

Xtrapulspack-Servoregler SIN/COS 1Vpp

Für die Konfiguration des Xtrapulspack wird die Gem Drive Studio Software verwendet.

Bitte verwenden Sie unsere [Datasheet Engine](#), um die Motorparameter zu sehen.

Schritt 1) ⇒ Motorkonfiguration ⇒ Strombegrenzung

The screenshot shows the 'Motor data' and 'Current limit' configuration windows in the Gem Drive Studio software. The 'Motor data' window on the left contains a large empty text area, a 'Motor select' button, and an 'Erase data' button. Below it, the 'Motor feedback' section shows 'SinCos track resolver'. At the bottom left, there are several images of different motor models. The 'Current limit' window on the right has two input fields: 'Maximum current (A):' set to '4 x Rated Current' and 'Rated current (A):' set to 'Rated Current'. At the bottom of the 'Current limit' window are four buttons: 'Apply', 'Refresh', 'Cancel', and 'Close'.

Schritt 2) => Motorkonfiguration => Stromregelung

The screenshot shows a software interface for motor configuration. It is divided into two main sections: 'Motor data' and 'Current loop'.

Motor data section:

- A large empty text area for motor data.
- Buttons: 'Motor select' and 'Erase data'.
- Motor feedback:** SinCos track resolver.
- Images of various motor types.

Current loop section:

- Phase-to-phase inductance (mH): Inductance value
- Bandwidth: ☐ Low ☒ High
- Calculate current loop gains** (highlighted with a green arrow)
- ID loop proportional gain:
- ID loop integral gain:
- IQ loop proportional gain:
- IQ loop integral gain:
- Low pass filter (Hz):

Bottom buttons: Apply, Refresh, Cancel, Close.

Schritt 3) Positionssensoren

Position sensors

Resolver input
SinCos tracks Not reversed **Resolver parameters**

Encoder 1 input
Disabled **Encoder 1 parameters**

Encoder 2 input **Encoder 2 parameters**

Analog sensor input **Analog sensor parameters**

Sensorless control **Sensorless parameters**

Motor Feedback: Resolver
Servo loop: Resolver **Feedback selection**

User position scaling:
60.00 mm per motor revolution **User position scaling**

Refresh **Cancel** **Close**

Hinweis, dass Sie bei NL80Q oder NL080X die Skalierung auf 30 mm und bei NL040Q oder NL040X die Skalierung auf 18 mm einstellen müssen.

Schritt 4) Positionssensoren ⇒ Benutzer-Positionsskalierung

User position scaling

Position unit

☐ Revolution

☐ Increment

☒ Millimeter

☐ Meter

☐ Degree

☐ Other unit:

Display factor

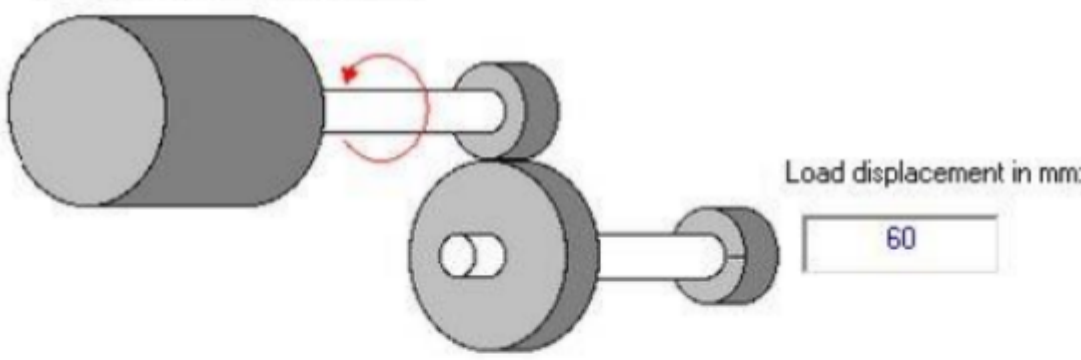
☐ 1

☐ 0.1

☒ 0.01

☐ 0.001

Motor displacement: 1 revolution



Load displacement in mm:

