

Safety. Functional Safety.





AMK

Functional Safety in the drive

Compliance with the Machinery Directory is mandatory for every machine manufacturer in the European Economic Area. In other words, machine builders are required by law to build safe machines.

The crucial question is how this safety is realized. Of course, the effort and costs involved play a major role.

Ideally, safety functions are integrated in the drive. This not only saves time and money but is also much easier.

From AMK you receive drives with integrated Functional Safety TÜV-certified for plants up to PLe (ISO 13849-1.2008) and up to SIL 3 (IEC 62061).

The safety functions can be commanded by local safety inputs or by the FSoE protocol, depending on the device.

Functional Safety at device level
Easy and at minimum cost
All from one source!
Functional Safety can be commanded via local FSoE protocol
Standard versions with OSE (STO)

> • TÜV-certified for plants up to PLe (ISO 13849-1.2008) and up to SIL 3 (IEC 62061)



Products with Safety







Decentralized drive technology

- Standard version with STO
- Functional Safety
- Safety in normal operation
- Safe operating modes
- Safe stop functions
- In the certification process for plants up to PLd
- Commanding via the fieldbus with FSoE

Central inverters

- KW devices with integrated OSE safety function: Certified against restart analogous to STO
- For plants up to PLe

Controller cards KW-R07 and KW-R17 for central inverters

- Functional Safety
 - Safe normal operation
 - Safe operating modes
 - Safe stop functions
- TÜV-certified for plants up to PLe (ISO 13849-1.2008) and up to SIL 3 (IEC 62061)
- Commanding via the fieldbus with FSoE
- Commanding via safe I/Os

Safety functions

Safety in normal operation

- Safe Encoder Monitoring (SEM)
- Safe Maximum Speed (SMS)

Safe operating modes:

- Safe Operating Stop (SOS)
- Safe Speed Range (SSR)
- Safely-Limited Speed (SLS)
- Safe Direction (SDI)
- Safely Limited Increment (SLI)

Safe stop functions

- Safe Torque Off (STO)
- Safe Stop 1 (SS1)
- Safe Stop 2 (SS2)



Control your Motion.



AMKAMAC controllers

AMKASYN servo converters

DYNASYN servo motors

AMKASMART decentralized drive technology

SPINDASYN hollow shaft motors



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