

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

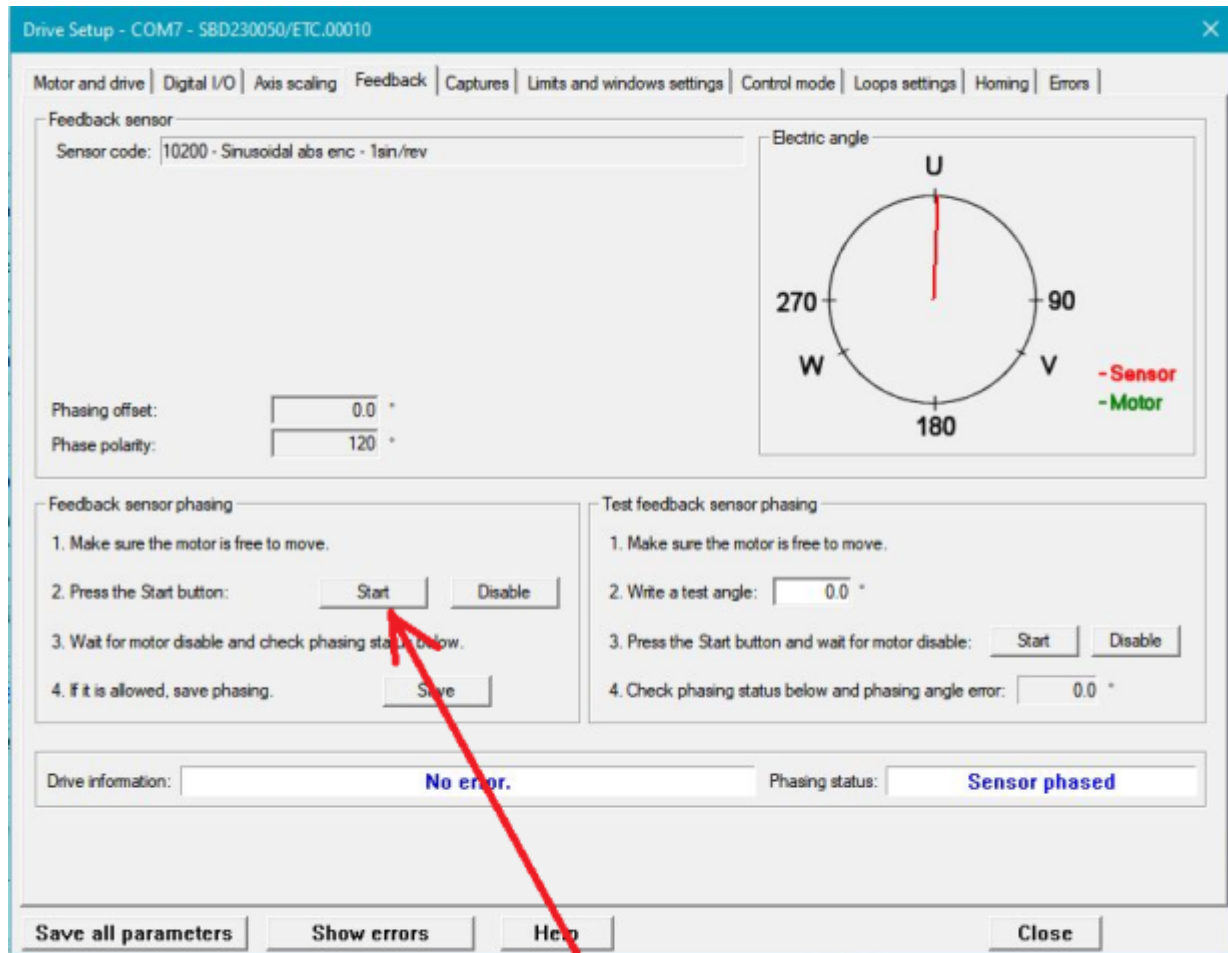
Opening time: 0 ms

Closing time: 0 ms

☒ *Auto calculate

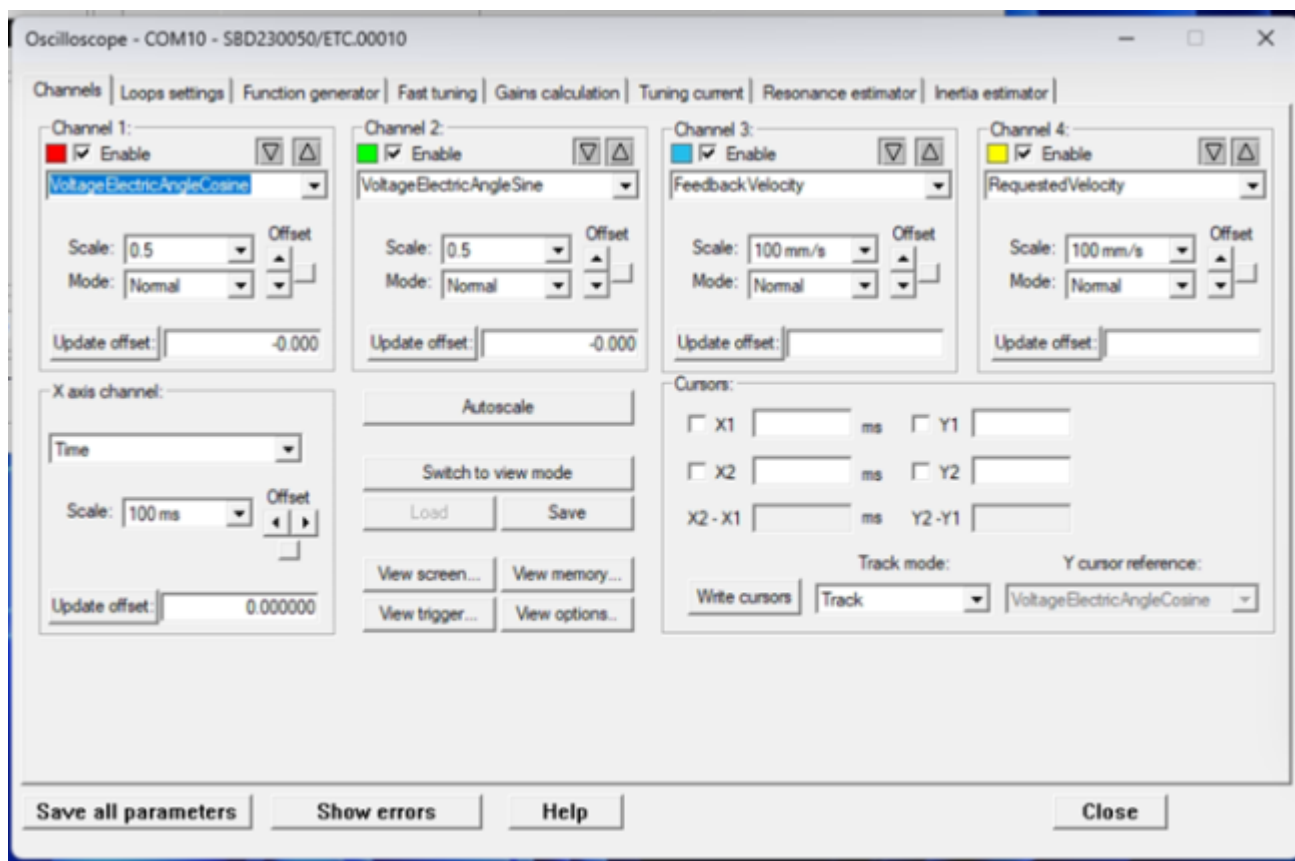
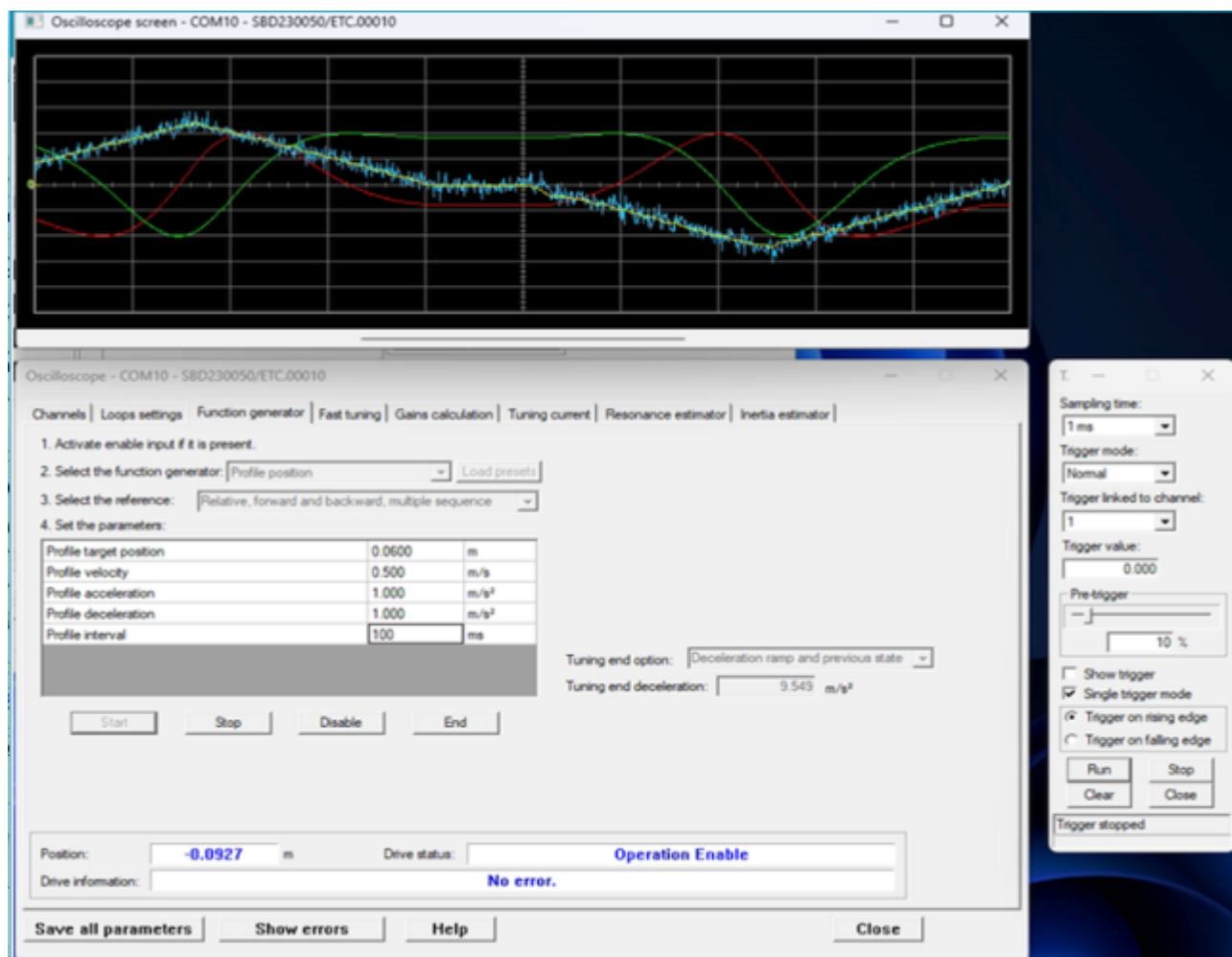
Write Cancel Close

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' software window. The 'Loops settings' tab is active, showing configurations for Position, Velocity, and Current loops, along with various filters and bandwidths.

Position loop:

- KPp: 60
- KVff: 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
- KVd: 24
- KAff: 1.000
- 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: Low pass 1st order, Frequency: 500 Hz
- KC_Q reduction: 0.000
- Enable predictive measure: ☐
- Enable EMF compensation: ☐
- Estimated bandwidth: 345 Hz
- Recalculate

Other settings:

- Total estimated inertia: 1.0 x motor inertia
- Reduction factor: 1.000
- Field weakening: Enable - Low pass 1st order
- Load loops parameters from permanent memory: ☐
- Recalculate all loops:
- End actual tuning command:
- Save all parameters:
- Show errors:
- Help:
- Close:

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

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

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