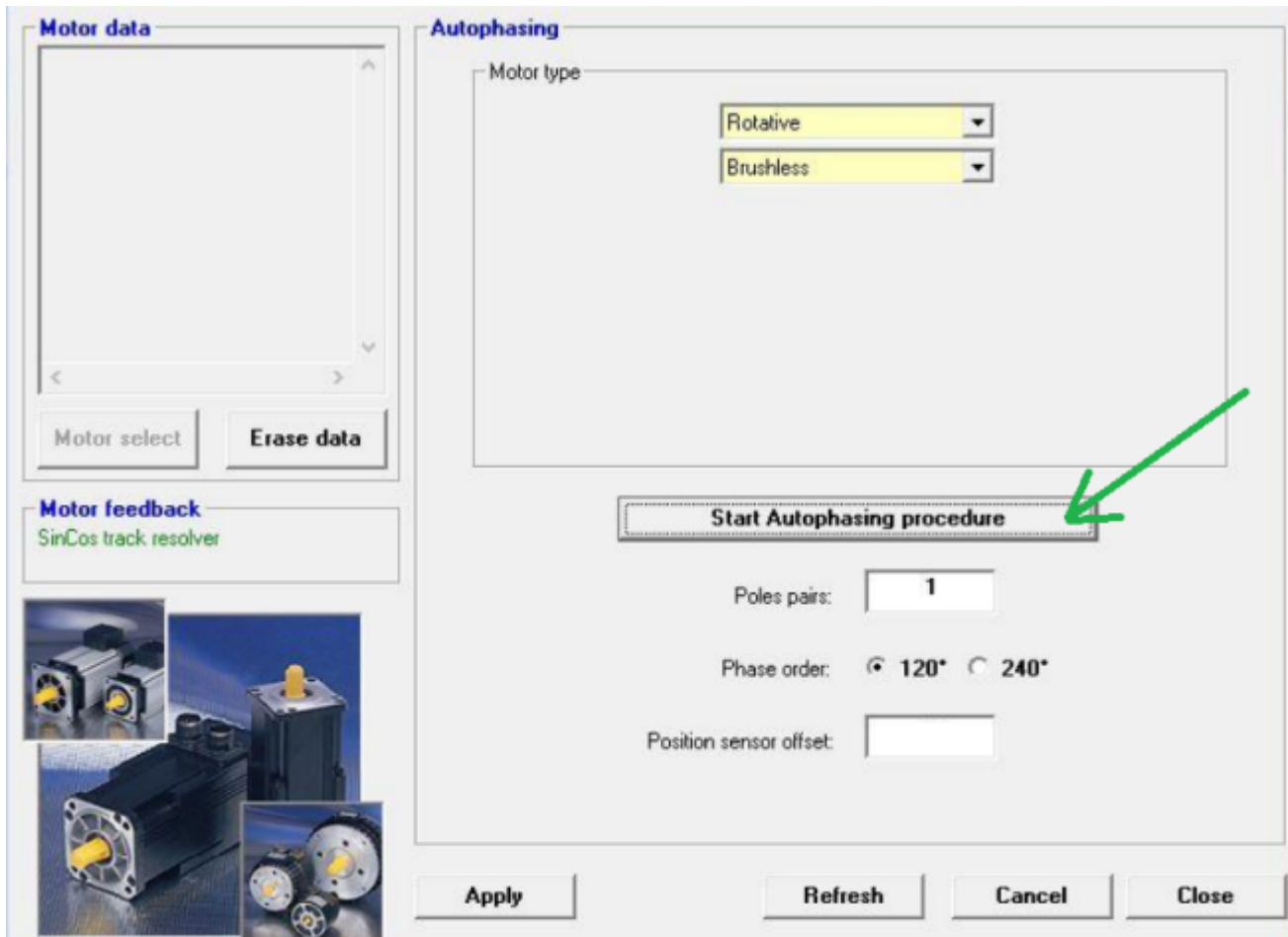
Apply

Refresh

Cancel

Close

Schritt 5) Motorkonfiguration ⇒ Autophasing



Motor data

Motor select Erase data

Motor feedback
SinCos track resolver

Autophasing

Motor type

Rotative
Brushless

Start Autophasing procedure

Poles pairs: 1

Phase order: ☒ 120° ☐ 240°

Position sensor offset:

Apply Refresh Cancel Close

Schritt 6) Bewegungsprofilanforderungen angeben

Verwenden Sie Profilmodi, um mit dem **Position-Profilmodus** die Geschwindigkeits- und Beschleunigungsanforderungen für Ihre Anwendung anzugeben.

Schritt 7) Autotune durchführen

Verwenden Sie Regler $\Rightarrow$ Autotuning, um den Motor entsprechend den Position-Profilmodus-Spezifikationen abzustimmen.

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

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

Last update: 2026/09/12 14:02

