



# Siemens S120 Liquid Cooled VFDs

Low-Voltage Variable Frequency Drive Solution for Demanding Applications  
 Liquid cooled S120 AC drives are designed to control the speed and torque on low voltage induction motors. The drives features Siemens S120 inverter modules (motor modules) with high-current IGBTs that can be paralleled for a wide range of motor horsepowers.

These drives can be configured as stand-alone units, packaged into a common-DC bus arrangement, or supplied with active front end (AFE) rectifiers for regenerating energy. Both stainless steel and copper/brass piping systems are available for supplying the mixture of water and glycol to the individual drive modules.

Current Power can provide Siemens S120 VFDs as part of a packaged solution with any or all of the following products:

- Electrical building (power house)
- Generator control and distribution switchgear
- PLC based automation system
- Control consoles

Standard drive options are available, but Current Power can provide detailed engineering necessary to meet your specific application within the ratings listed below. For further information, contact sales@currentpsi.com.

## Standard Available Ratings

AC Supply Voltage	380 – 690Vac
Motor Horsepower	Up to 6000HP
Continuous Motor Current	Up to 6500Aac
Frequency	0 – 200Hz
Ambient Temperature	0 – 50°C (32 – 122°F)
Cooling	Liquid
Enclosure Dimensions	91” H x ** W x 32” D

\* Width of enclosure varies with motor current/horsepower



## Standard Features

- Line disconnect for isolation and lockout of the drive
- Input line reactance for transient protection
- High speed fuses for protection of sensitive electronics
- Digital controller with parameter based operation and analog and digital I/O
- Door mounted HMI digital display and keypad
- Emergency stop pushbutton
- Tin-plated copper buswork
- Front access design for simple access to modular drive components
- Free standing, welded frame cubicles with a light grey powder coat finish
- Tin-plated copper ground bar
- Dedicated engineering support during design and fabrication
- Full load tests done prior to shipment
- Documentation package including engineered drawings and product data sheets

## Optional Features

- Common DC bus arrangement for more efficient use of rectifiers
- Active Front End (AFE) rectifier arrangement for regenerating energy
- 12 and 24 pulse configurations for harmonic mitigation
- Dynamic braking chopper and resistor
- Profibus, Profinet, or Modbus communications
- Motor encoder interface
- Anti-condensation space heaters
- 3rd party design approval and/or certification
- Remote control panels
- Installation and commissioning services
- Training classes on operation and maintenance