

Addition of New RT Choke Series Mitigates EMI Issues in Robotics and Motor Drives

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Schaffner has extended its range of filtering solutions for suppressing electromagnetic interference (EMI) with a new common-mode choke series designed for use with mid-size power range drives frequently used in robotics and motor drives.

If not dealt with, EMI could cause robots to behave with unexpected movements, representing a serious risk to factory workers as well as the possibility of costly damage. In addition, EMI could interfere with functional-safety systems, such as the false triggering of a safety mechanism, leading to unnecessary equipment stoppages or safety protection systems failing to operate when required.

Operating at Currents up to 63 A – On a PCB

By fitting this new current-compensated choke – which is capable of operating at currents up to 63A – it's now easier than ever to prevent EMI noise from going to power lines and disturbing the functioning of other systems. Ensuring improved immunity against grid disturbances, the [RT choke series](#) suppresses EMI noise in PCB integrated filter designs.

As a global leader in electromagnetic solutions, Schaffner developed the new choke series to meet the growing use of automation and electrification across a range of industries. Designed to help minimize costs, the addition of the [RT choke series](#) will also support design engineers working across a range of industrial segments.

The choke is also ideal for AC and DC filtering up to 600V in fast chargers and charging stations, uninterruptible power supplies (UPSs), switch mode power supplies (SMPSs), photovoltaic inverters, industrial LED lighting, medical and laboratory equipment.

Horizontal or Vertical Mounting

Offering a choice of horizontal or vertical PCB mounting options, the [RT choke series](#) is compact and lightweight. Available in two- or three-wire configurations, the choke series also provides a broad range of inductance ratings and features a UL-approved insulation system, excellent winding insulation and standardized footprint, enabling designers to swap chokes and alter specifications without having to make design changes. Custom-specific versions of the choke are available on request.

Flexible Range

Felix Wedel, product manager at Schaffner, explains: “As the world changes it is important that we keep developing the best solutions for our customers. For product designers in this sector, a flexible range of mounting possibilities and cost-effective PCB designs are crucial in order to deliver a reliable and cost-effective EMC solution. The [RT choke series](#) has proved to be a popular and reliable solution for many sectors and a choke capable of operating at higher currents will be a valuable addition to the range.”

Wedel adds: “As is often the case, it is best to seek advice from the experts to identify any potential EMC challenges and find solutions as early as possible in the design process.”

For more information, visit the Schaffner website at schaffner.com

Schaffner plays a vital role in building a sustainable future in the new era of electrification. Headquartered in Switzerland and with subsidiaries around the world, Schaffner is a global leader in electromagnetic solutions that ensure the efficient and reliable operation of electronic systems. The Schaffner Group are experts in EMC filter solutions, harmonic filters, electromagnetic components and electromagnetic solutions. Our passionate and knowledgeable employees empower our customers to develop reliable electronic devices and systems that meet compliance standards and deliver increased energy efficiency.

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