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WARNING!

.Hazardous movements! Danger to life, risk of injury, serious injury or property damage!

- Keep free and clear of the ranges of motion of machines and moving machine parts.
- Prevent individuals from accidentally entering the machine's range of motion (e.g., by using safety fences, safety guards, protective coverings, light barriers).
- Make sure that the drives are brought to safe standstill before accessing or entering the danger zone.
- Also observe the safety note "Protection against dangerous movements" in chapter ↘ **"Safety instructions for electric drive and control systems"**

.Detecting and adjusting the connected encoder type

ctrlX DRIVE devices detect connected position encoders "plug & play" and configure them for use. For this purpose, a so-called "encoder scan" is executed during the initialization phases of the position encoder:

- After the 24V control voltage (booting of the drive) has been switched on
- After phase switching from CM to PM
- After a "parked axis" was activated (resetting "C1600 Parking axis procedure command")

.Use case

Potential changes of the connected encoder type can be automatically detected by an "encoder scan", e.g. during the activation of parked axes. Furthermore, the controller provides the option to automatically configure the motor encoder during the initial commissioning of motors. This is possible for the following types:

- Encoder with sine signals and HIPERFACE interface (SICK|STEGMANN)
- Encoder with ACURO®link interface (Hengstler)
- Encoder with EnDat 2.2 interface (Heidenhain)
- Encoder with ctrlX SENSE interface

However, executing the "encoder scan" requires time. In the case of time-critical initialization processes, the "encoder scan" can be permanently deactivated via the position encoder configuration in "S-0-0602.x.1, Phys. encoder type".