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PCS100 UPS-I units to protect Swiss government data center



The data center industry is nowadays one of the most dynamically developing market sectors as it constitutes a crucial element of the flawless performance of both private and public businesses. Gathering, storing and managing data requires extremely high standards. Therefore, the most paramount concern for a data center business is unbroken continuity. Digital devices do not tolerate power supply interruptions which in fact are very common in the world's electricity supplies. Voltage sags and surges along with short outages might impair the system or even stop it completely. In the case of a data center such an event could have serious consequences affecting information security and data protection.

Background

For a government data center any power supply disruption might be particularly harmful. Rows of servers storing unimaginable amount of information operate around the clock and the prospect of an impairment of applications or

even potential loss of classified data due to unexpected voltage sags and surges is totally unacceptable and cannot be disregarded. This is why the Swiss government data center has decided to secure its reliable as well as efficient operations by supplementing its system with ABB's PCS100 UPS-I technology.

Solution

ABB PCS100 UPS-I provides an ideal solution where power supply disruption poses a considerable risk. The UPS-I is an offline system which uses energy storage coupled through a back-up inverter to enable the downstream load to ride through short outages and very deep sags of up to 30 seconds which allows enough time before the PC emergency generators start. The PCS100 UPS-I operates with speed of performance like online systems due to the revolutionary fast utility disconnect. It remains inactive until the voltage falls by 10-13 percent. This enables high efficiency, reaching 99 percent.

Solution benefits

- Provides protection against short outages and very deep sags.
- Offers protection against utility reclosure events
- Provides back-up during generator start-up following a utility supply failure.
- Allows process loads to ride through common power problems, increasing yield, reducing product wastage and improving productivity.
- Suited to the demanding requirements of industrial applications as well as industrial loads.

Features

- Very high efficiency (typically 99 percent).
- Very high fault capacity compared with standard UPS solutions.
- Extensive range of voltages available.
- Modular design providing high reliability and short repair times.
- · Small footprint design.
- Custom storage solutions available.

ABB will support one of the Swiss government data centers with emergency power supply comprising four PCS100 UPS-I units of 1800 kVA rated output each. ABB will provide the whole solution including the switch gear as well as all related services. The customer will also receive a practical training which will take place in New Zealand factory.

To find out more about ABB's power protection solutions:

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