

**Topic: Frequency inverter F5 with safety relay for safety function STO**

This info describes the safety classification of frequency inverters in accordance with the new machine directive.

**Problem, reason**

Frequency inverter F5 with safety relay for safety function STO (Mat.No. xx.F5.xyx-xxxx for y=A...D; x=variable).

After expiration of the transition period for the new machine directive, it is necessary to classify the performance level in accordance with ISO 13849 or SIL in accordance with IEC.

**Measures**

The KEB COMBIVERT F5 with driver relay for safe torque off (STO) is classified as follows:

Description	Value
MTTF <sub>D</sub> of the relay:	high (121 years)
Category	Cat 1 (single)
Diagnostic coverage	DC=0
it follows an achievable	
Performance Level according to ISO 13849 of	PL-c



For applications with higher performance level this level can be achieved also with the previous FI security technology by adding of additional components (e.g. safety contactor...).



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