New Surge Protective Devices QS technology

ABB

The new SPDs QS range is available in multi-pole versions for all distribution system TT, TN-C, TN-S, IT and several voltage level 275 / 350 / 440 / 600 V AC stables or unstable. Different I_{imp} , I_{max} and I_{scor} can protect the installations against high transient overvoltages from the lightning or switching effect. This new range can be installed on sites with a prospective short-circuit current up to 100 kA on the installation point of the SPD.



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Quicker maintenance operations and dielectric test for electrical switchboards with Pluggable cartridges.

ABB SPDs with pluggable cartridges facilitate maintenance operations. If one or more used cartridges need replacing, it is not necessary to disconnect the device. A cartridge at the end of its life can be replaced without having to change either the SPD or all the whole set of cartridges.

This pluggable feature allows time saving when performing dielectric tests in electrical switchboards (according to IEC 61439-2 and IEC 61 60364-6 used by panel builders).

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A full SPD range updated and certified with the new standard.

The latest version of IEC 61643-11:2012 add new tests procedures in the aim to increase your surge protection. Better features: a Surge Protective Device declared as a T1+2 SPD has to pass the laboratory's tests as an Type 1 (10/350 µs waveform) and as a Type 2 SPD (8/20 µs waveform). Improve safety features: a new test procedure which takes into account both the failure behavior of protective equipment in the event of an overload and when the service life has expired.

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A lower voltage protection level to keep the systems safe.

Starting at Up = 1100 V, the new performances of the QS range Type 1+2, Type 2 and Type 2+3 guarantee that the residual voltage at the terminal of the SPD, under the effect of a surge, will be as low as possible to guarantee the best protection of the equipment.

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These Surge Protective Devices are equipped with two varistors per pole.

If one varistor is damaged, the SPD gives advanced warning that it is approaching the end of its life while the other varistor continues to protect the equipment, allowing to perform Preventive Maintenance.



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Easier inspection of equipment with state indicator and signaling contact

The front mechanical end of life indicator provides the information of the status of the SPD (changing color from green to red), when the device reaches the end of its life. This is available for all cartridges with MOV technology. There is the possibility to use the signaling contact "TS" to transmit this end of life information to a remote control system.

In case of products with Safety Reserve system, the TS will change status as soon as one MOV is damaged, allowing to perform Preventive Maintenance activities.



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Compact design to save space in enclosure

OVR QS series are DIN rail mounting and sizes are ideal to be installed in all reduced size plants. Starting with the single-pole versions for maximum flexibility, it will allow you to save space in your current installation or choose a smaller enclosure and at the same time protecting the equipment against transient overvoltage.







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No dedicated back up protection needed for the SPD.

In the case where the SPD ends its life in short circuit condition, we therefore need a back-up protection (fuse or circuit breaker) in order to open the circuit. With the QS series, the rated current of this back up protection has been increased up to:

- 125 A MCB (B or C) or 160 A (gG or gL)
- for T1-T2s and T2s series
- 125 A (B or C/gG or GL) for T2 and T2-T3 series.



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A safer installation with QuickSafe[®] technology.

According to the new IEC 61643-11:2012 standard, the patented technology QuickSafe[®] allows the product perfect performances even in extreme conditions (up to +80 °C as rated temperature) and guarantees a quick disconnection in case of interruption of the neutral and short-circuit conditions in case of failure.

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Contact us

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http://www.abb.com/lowvoltage

