Studer Cables
Connected to HARTING

Cable Solutions for Ventilation Systems

BETAdrive® – Halogen-Free, Energy-Efficient and Sustainable

Whether in cleanrooms, tunnels, data centers, or building services: our halogen-free **BETA**drive® connection and supply cables are the ideal solution for the safe, sustainable, and energy-efficient operation of frequency converter-controlled electric motors. Thanks to EMC optimization, short-circuit safety, and an exceptionally long service life, they ensure efficient use in sensitive and demanding environments – while making a valuable contribution to sustainability.

Optimized for frequency converter systems

BETAdrive® cables are specially designed for use in applications with frequency converters. They ensure safe, low-interference operation of electric motors in ventilation, heating, and air-conditioning systems – particularly in environments such as cleanrooms, where precise controllability is essential. Applications in the semiconductor, food, or pharmaceutical industries, as well as in tunnels, data centers, and building services, benefit from the precise design and high reliability of our cables.

More efficiency, less energy consumption

Frequency converters allow the motor speed to be precisely adjusted to the demand, which not only optimises processes but also enables significant energy savings. Our cables contribute to this by minimising asymmetrical voltage drops and reducing bearing currents at the same time. The result: extended component service life, lower operating costs and increased sustainability.

Swiss made

Advantages

- Symmetrical design – prevents asymmetric voltage drops and induced currents
- Reduction of bearing currents – extends motor service life
- Multicore and flexible – easy handling
- Low electrical capacitance – optimized for frequency converter operation
- EMC-optimized double shielding (aluminium composite foil and tinned copper braid with min. 85 % coverage)
- Halogen-free – increases safety in case of fire
- Low-toxicity fire gases
- UV- and weather-resistant

Reliable performance indoors and outdoors

Our **BETA**drive® cables are suitable for fixed and flexible installation under moderate mechanical stress – indoors and outdoors. The combination of optimised symmetrical design and EMC shielding guarantees trouble-free operation and minimises power losses. Ideal for frequency converter applications where any interference must be avoided.

Robust materials for the most demanding requirements

The cable sheath is made of a specially developed, halogen-free compound with excellent fire behaviour. This makes our cables ideally suited for demanding industrial applications where safety, temperature resistance and service life are important.

Studer Cables stands for quality, flexibility and technical excellence.

Connection and supply cables

	Nominal voltage	Temperature range	Cross sections
BETAdrive®	0.6/1 kV	+90 °C max. Conductor temperature +250 °C max. Short-circuit temperature	from 3 × 2.5 mm² 3 L + 3 × 1 mm² PE to 3 × 240 mm² 3 L + 3 × 50 mm² PE

Connection and supply cables (with circuit integrity)

	Nominal voltage	Temperature range	Cross sections
BETAdrive® FE 180	0.6/1 kV	+90 °C max. Conductor temperature +160 °C max. Short-circuit temperature **+750 °C in case of fire**	from 3 × 16 mm² + 3 × 6 mm² to 3 × 240 mm² + 3 × 50 mm²

Further information can be found in our data sheets on our website: **https://studercables.com/en/products/**

In addition to premium-quality products, Studer Cables provides comprehensive consulting, precise calculations, and a wide range of additional services. Our experts will be pleased to answer your questions personally.

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