

Servoazionamento SBD

Il software SDSetup viene utilizzato per configurare l'azionamento SBD:

[:green_drive_motors:sdsetup.zip](#)

File ESI versione EtherCAT: [:green_drive_motors:cmz_sbd_etc.zip](#)

Nota applicativa TwinCAT: [:green_drive_motors:sdsetup-twincat_cmz_en.pdf](#)

File EDS versione CANopen: [:green_drive_motors:sbdcn.zip](#)

File GSDML versione ProfiNET: [:green_drive_motors:gsdml_sbd_ssd.zip](#)

Nota applicativa TiA Portal: [:green_drive_motors:cmzdrivespnt_tiaportal.zip](#)

1) Specificare un nuovo motore usando

Un nuovo motore può essere aggiunto usando File ⇒ Motori utente ⇒ Gestisci. Usa [Datasheet Engine](#) per visualizzare i parametri del motore.

Qui di seguito, per esempio, i parametri del motore GD350XS.

User motors

Name: GD350XS Manufacturer: NiLAB GmbH

Motor data

Model: GD350XS

Motion type: AC3 linear

Poles: 2 poles

Rated current: 2.61 A

Max current: 9.00 A

Mass: 1.00 kg

Inductance: 7.50 mH

Resistance: 7.650 ohm

Force constant: 73.0 N/A

Rated force: 191.0 N

Max force: 1242.0 N

Rated speed: 4.000 m/s

*Max speed: 4.400 m/s

*Max voltage: 1000.0 V

Pole pitch: 60 mm

Feedback sensor

Type: Sinusoidal abs enc - 1sin/rev

Phasing offset: 0.0 °

Phase polarity: 120 °

Temperature sensor

Type: PTC

Fault threshold: 1100 ohm

Overload protection

☒ Enabled

*Time: 1.009 s

Brake

☐ Present

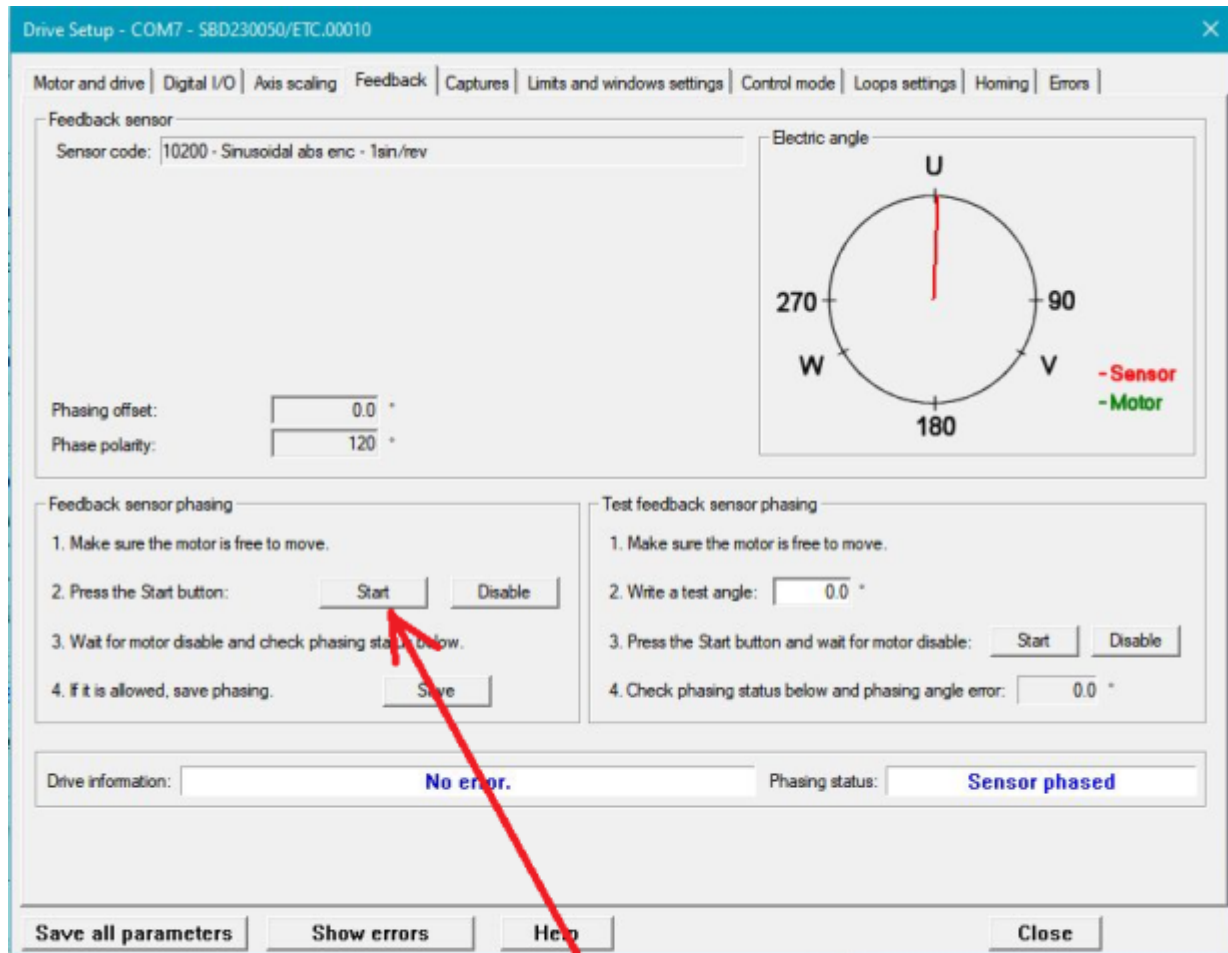
Opening time: 0 ms

Closing time: 0 ms

☒ *Auto calculate

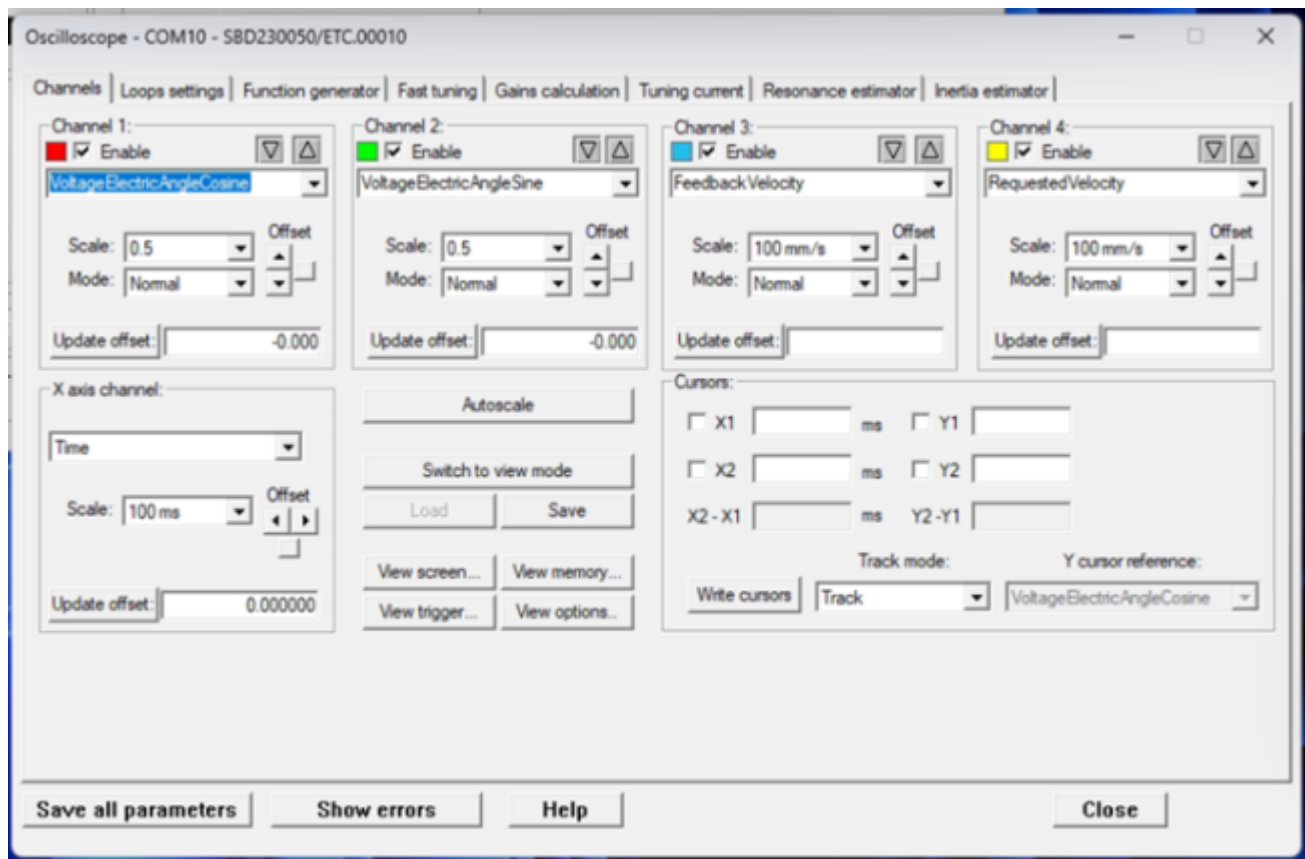
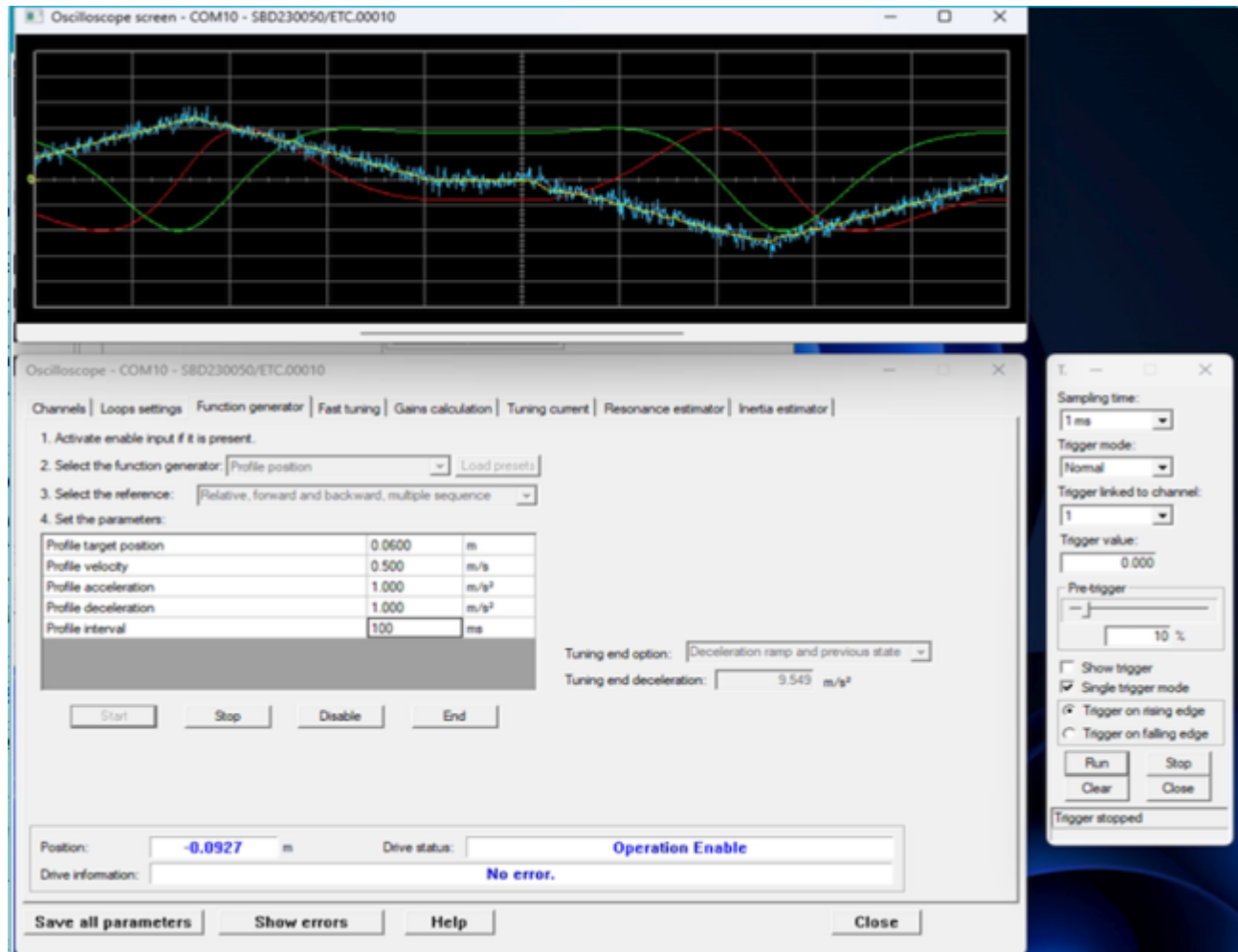
Write Cancel Close

