ACS1000 NEMA 3R drives
315 to 2000 kW

Enclosure rated for outdoor use
ABB’s outdoor NEMA/UL Type 3R-rated drive provides reliable and continuous process control, regardless of the installation location. It is protected against harsh weather conditions and is suitable for various industries, such as oil and gas, as well as mining.

Automated cooling system
The drive has a fully automated cooling system and a controlled heater to protect against condensation. With indoor solutions, cooling the electrical room becomes a major expense. With outdoor applications, the need for additional cooling is eliminated, resulting in reduced operating cost.

Simple installation
As the drive comes in one complete package, its installation is simple, and there is no need to add extra equipment like solar shielding. Electrical connections to the supply and motor are designed to be simple and quick: three cables in, three cables out.

Reliable operation even at low temperatures
Temperature is adjusted by controlling the airflow through the enclosure with an air control flap. When the drive is not running, the flap is closed and space heaters maintain a minimum temperature to ensure that it is possible to continue operating even at low temperatures.

Solution for harsh outdoor environments

Designed specifically for outdoor use, the environmental extension of the ACS1000 medium voltage drive provides reliable operation even in remote locations and in installations where no fixed facilities are present.
Based on ABB’s ACS1000 medium voltage drive, which has been proven reliable in numerous installations worldwide.

Wide power range and several output voltage variants: 315 to 2000 kW, 3300/4000/4160 V output.

Enclosure designed for harsh outdoor environments:
- High enclosure class, NEMA/UL Type 3R, which provides protection against falling rain, sleet, snow and external ice formation.
- Robust and durable enclosure made out of 2.5 mm zinc-coated sheet metal.

Lockable enclosure construction.

Operates at temperatures from -5 up to +50 °C

Wide range of options.

Possibility for remote connectivity, which enables easy asset management and remote assistance.

### Technical data

**Input**
- Input configuration: 24-pulse diode rectifier
- Input voltage: 2.3 kV, 3.3 kV, 4.16 kV, 6 to 6.9 kV and 10 to 11 kV*
- Input voltage variation: ±10%
- Input frequency: 50/60 Hz
- Input frequency variation: <5%
- Input power factor: >0.95
- Input harmonics: Complies with IEC 61000-2-4 and IEEE 519

**Auxiliary voltage**
- 110 V DC, 220 V DC
- 110 to 240 V AC 50/60 Hz
- 380 to 690 V AC 50/60 Hz, 3-phase

**Output**
- Output power: 315 to 2000 kW
- Output voltage: 3.3 kV, 4.0 kV, 4.16 kV
- Output frequency: 0 to 82.5 Hz (higher on request)
- Motor type: Induction
- Efficiency of converter: >96%
- Motor harmonics: <2% THDi

**Enclosure**
- NEMA 3R

**Cable entry**
- Bottom

**Environmental**
- Altitude: 3000 m
- Ambient air temperature: -5 to +50 °C
- Noise: <80 dB(A)
- Cooling type: Air
- Standards: EN, IEC, CE and UL

*Not all supply voltage and frequency combinations are possible

### Rugged. Robust. Reliable.

ACS1000 NEMA/UL Type 3R drive package includes:
- ABB ACS1000 air-cooled drive with integrated supply transformer
- Optional integrated medium voltage service entrance rated disconnect with fuses
- Surge/lightning protection
- Heater to protect against condensation
- Control interface with control panel and pilot lights for drive ready, running and fault

For more information please contact your local ABB representative or visit:

[www.abb.com/drives](http://www.abb.com/drives)

[www.abb.com/drivespartners](http://www.abb.com/drivespartners)