



**FEATURES**

- Energy dissipation ratings  
 1200 W-s @ 187Vdc  
 1600 W-s @ 375 Vdc
- Standard trip voltage  
 187VDC or 375VDC
- UL 508C, Fully isolated, works with off line power supplies
- Custom configurations available (contact factory)
- Parallel operation
- External resistor operation optional for higher continuous power

MODEL	PEAK CURRENT
125	30A @ 187 Vdc
145	20A @ 375 Vdc

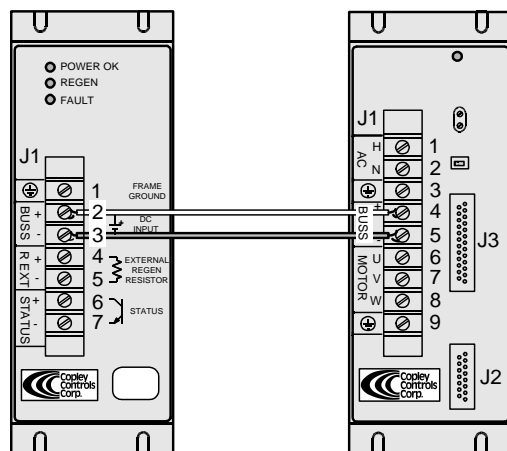


**PRODUCT DESCRIPTION**

The reverse energy dissipator functions as a shunt regulator that limits the rise in power supply voltage, during regeneration. When a motor is braking or a stage is lowering, energy is transferred from the motor to the supply capacitor causing the voltage to increase. In high power systems it may be impractical to use capacitance to absorb all the energy. The model 125 and 145 can be used to dissipate the energy as the voltage reaches a set limit.

Under normal forward running conditions, the PWM dissipator is inoperative. Only when braking occurs, increasing the power supply voltage does the PWM dissipator start to dissipate energy. When the trip point is reached the PWM duty cycle starts to increase and energy is dissipated over its resistive load. As the voltage increases, the duty cycle increases, linearly dissipating more energy over its internally set operating range

The range is directly proportional to the trip voltage (4% of Trip point). The green LED indicates power OK, the yellow LED indicates dumping, and the red LED indicates overtemperature and shutdown. For dissipating more energy the Model 125 and 145 can be connected in parallel for simultaneous operation.



Model 125 or 145  
 Dissipator

Copley Amplifier



**SPECIFICATIONS**

MODEL	125	145
<b>PEAK CURRENT</b>	30A @ 200V	20A @ 400V
<b>PEAK POWER</b>	6k Watts * 200 ms	8k Watts * 200 ms
<b>PEAK ENERGY</b>	1200 W-s	1600 W-s
<b>CONTINUOUS POWER</b> (See note 2)	120 Watts	160 Watts
<b>OPERATING VOLTAGE</b>		
Trip point	187V	375V
Range	7.5V	15V
Stability	0.2%	0.2%
<b>QUIESCENT CURRENT</b>	< 30 mA	< 30 mA

**THERMAL REQUIREMENTS**

operating temperature	0°C to 70° C	0°C to 70° C
Storage temperature	-30°C to 85° C	-30°C to 85° C

**INDICATOR LED's**

Green	Power OK
Yellow	Dissipating Energy
Yellow & Red	Warning, 1° C from thermal shutdown
Red	Thermal shutdown

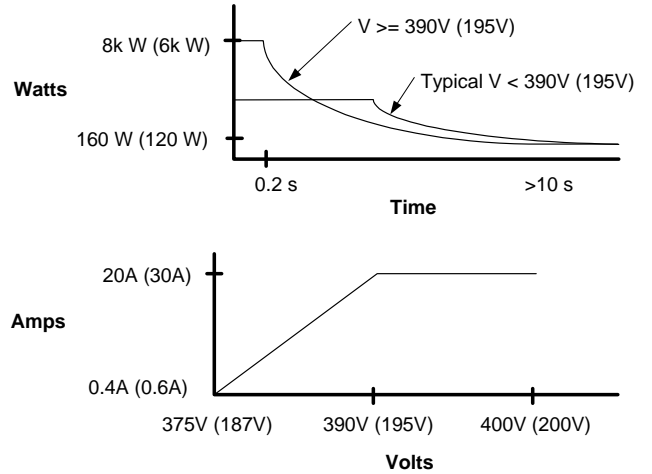
**STATUS**

Opto-isolator is ON (4mA current) when dissipator is OK.  
OFF (32VDC max) when shutdown.

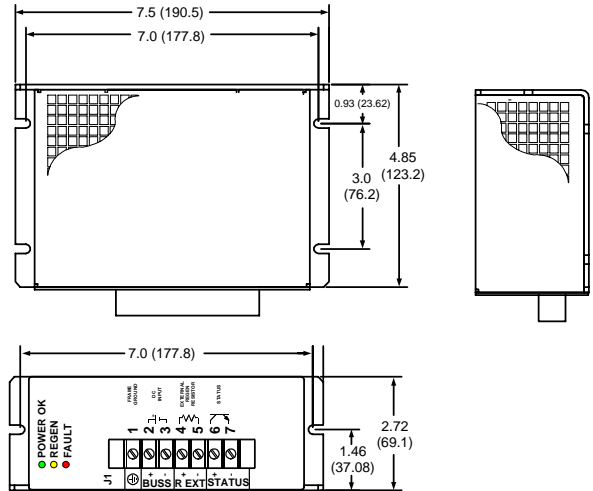
**APPLICATION INFORMATION**

- Special configurations are available for non-standard trip voltages.
- The operating range voltage is 4% of the trip voltage.
- Where multiple dissipators are configured in parallel, use cable with equal length to the amplifier.

**POWER CURVES FOR MODEL 145 (125)**



**OUTLINE DIMENSIONS**



Dimensions in inches (mm)

**WEIGHT**

0.84 lbs. (0.38kg)

**CONNECTORS**

J1: 7-position barrier strip; #6-32 screws with wire protectors

**ORDERING GUIDE**

Model 125	187V trip, 30A Peak PWM reverse energy dissipator
Model 145	375V trip, 20A Peak PWM reverse energy dissipator

**Note:**

1. For special configurations, specify the trip voltage and verify that the range voltage is OK.
2. To increase continuous power dissipation, contact factory for external resistor option.

