

Features

- Overload class is adjustable using DIP switches for 5, 10, 20 or 30 seconds, maximum trip times at six times rated current
- Designed for 1000V and less distribution systems
- Form C (NO/NC) contact on output relay
- Isolated alarm relay output contact
- Communications capability using IMPACC network
- Manual or automatic reset (either a true manual or remote electrical reset)—selectable
- Overload, Class II ground current, phase unbalance and single-phase protection are standard
- LED indication (bi-colored—red/green) for device status, including overload, phase unbalance or ground current trip
- Special Function Module adds protection for underload and jam conditions, also provides for long acceleration
- Optional load control feature available with special function module
- Feed-through current transformer windows for contactors, NEMA Sizes 1–4 (for Size 5 and larger, external current transformers can be used)
- Fits mounting footprint of Eaton’s MORA relay
- Panel or starter mountable
- Cause of trip is held in memory through a power loss
- Bell alarm contact available for remote status indication
- DIP switch provided for setting operating frequency—50 or 60 Hz
- Plug-in terminal block for control power, trip relay and bell alarm relay connections
- Operating temperature: –20° to 60°C (–4° to 140°F)

Benefits

- No external current transformers are required since they are internal to the IQ500

- DIP switches used to select functions and settings on base relay are clearly marked and covered with screw-on plastic covers
- On the automatic reset, the reset times can be selected for long (90 second) or short (10 second) delay
- Device can be set for different motor full load currents without additional parts or modules

Optional Benefits

- With the addition of the IQ500M Special Function Module, the enhanced protection includes jam (overtorque) and underload and provides long acceleration time (high inertia load)
- The underload and jam protection functions each have independent Form C output relays as part of the module. In addition, the underload and jam functions each have their own LEDs for status indication

- The underload and jam functions also have separate selectable trip levels and adjustable trip-delay and start-delay settings
- The IQ500M can be used as a load control module that allows “shedding and restoring” a particular load that contributes to the load being monitored
- The PONI (Product Operated Network Interface) card attaches directly to the base relay or special function module for interfacing with the Eaton’s PowerNet communications system
- Localized display can be achieved with the Central Monitoring Unit

Standards and Certifications

- UL File No. E19223



Product Selection

IQ502A



Current Sensing Protective Relay

Maximum Horsepower				Ampere Rating	Control Voltage	
200V	230V	460–475V	110/120V 50/60 Hz Catalog Number		220/240V 50/60 Hz Catalog Number	
20	25	50	3.4–66A	IQ502A	IQ502B	
60	75	150	10.8–207A	IQ504A	IQ504B	
—	—	—	0.32–5.4A	IQ500LA ¹	IQ500LB ¹	
Special function module				IQ500M	IQ500M	

Note

¹ Can be used with external CTs having 5A secondary.