.0% (full load), ≥ 96.5% (peak) |
| Input Protection | — | Fuse + Surge Protection Circuit (SPD) | Fuse + Surge Protection Circuit (SPD) |
| **Output Parameters** | | | |
| System Power | 30 kW | 40 kW | 40 kW |
| Rated Output | — | 1000 V @ 40 A | 1000 V @ 40 A |
| Output Voltage Range | 150 ~ 1000 Vdc | 150 ~ 1000 Vdc | 150 ~ 1000 Vdc |
| Constant Power Range | — | 300 ~ 1000 Vdc (40 kW) | 300 ~ 1000 Vdc (40 kW) |
| Output Current Range | ≤ 120 A | 0 ~ 133.4 A (T ≤ 60℃) | 0 ~ 133.4 A (T ≤ 60℃) |
| Output Current Accuracy | ≤ ± 1.0% | ≤ ± 1.0% | ≤ ± 1.0% |
| Output Voltage Accuracy | ≤ ± 0.5% | ≤ ± 0.5% | ≤ ± 0.5% |
| Peak-To-Peak Ripple & Noise | — | ≤ 1.0% | ≤ 1.0% |
| Current Sharing Error | — | ≤ ± 5.0% | ≤ ± 5.0% |
| **Operating Environment** | | | |
| Operating Temperature Range | -40℃ ~ +60℃ (w/o derating)<br>Stop operation at 75℃ | -40℃ ~ +60℃ (normal operation) | -40℃ ~ +60℃ (normal operation) |
| High Temperature Derating | — | 60℃ ~ 75℃ | 60℃ ~ 75℃ |
| Storage temperature | — | -40℃ ~ +75℃ | -40℃ ~ +75℃ |
| Humidity | 0 ~ 95% RH (non-condensing) | 0 ~ 95% RH (non-condensing) | 0 ~ 95% RH (non-condensing) |

| | | | |
|---|---|---|---|
| Atmospheric pressure/ Altitude | ≤ 2000 m | ≤ 2000 m (full load output) | ≤ 2000 m (full load output) |
| **Physical Characteristics** | | | |
| Dimensions (w/o Handle) | 370×542.5×73 mm | 370×542.5×73 mm | 370×543×73 mm |
| Dimensions (with Handle) | — | 410×637.7×73 mm | 410×592.5×73 mm |
| Degree of Protection | IP50 | — | — |
| Cooling method | Liquid cooling | Liquid cooling | Liquid cooling |
| Coolant | 50% glycol-water | Glycol-water mixture (52.7% by | Glycol-water mixture (52.7% by |
| Flow Rate | 6 ~ 12 L/min | 6 ~ 12 L/min | 6 ~ 12 L/min |
| Max. Pressure Drop | 0.5 MPa | 0.5 MPa | 0.5 MPa |
| Weight | 27 kg | Approx. 27 kg | Approx. 27 kg |
| **Communication & Control** | | | |
| Communication | CAN 2.0 | CAN Bus | CAN Bus |
| Max. Paralleling Quantity | — | 60 Units | 60 Units |
| User Interface & Status Monitoring | Run / Fault / Protection LEDs | CAN communication + 3 LED indicators + 2 push-buttons | CAN communication + 3 LED indicators + 2 push-buttons |
| Protection Function | — | Anti-backfeed diode failure isolation protection + Output discharge function | Anti-backfeed diode failure isolation protection + Output discharge function |
| Input circuit protection | Built-in SPD, Fuse, Varistor | — | — |
| Output circuit protection | External fuse | — | — |
| **Safety & Reliability** | | | |
| Dielectric Strength (Power Stage) | — | Input-Chassis / Output-Chassis / Input-Output: 3535 VDC, 1 min | Input-Chassis / Output-Chassis / Input-Output: 3535 VDC, 1 min |
| Dielectric Strength (Signal) | — | Input-COM / Output-COM: 5750 VDC, 1 min | Input-COM / Output-COM: 5750 VDC, 1 min |
| Dielectric Strength (Enclosure) | — | COM-Chassis: 1400 VDC, 1 min | COM-Chassis: 1400 VDC, 1 min |
| MTBF | — | ＞ 120,000 Hours | ＞ 120,000 Hours |
| **Standards & Certifications** | | | |
| Certification | CE | — | — |
| Safety Standard | — | IEC 61851-1:2023 / GB 39752-2024 | IEC 61851-1:2023 / GB 39752-2024 |