

BM601 Regenerative Protection Module

ATS Part # A800993

Description

The ATS Regen Protection Module (sometimes referred to as a brake chopper) can be used with any DC, AC, Permanent Magnet DC, Switched Reluctance, or other types of motors.

During regenerative braking, the DC bus begins to rise. If the regen voltage rises too high, damage may occur to the supply battery and other equipment tied to the DC bus. The RPM module will turn on at a predefined voltage to protect all equipment on the DC bus.

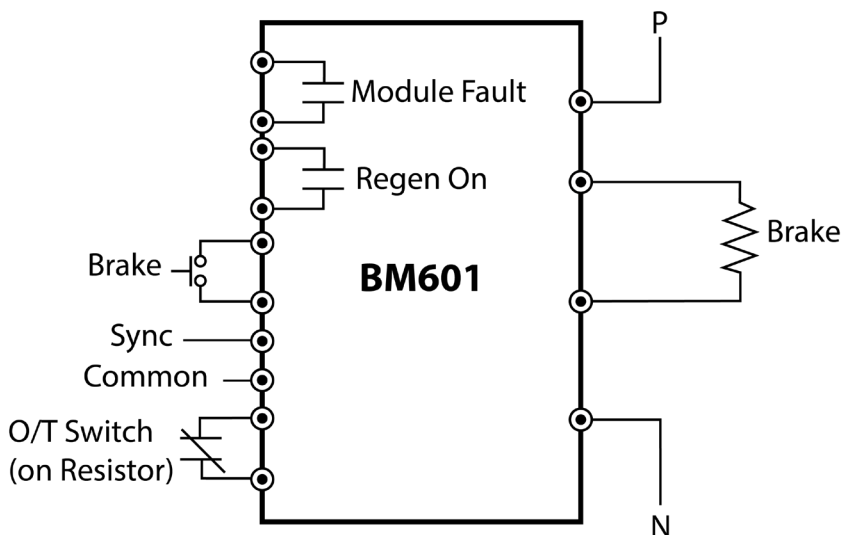
Features

- Absorbs over voltage surges on DC voltage supplies due to regenerative braking of DC or AC propulsion drives — adjustable from 272VDC to 768VDC.
- Capable of dumping up to 600A into braking resistor.
- 10% duty cycle (for example, 6 seconds on, every 60 seconds)
- Contains provision for resistor over temperature protection via resistor OT sensor.
- Compact, single enclosure houses all components, including internal isolated power supply.
- Brake On and Brake Fault output via relay contacts
- Able to sync up to 5 modules with “first triggers all” concept (no master unit required) for a total of 3000A braking current.
- Battery Condition Monitoring feature outputs signal indicating repeated brake cycles, warning the operator to check the battery condition.



Dimensions

Height	152mm (6")
Width	356mm (14")
Depth	254mm (10")
Weight	5.9 kgs (13 lbs)



Electrical Specifications

Voltage Range Input	256 - 800V DC
Rated Power @ Rated Volts Input	120kW @ 750V
Braking Threshold Voltage	Adjustable from 272V to 768V
Amps @ Rated Power Input	200A Peak
Maximum Current	600A (per module)
Duty Cycle	10% (e.g. 6 seconds on, every 60 seconds)

Environmental Specifications

Description	Specifications
Ambient Operating Temperature	-20°C to +50°C (-4°F to 122°F)
Storage Temperature	-40°C to +65°C (-40°F to 149°F)
Relative Humidity	<90% No condensation
Altitude	3300 feet (1000 meters) - de-rate above 3000 meters