

## MVS9000-LV

MV Turnkey Solution for 1500 Vdc String Inverter SG320HX/SG320HX-20



### SAVED INVESTMENT

- Up to 10.56 MW block design
- Easy transportation due to standard container design
- All pre-assembled for easy set-up and commissioning



### SAFETY

- MV and LV isolated, independent control room
- All key components front accessible, no need walk-in operation



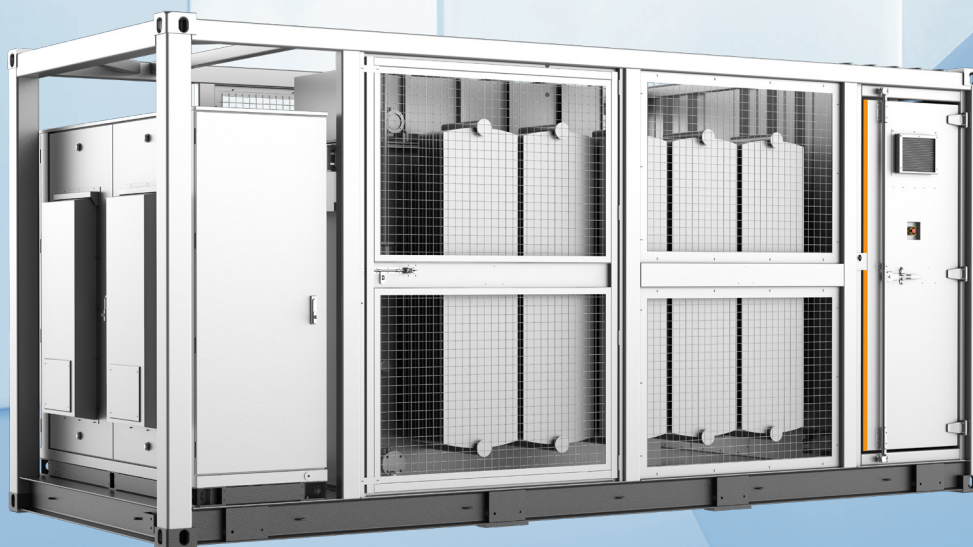
### EASY O&M

- Online analysis for fast trouble shooting
- Modular design, main device easy replacement



### RELIABLE

- All components type-tested
- Compliance with standards: IEC 60076, IEC 62271, IEC 61439



| Type designation                                   |                                                                  | MVS9000-LV |
|----------------------------------------------------|------------------------------------------------------------------|------------|
| Transformer                                        |                                                                  |            |
| Transformer type                                   | Oil immersed                                                     |            |
| Rated power                                        | 9000 kVA @ 51 °C , 9054 kVA @ 50 °C                              |            |
| Max. power                                         | 10560 kVA @ 30 °C                                                |            |
| Vector group                                       | Dy11y11                                                          |            |
| LV / MV voltage                                    | 0.8-0.8 kV / ( 20 – 35 ) kV                                      |            |
| Maximum input current at nominal voltage           | 3811 A * 2                                                       |            |
| Frequency                                          | 50 Hz / 60 Hz                                                    |            |
| Tapping on HV                                      | 0 , ± 2 * 2.5 %                                                  |            |
| Efficiency                                         | ≥99% ( optional: Tier2 )                                         |            |
| Cooling method                                     | ONAN ( Oil Natural Air Natural )                                 |            |
| Impedance                                          | 9.5% ( ±10% )                                                    |            |
| Oil type                                           | Mineral oil ( PCB free )                                         |            |
| Winding material                                   | Al / Al                                                          |            |
| Insulation class                                   | A                                                                |            |
| MV switchgear                                      |                                                                  |            |
| Insulation type                                    | SF6                                                              |            |
| Rated voltage range                                | 24 kV – 40.5 kV                                                  |            |
| Rated current                                      | 630 A                                                            |            |
| Internal arcing fault                              | IAC AFL 20 kA / 1 s                                              |            |
| LV panel                                           |                                                                  |            |
| Main switch specification                          | 4000 A / 800 Vac / 3P, 2 pcs                                     |            |
| Disconnecter specification                         | 260A / 800 Vac / 3P, 30 pcs                                      |            |
| Fuse specification                                 | 400A / 800 Vac / 1P, 90 pcs                                      |            |
| Protection                                         |                                                                  |            |
| AC input protection                                | Fuse+Disconnecter                                                |            |
| Transformer protection                             | Oil-temperature, Oil-level, Oil-pressure, Buchholz               |            |
| Relay protection                                   | 50 / 51 , 50 N / 51 N                                            |            |
| Surge protection                                   | AC Type I + II                                                   |            |
| General data                                       |                                                                  |            |
| Dimensions ( W * H * D )                           | 6058 mm * 2896 mm * 2438 mm                                      |            |
| Approximate weight                                 | 24 T                                                             |            |
| Operating ambient temperature range *              | -20 °C to 60 °C ( optional: -30 °C to 60 °C )                    |            |
| Auxiliary power supply                             | 15 kVA / 400 V ( optional: max. 40 kVA )                         |            |
| Degree of protection                               | IP54                                                             |            |
| Allowable relative humidity range (non-condensing) | 0 % – 95 %                                                       |            |
| Operating altitude                                 | 1000 m ( standard ) / > 1000 m ( optional )                      |            |
| Communication                                      | Standard: RS485, Ethernet, Optical fiber                         |            |
| Compliance                                         | IEC 60076, IEC 62271-200, IEC 62271-202, IEC 61439-1, EN 50588-1 |            |

\* The ambient temperature is determined as the average temperature obtained from at least four evenly distributed temperature monitoring points located at a distance of 1 meter from the equipment, at a height halfway up the machine. The temperature sensors must be shielded from airflow, thermal radiation, and rapid temperature fluctuations to prevent display inaccuracies.

### CIRCUIT DIAGRAM

