QUINT power boost and monitoring capabilities

Application note

QUINT power boost

The fourth generation of QUINT power supplies boasts several exclusive characteristics and unique diagnostics, with two vigorous power boosts which eliminate the need to oversize the power supply.

The QUINT4 power supply's static power boost provides loads with up to 125% of the nominal current permanently, in the event that an older or more resistive device begins to draw unanticipated current. QUINT4 power supplies offer an additional dynamic power boost of up to 200% of the nominal current for up to 5 seconds. The dynamic power boost is an ideal feature when designing an application with inductive loads. This power boost will compensate for the extra current needed to start up current-hungry loads.

QUINT monitoring

QUINT4 power supplies are also equipped with proactive configurable monitoring capabilities to provide users with enhanced diagnostics that enable preventative maintenance. The exclusive digital output alarm settings make proactive monitoring easier than ever. Without the need for an additional monitoring device, the QUINT4 can digitally monitor several vital signs of the power supply.

QUINT POWER - Preventive monitoring

Default settings		Out 1 digital	Out 2 digital	Out 2 analog	13 14 relays	Bargraph
Output Voltage	Ⓥ	◉	○	○	◉	
Output Current	Ⓐ	○	◉	○	○	
Output Power	Ⓟ	○	○	○	○	◉
Operating Hours	0000h	○	○		○	
Prewarning Derating	ϑ	○	○		○	
Overvoltage Protection	OVP	○	○		○	
Input Voltage OK	AC_{OK}	○				

As a default, the power supplies can monitor output voltage and power using digital output contacts. Through a passive interface, the devices can be easily configured to proactively monitor other essential output data. It can also send a digital signal when the power supply begins to de-rate due to ambient temperatures or if the power supply's OVP has been activated. Users can set an operating hour alarm to indicate when the power supply has operated for a selected period of time.

The QUINT4 power supply's output 2 contact can be configured as an analog output. This 4-20mA analog signal sends the real-time current, voltage, or power to the PLC, HMI, or SCADA controller. The ability to customize which electrical characteristic (voltage, current, or power) to monitor gives customers the freedom to choose which one is most important to their application. This analog output eliminates the need for an external device to monitor the power supply.

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