NEWS **M1509**

To:	Owner Sales Manual	Category:	Product News
from:	Josef Schuler	Product group:	Circuit Protection
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UHS SMD fuse

Safe tripping of particularly high currents in the SELV range

- Very high breaking capacity of up to 2'000A
- Safe tripping in 10s at twice the rated current
- Particularly compact dimensions
- Operating temperature range from -55°C to 125°C

Product

Even in the SELV range, the range of safety extra-low voltage that is harmless to people even when touched, enormously high currents can flow in the event of a short circuit. SCHURTER responds to this danger with the new, particularly compact SMT fuse UHS.

SELV stands for "Safety Extra Low Voltage". The term sounds self-explanatory and harmless. However, especially with the availability of inexpensive and yet very powerful lithium-ion battery cells, the need to be able to switch off ever higher currents in a controlled manner on inexpensive SMT circuit boards is increasing.
The SMT fuse SCHURTER UHS with rated currents of 50 to 100A, which was specially developed for these cases, ideally meets the requirements for a high and fast breaking capacity in case of massive overcurrent. The immense energies stored in lithium-ion battery cells can be galvanically isolated in a controlled manner.

Compact and powerful

Space is a scarce commodity on modern printed circuit boards. This makes the minimal "footprint" occupied by the UHS all the more significant. Nevertheless, it manages to disconnect the circuit at twice the rated current within just 10 seconds and thus ensures that the PCB can be constructed in a space-saving and economical manner.

Danger: Short circuit

Lithium-ion battery cells can store very high amounts of energy and release it again within a very short time - for example in the event of a short circuit. The UHS has an enormously robust design. Its breaking capacity at 50VDC is 600A, and lower voltages up to 16VDC even allow 2'000A.

Wide range of applications

The UHS is designed to operate at ambient temperatures from -55°C to +125°C. This makes it ideal for applications in the automotive sector. However, other applications with potentially very high overcurrent (telecom, data center or power tools) are also perfectly suited.

Availability and Samples

All articles in the variant table are available in small quantities from stock. Larger quantities on request. More information about available stock of a specific variant may be retrieved by using the Distributor Stock Check in the table of variants on the **Data Sheet [1]**.

Additional Information

This document together with the PR texts, -adverts and -pictures and pricing information are available on the Digital Asset Management server **SCHURTER DAM [3]**.
The **Data Sheet [1]** contains detailed information about the technical specifications, order numbers as well as CAD-Data.

Please do not hesitate to contact us in case of any questions.

Best Regards,

Josef Schuler
Product Manager

SCHURTER AG
Werkhofstrasse 8-12
6002 Luzern
Schweiz
Direct: +41 41 369 34 09
www.schurter.com
josef.schuler@schurter.com

Links to Sales Information

[1] Data Sheet	https://www.schurter.com/en/datasheet/UHS
[2] SCHURTER DAM	https://dam.schurter.com/web/5972168ded216281/launch-uhs/?viewType=grid

New Part Numbers

Part no.	Description	Configuration Code
3-140-167	UHS Fuse F 50A	UHS-8494-50A00-SMD-0F-SN-00
3-140-168	UHS Fuse F 50A	UHS-8494-50A00-SMD-0F-SN-00
3-140-169	UHS Fuse F 60A	UHS-8494-60A00-SMD-0F-SN-00
3-140-170	UHS Fuse F 60A	UHS-8494-60A00-SMD-0F-SN-00
3-140-171	UHS Fuse F 70A	UHS-8494-70A00-SMD-0F-SN-00
3-140-172	UHS Fuse F 70A	UHS-8494-70A00-SMD-0F-SN-00
3-140-173	UHS Fuse F 80A	UHS-8494-80A00-SMD-0F-SN-00
3-140-174	UHS Fuse F 80A	UHS-8494-80A00-SMD-0F-SN-00
3-140-175	UHS Fuse F 90A	UHS-8494-90A00-SMD-0F-SN-00
3-140-176	UHS Fuse F 90A	UHS-8494-90A00-SMD-0F-SN-00
3-140-177	UHS Fuse F 100A	UHS-8494-100A0-SMD-0F-SN-00
3-140-178	UHS Fuse F 100A	UHS-8494-100A0-SMD-0F-SN-00