

Managing DC Energy: Metal Saw

Situation:

Saw blades for high-precision metal saws are often taylor made and very expensive. The saw itself is driven with a defined feed rate.



Problem:

In case of main power failures the saw blade and the workpiece may wedge. This crash causes damage at the saw blade and the workpiece.

Intention:

In case of power failure, ensuring the continuation of the drive until the saw blade has moved away from the workpiece.

Solution:

- > Use of [KTS-U2004-0002](#) via „Plug & Play“:
Supplying the saw with the energy that is necessary until the forward feed is reversed – the saw blade can be moved away from the workpiece.

Results:

1. Controlled return of the saw blade out of the workpiece
2. Avoiding damage to the saw blade and the workpiece – no costly and time consuming spare part procurement necessary
3. The machine can keep running without time-consuming set-up times

Further information:

[Metal-Saw](#)

[KTS](#)
[Control cabinet](#)

We look forward to hearing from you!

Energy Management Systems KTS

Protection of electric drives against voltage fluctuations, reduction of peak loads, off-grid use of regen energy: The requirements and framework conditions can hardly be more different. KTS is a very flexible system with solutions for all cases. It consists of a combination of power electronics, super capacitor modules, and other necessary and desired peripherals – all of which are tailored to the specific application scenario.

The KTS is connected directly to the DC link of your drive system and provides energy in the event of an interruption. It can also be used as a cyclic buffer for the brake energy. What if the application requires both features? No problem – the KTS is simply the ideal solution. In addition, all the necessary safety systems are integrated in the system and the delivered system is completely wired and ready for connection. This simplifies your initial operation significantly since, in most cases, all you need to do is just connect the power and communication cables.

The modular design of the electronics and storage allows for a fine gradation in relation to the required power and energy quantity. What's decisive in this case are the application data, which are used as a basis of the initial simulation. The simulation helps determine the necessary components. The sizing tool is available on our homepage.

A safe discharge unit (SDU) can also be integrated for discharging the storage voltage to a safe level within a reasonable time during maintenance work. In addition, the system can also be enhanced with a 24 V emergency current supply for the 24 V system periphery.

This document only presents a quick overview. Please contact us for specific offers.

Energy Management Systems KTS-U – Emergency Power Supply

Connected directly to the DC link of your drive system or to a DC circuit the system provides the energy needed to bridge voltage fluctuations or power failures without any interruptions. This in turn ensures that the machine or system comes to a safe standstill.

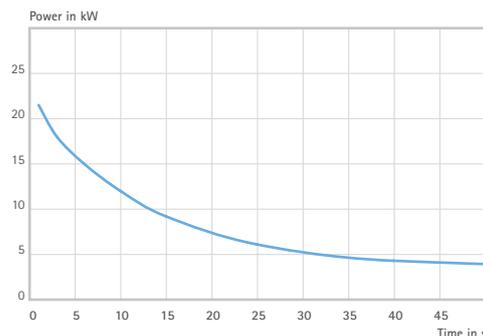
The system is designed using a sizing that is based on the respective application data.

Technical data KTS-U

Parameter	KTS-U0800	KTS-U1000	KTS-U2000	KTS-U2000
Dimensions mm H x W x D	800 x 600 x 400	1000 x 600 x 400	2000 x 600 x 600	2000 x 1200 x 600
Mounting up to approx.	38 kJ energy	200 kJ energy	1 MJ energy	1,8 MJ energy
Peak power up to approx.	180 kW	40 kW	108 kW	216 kW

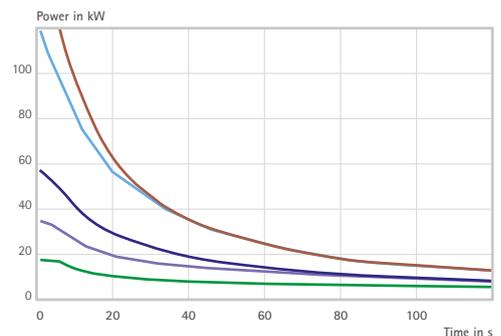
KTS-U100x Energy Management Systems UPS Applications

— KTS-U1001-0029 (1 DSM 4.0 with 5 DSKM 090010)



KTS-U200x Energy Management Systems UPS Applications

— KTS-U2001-xxxx (1 DSM 4.0 with 7 DSKM 045165)
 — KTS-U2002-xxxx (2 DSM 4.0 with 7 DSKM 045165)
 — KTS-U2004-xxxx (4 DSM 4.0 with 6 DSKM 045165)
 — KTS-U2005-xxxx (5 DSM 4.0 with 10 DSKM 045165)
 — KTS-U2007-xxxx (7 DSM 4.0 with 10 DSKM 045165)



We look forward to hearing from you!



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