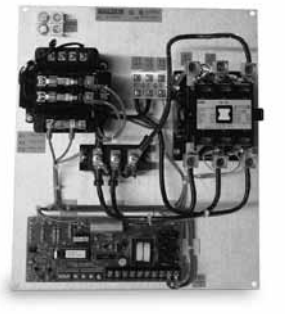
Multipurpose Dynamic Brake

5-500 HP **208-460V 50/60 Hz**
5-600 HP **230-575V 50/60 Hz**



Applications: Stopping coasting loads such as chippers, saws, cutting tools and conveyors. It can also be used to stop windmilling fans before starting.

Features: The Multipurpose Brake is a microprocessor based solid state brake designed to eliminate the problems common to traditional DC injection brakes. To eliminate blown fuses and welded contacts, the microprocessor senses when AC is no longer present before turning "on" the braking. A faster zero speed sensing circuit turns off the braking as soon as the motor stops to reduce motor heating.

Design Specifications
- Microprocessor based control
- SCR/Diode power circuit
- Line contactor
- Motor voltage sensing circuit
- Zero speed sensing
- Four braking time ranges
- Three operating modes
- Two adjustable braking magnitude potentiometers

Environmental and Operating Conditions
- 40 degrees C
- 1000 feet elevation
- Open panel design
- 208, 230, 460, 575 volt input line voltage
- 50/60 Hz input frequency
- Control voltage 120 VAC

Protective Features
- Shorted SCR protection
- Motor terminal voltage sensing
- Time delay to allow motor flux to collapse
- Motor starter interlock contact

Model Number	208/230/460 VAC 50-60 Hz. [a]		**BQ7-016-CP**	**BQ7-030-CP**	**BQ7-055-CP**	**BQ7-080-CP**	**BQ7-135-CP**	**BQ7-160-CP**	**BQ7-250-CP**	**BQ7-420-CP**	**BQ7-600-CP**
	230/460/575 VAC 50-60 Hz. [a]		**BQ8-016-CP**	**BQ8-030-CP**	**BQ8-055-CP**	**BQ8-080-CP**	**BQ8-135-CP**	**BQ8-160-CP**	**BQ8-250-CP**	**BQ8-420-CP**	**BQ8-600-CP**
Output Ratings	Hp Rating	230 VAC	5	10	20	30	50	60	100	150	250
		460 VAC	10	20	40	60	100	125	200	350	500
		575 VAC	10	30	50	75	125	150	250	400	600
	Current Rating		16	30	55	80	135	160	250	420	600
	Derate		Above 1000m (3300 Ft.) decrease amp rating 1% for each additional 100m (330 ft.)								
			Above 45° (115°F) decrease amp rating 1.5% for additional °C (0.84%/°F)								
Input Rating	Frequency		50-60 Hz. ±5%								
	Voltage		control board 115 VAC +10% to -15%								
	Phase		Three Phase								
Control Spec.	Control Type		Microprocessor Based								
	Control Method		Common Anode SCR and diode to achieve DC								
	Control Power		External control transformer (suppled with certain models) 115 VAC 50-60 Hz. to the control board								
	Power Consumption		1.5 VA by the control board								
	Operating Modes		Master mode (brake controls starting and stopping of motor)								
			Prestop mode (prestop a windmilling load)								
			Basic mode (for replacement of existing dynamic brake)								
	Brake Timer Ranges		1-17 seconds; 15-32 seconds; 30-47 seconds; 45-62 seconds								
	Zero Speed Sensor		Selectable (brake disengages when motor stops rotating)								
	M Contact Rating		10 amp at 125 VAC								
	Brake Magnitudes		Two adjustable brake magnitudes								
	Status LEDs		Power/Ready/Run/Braking								
	Peak Inverse Voltage		460 VAC controls - 1200V; 575 VAC controls - 1600V								
	Heat Loss		1 watt per amp while braking								
Diagnostics	Error Indicators		Improper line voltages; Motor contactor failed to open; Brake contactor failed to open; Improper line frequency								
Dimensions	Height x Width x Depth		14.75" x 12.88" x 5"		14.75" x 12.88" x 6"		21" x 21" x 8"		33" x 33" x 9.75"		
Ambient Conditions	Temperature		Enclosed 0-45°C (32° to 113°F) open/panel 0 to 50°C (32° to 122°F)								

[a] For 50 Hz. applications use the brakes without a transformer and supply a separate 115 VAC supply to the brake control board and contactor. The brake can also be ordered as a BQ9 - XXX - XX for 380/400/415 VAC applications. It will have the control transformer mounted on the panel.