2) Fasing del motore



3) Tuning del motore

Usando il generatore di funzioni, specificare un profilo di movimento.



4) Esempio di impostazioni dei loop

The screenshot displays the 'Oscilloscope - COM10 - SBD230050/ETC.00010' control interface. The interface is divided into several tabs: Channels, Loops settings (selected), Function generator, Fast tuning, Gains calculation, Tuning current, Resonance estimator, and Inertia estimator. The 'Loops settings' tab is active, showing the following configurations:

- Position loop:** KPp: 60, KVF: 1.000, Close position loop: ☒. Position stand still: ☐ Enable. Stability: 34, Stiffness: (slider). Position error dead band: 0.0000 m. Estimated bandwidth: 15 Hz. Recalculate.
- Velocity loop:** KVp: 100, KVi: 37, KAd: 1.000, KVd: 24, KVd filter frequency: 15000. Velocity stand still: ☐ Enable. Stability: 63, Stiffness: (slider).
- V filters:** 1: Low pass 2nd order, Frequency: 100 Hz. 2: None, Frequency: 2000 Hz. 3: None, Frequency: 2000 Hz. Sensor: None, Frequency: 2000 Hz. Angle observer bandwidth: 798 Hz. Estimated bandwidth: 53 Hz. Recalculate.
- Current loop:** KCp_Q: 2771, KQ_Q: 8190, KCp_D: 2771, KQ_D: 8190. C filter: Type: Low pass 1st order, Frequency: 500 Hz. KC_Q reduction: 0.000, ☐ Enable. Estimated bandwidth: 345 Hz. Recalculate.
- Field weakening:** Enable - Low pass 1st order.
- Buttons:** Load loops parameters from permanent memory, Recalculate all loops, End actual tuning command.
- Footer:** Save all parameters, Show errors, Help, Close.

From:
<https://dokuwiki.nilab.at/> - **NiLAB GmbH**
Knowledgebase

Permanent link:
https://dokuwiki.nilab.at/doku.php?id=it:green_drive_motors:sbd_servo

Last update: **2026/09/11 12:19**

