Quasar switch-mode rectifiers are designed to meet all galvanic surface treatment requirements. Based on high-speed IGBT technology, they provide high efficiency and performance. Compact dimensions and reduced weight versus conventional rectifiers without compromising reliability.

From a unit of 50A to 500A... ... to a powerful installation of 32'000A!

**COMMUNICATION ADAPTERS**
- Communication adapters for Profinet, DeviceNet, Modbus/TCP networks
- SIM is a remote control unit that communicates with the rectifier

**ANALOGUE INTERFACE**
- ANL provides 6 digital inputs and 6 outputs and 2 analogue inputs and 2 outputs
- Replaces the junction box
- Easy installation

**INPUT/OUTPUT SCREW INTERFACE**
- Simultaneous display of 4 lines of data
- Immediate display of messages
- Easier to read
- Remotable up to 4 meters
- Available parameters:
  - Measured Value
  - Set point values and messages
  - Ramp time / Phase time
  - Partial AH / Partial limit AH
  - Total AH / Total limit AH
  - Grand Total AH

**WATER FLOW SENSOR AND SOLENOID**
- Water cooled rectifier optional for low water flow rate alarm
- Features:
  - adjustable Flow Sensor to assure minimum required flow rate
- Benefits:
  - assures minimum water flow rate
  - solenoid can be used to stop circulation of cold water when rectifier is in stand-by, thus preventing potential condensation

**COMMUNICATION ADAPTERS**
- Communication adapters for Profinet, DeviceNet, Modbus/TCP networks
- SIM is a remote control unit that communicates with the rectifier

**ANALOGUE INTERFACE**
- ANL provides 6 digital inputs and 6 outputs and 2 analogue inputs and 2 outputs
- Replaces the junction box
- Easy installation

**INPUT/OUTPUT SCREW INTERFACE**
- Simultaneous display of 4 lines of data
- Immediate display of messages
- Easier to read
- Remotable up to 4 meters
- Available parameters:
  - Measured Value
  - Set point values and messages
  - Ramp time / Phase time
  - Partial AH / Partial limit AH
  - Total AH / Total limit AH
  - Grand Total AH

**COMMUNICATION ADAPTERS**
- Communication adapters for Profinet, DeviceNet, Modbus/TCP networks
- SIM is a remote control unit that communicates with the rectifier

**ANALOGUE INTERFACE**
- ANL provides 6 digital inputs and 6 outputs and 2 analogue inputs and 2 outputs
- Replaces the junction box
- Easy installation

**INPUT/OUTPUT SCREW INTERFACE**
- Simultaneous display of 4 lines of data
- Immediate display of messages
- Easier to read
- Remotable up to 4 meters
- Available parameters:
  - Measured Value
  - Set point values and messages
  - Ramp time / Phase time
  - Partial AH / Partial limit AH
  - Total AH / Total limit AH
  - Grand Total AH

**WATER FLOW SENSOR AND SOLENOID**
- Water cooled rectifier optional for low water flow rate alarm
- Features:
  - adjustable Flow Sensor to assure minimum required flow rate
- Benefits:
  - assures minimum water flow rate
  - solenoid can be used to stop circulation of cold water when rectifier is in stand-by, thus preventing potential condensation

**COMMUNICATION ADAPTERS**
- Communication adapters for Profinet, DeviceNet, Modbus/TCP networks
- SIM is a remote control unit that communicates with the rectifier

**ANALOGUE INTERFACE**
- ANL provides 6 digital inputs and 6 outputs and 2 analogue inputs and 2 outputs
- Replaces the junction box
- Easy installation

**INPUT/OUTPUT SCREW INTERFACE**
- Simultaneous display of 4 lines of data
- Immediate display of messages
- Easier to read
- Remotable up to 4 meters
- Available parameters:
  - Measured Value
  - Set point values and messages
  - Ramp time / Phase time
  - Partial AH / Partial limit AH
  - Total AH / Total limit AH
  - Grand Total AH

**WATER FLOW SENSOR AND SOLENOID**
- Water cooled rectifier optional for low water flow rate alarm
- Features:
  - adjustable Flow Sensor to assure minimum required flow rate
- Benefits:
  - assures minimum water flow rate
  - solenoid can be used to stop circulation of cold water when rectifier is in stand-by, thus preventing potential condensation

**COMMUNICATION ADAPTERS**
- Communication adapters for Profinet, DeviceNet, Modbus/TCP networks
- SIM is a remote control unit that communicates with the rectifier

**ANALOGUE INTERFACE**
- ANL provides 6 digital inputs and 6 outputs and 2 analogue inputs and 2 outputs
- Replaces the junction box
- Easy installation

**INPUT/OUTPUT SCREW INTERFACE**
- Simultaneous display of 4 lines of data
- Immediate display of messages
- Easier to read
- Remotable up to 4 meters
- Available parameters:
  - Measured Value
  - Set point values and messages
  - Ramp time / Phase time
  - Partial AH / Partial limit AH
  - Total AH / Total limit AH
  - Grand Total AH

**WATER FLOW SENSOR AND SOLENOID**
- Water cooled rectifier optional for low water flow rate alarm
- Features:
  - adjustable Flow Sensor to assure minimum required flow rate
- Benefits:
  - assures minimum water flow rate
  - solenoid can be used to stop circulation of cold water when rectifier is in stand-by, thus preventing potential condensation
Switch-mode Rectifiers

- **Air Cooled - IP31**
- **Water Cooled - IP43**
- 1 power module / reverse module
- Available in all types:
  - DC - Direct Current / DCR - Reverse of polarity
  - PP - Pulsed / PPR - Pulsed with Reverse of polarity

- **Sizes:** 50A / 100-150A / 200-250A / 300A / 400A / 500A
- Available with buzzer and push button for E-coat applications

---

**Sizes:** Config 01-1 up to 550A DC / 250A DCR
Config 02-2 up to 1100A DC / 550A DCR
Config 03-3 up to 1700A DC / 1100A DCR
- Available in all types:
  - DC - Direct Current
  - DCR - Reverse of polarity
  - PP - Pulsed
  - PPR - Pulsed with Reverse of polarity

- Available in IP52 (NEMA 12)

---

**Sizes:** Config 05-5 up to 3000A DC / 1500A DCR
Config 06-6 up to 5000A DC / 2500A DCR
Config 07-7 up to 7500A DC / 3750A DCR
Config 09-9 up to 15000A DC / 7500A DCR
Config 10-10 up to 20000A DC / 10000A DCR
Config 11-11 up to 30000A DC / 15000A DCR
- Available in all models Q100/Q300/Q500
- Up to 50% energy saving
- 30% less process time for the same deposit thickness
- Increase temperature of anodizing solution due to the reduction of oxidation voltage
- Reduced barrier-layer
- Pulses help avoid burned parts and improve surface uniformity
- Same rectifier can be used for anodizing and coloring
- Different programmable waveform for different process applications

---

**Available in all types:**
- DC - Direct Current
- DCR - Reverse of polarity
- PP - Pulsed
- PPR - Pulsed with Reverse of polarity

- Up to 9 power modules / reverse modules
- Up to 8000A in one tower
- Multi-tower expansion for higher requirement

---

**Available in all types:**
- DC - Direct Current
- DCR - Reverse of polarity
- PP - Pulsed
- PPR - Pulsed with Reverse of polarity

---

**Pulse plating & pulse anodizing**

- Pulse waveforms for different applications
- Different rectifier types for various processes

---

For more information, visit us at: www.cnspower.com