

TECHNICAL FEATURES

Doubly-fed Converter - Two-level



Efficient

The air-cooled converter has high cost performance and is easy for maintenance and suitable for high altitude, low temperature and high temperature environment on land; It features higher power density design, miniaturized design of components and standard design of modules, which are fast for installation and strong for maintainability. The advanced dual PWM variable current control algorithm can adapt to harsh power grid.



Friendly

It meets the requirements of low voltage ride through and high voltage ride through of national grid and adapts to various complex grid environments. It features adaptive harmonic suppression technology, green power output, and excellent grid dynamic reactive power compensation capability.



Reliable

The integrated air duct cooling design effectively reduces device temperature rise and ensures product life. The circuit breakers and contactors are (selected from) international first-tier brand, which timely protect the main circuits and thus have high reliability. It has system solutions for the whole electrical industry chain from power devices, module components and variable current devices to system integration.



Intelligent

It has expert automatic diagnosis system based on CSR Drive and rich and flexible external interfaces to perfectly match various main control systems and motors. It also has PHM online diagnosis technology to realize status repair and early warning of failure.



Doubly-Fed Converter - Two-Level (Parameters)

| Parameters | Power Level | 2MW | 2.5MW | 3.0MW | 3.6MW |
|--------------------------|---|---|---|---|---|
| Grid Parameters | Grid Voltage | 690V+10%/-10% | | | |
| | Grid Frequency | 45HZ-55HZ | | | |
| | Grid Current | 2000A | 2500A | 3000A | 3550A |
| | Grid-side Current | 420A | 420A | 600A | 600A |
| Converter Parameters | Grid-side Overload Current (10s/10min) | 462A | 462A | 660A | 660A |
| | Machine-Side Current | 830A | 860A | 1100A | 1200A |
| | Machine-Side Overload Current (10s/10min) | 9130A | 946A | 1210A | 1320A |
| | Cabinet Size W x L x D(mm) | 2400mm*2000mm*700mm | 2700mm*2000mm*700mm | 2400mm*2000mm*700mm | 2700mm*2000mm*700mm |
| | Grid Voltage Harmonics (Withstand) | ≤5% | ≤5% | ≤5% | ≤5% |
| | Grid Voltage Imbalance (Withstand) | ≤8% | ≤8% | ≤8% | ≤8% |
| | Overall Efficiency | ≥97% | ≥97% | ≥97% | ≥97% |
| | Low Voltage ride through | Meet the latest national standard E _c on2006 | Meet the latest national standard E _c on2006 | Meet the latest national standard E _c on2006 | Meet the latest national standard E _c on2006 |
| | Cooling Method | Forced Air Cooling | Forced Air Cooling | Forced Air Cooling | Forced Air Cooling |
| | Noise | ≤85dBA | ≤85dBA | ≤85dBA | ≤85dBA |
| Environmental Parameters | Protection Level | Control cabinet IP54 switch cabinet power cabinet IP23 | Control cabinet IP54 switch cabinet power cabinet IP23 | Control cabinet IP54 switch cabinet power cabinet IP23 | Control cabinet IP54 switch cabinet power cabinet IP23 |
| | Operating Temperature | -35°C~+50°C | -35°C~+50°C | -35°C~+50°C | -35°C~+50°C |
| | Storage Temperature | -40°C~+70°C | -40°C~+70°C | -40°C~+70°C | -40°C~+70°C |
| | Altitude | 3000m | 3000m | 3000m | 3000m |