



Managing
DC Energy

Energy
Management Systems

KTS



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.

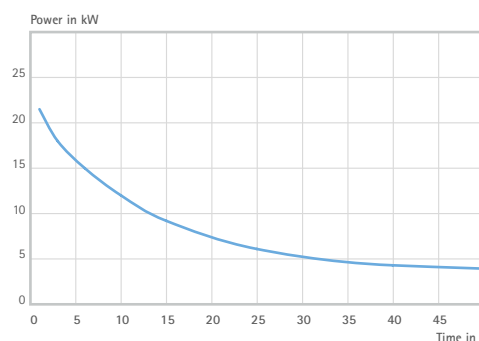
The system is designed using a sizing that is based on the respective application data.

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

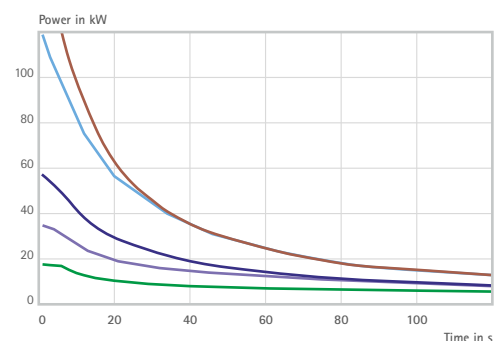
KTS-U100x Energy Management Systems UPS Applications

— 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)



Energy Management Systems

KTS-C – System for cyclic applications

The KTS-C series is used for buffering brake energy either alone or in conjunction with a UPS function. It is designed for cyclical loads.

The individual system is sized based on the respective application data.

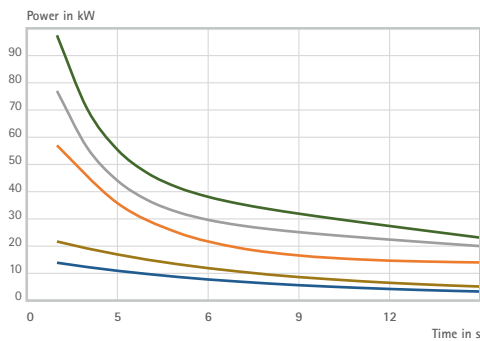
Technical data KTS-C

Parameter	KTS-C1000	KTS-C2000	KTS-C2000
Dimensions mm H x W x D	1000 x 600 x 400	2000 x 600 x 600	2000 x 1200 x 600
Mounting up to approx.	> 10 kJ energy	ca. 1 MJ energy	ca. 1,8 MJ energy
Peak power up to approx.	126 kW	108 kW	216 kW
Continuous power up to approx.	54 kW	36 kW	72 kW

KTS-C200x Energy Management Systems

Cycle time 30 s (15 s in, 15 s out)

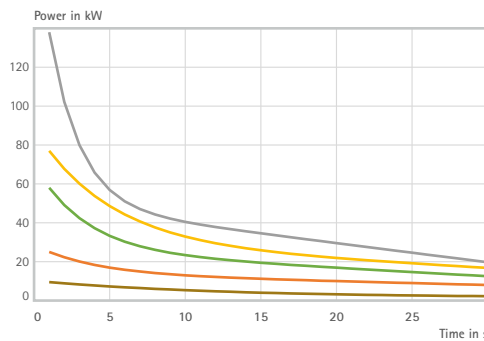
- KTS-C2001-xxxx (1 DSM 4.0 with 6 DSKM 045165)
- KTS-C2001-xxxx (1 DSM 4.0 with 9 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 6 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 8 DSKM 045165)
- KTS-C2007-xxxx (7 DSM 4.0 with 10 DSKM 045165)



KTS-C200x Energy Management Systems

Cycle time 60 s (30 s in, 30 s out)

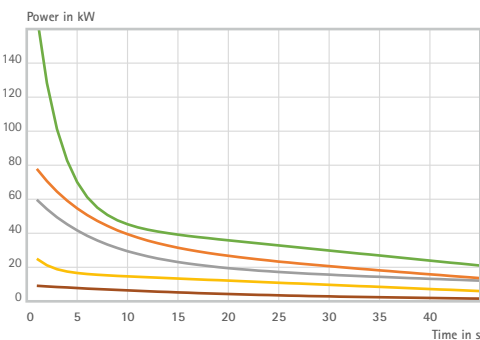
- KTS-C2001-xxxx (1 DSM 4.0 with 4 DSKM 045165)
- KTS-C2001-xxxx (1 DSM 4.0 with 10 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 6 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 8 DSKM 045165)
- KTS-C2007-xxxx (7 DSM 4.0 with 10 DSKM 045165)



KTS-C200x Energy Management Systems

Cycle time 90 s (45 s in, 45 s out)

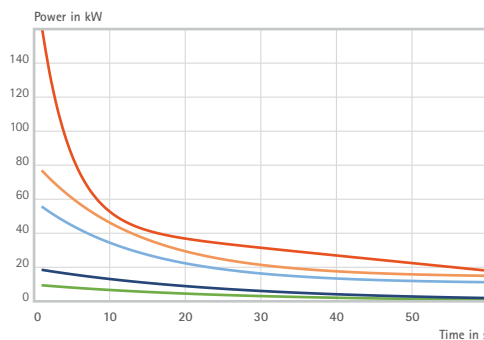
- KTS-C2001-xxxx (1 DSM 4.0 with 4 DSKM 045165)
- KTS-C2001-xxxx (1 DSM 4.0 with 10 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 6 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 8 DSKM 045165)
- KTS-C2007-xxxx (7 DSM 4.0 with 10 DSKM 045165)



KTS-C200x Energy Management Systems

Cycle time 120 s (60 s in, 60 s out)

- KTS-C2001-xxxx (1 DSM 4.0 with 4 DSKM 045165)
- KTS-C2001-xxxx (1 DSM 4.0 with 8 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 6 DSKM 045165)
- KTS-C2004-xxxx (4 DSM 4.0 with 8 DSKM 045165)
- KTS-C2007-xxxx (7 DSM 4.0 with 10 DSKM 045165)



Recommended options for KTS-U- and KTS-C-Systems:

Safe discharge unit SDU

Compatible, overload-proof discharge unit for the capacities in the KTS.



24 V Emergency Power Supply NEV

Power supply for 24 V periphery of the machine or system from the KTS storage.



Managing DC Energy

Active Energy Management Solutions and Safe Brake Resistors for Electric Drives

We offer:

- **Tested product quality**
- **Certified processes**
– we undergo regular inspections by third parties
- **Individual application support**
– owing to our modular system we can offer more than 60.000 solutions
- **Machine-specific implementation**
– we match our products with your machines
- **High reaction rate**
– we provide you with a suitable offer in the shortest possible time
- **Short delivery times**
– all components are available from stock
- **On-time deliveries every time**
– we deliver on schedule in optimal lot sizes
- **Reliable partner**
– we strive for long-term business relationships
- **Direct customer relationships**

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We look forward to hearing from you!



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