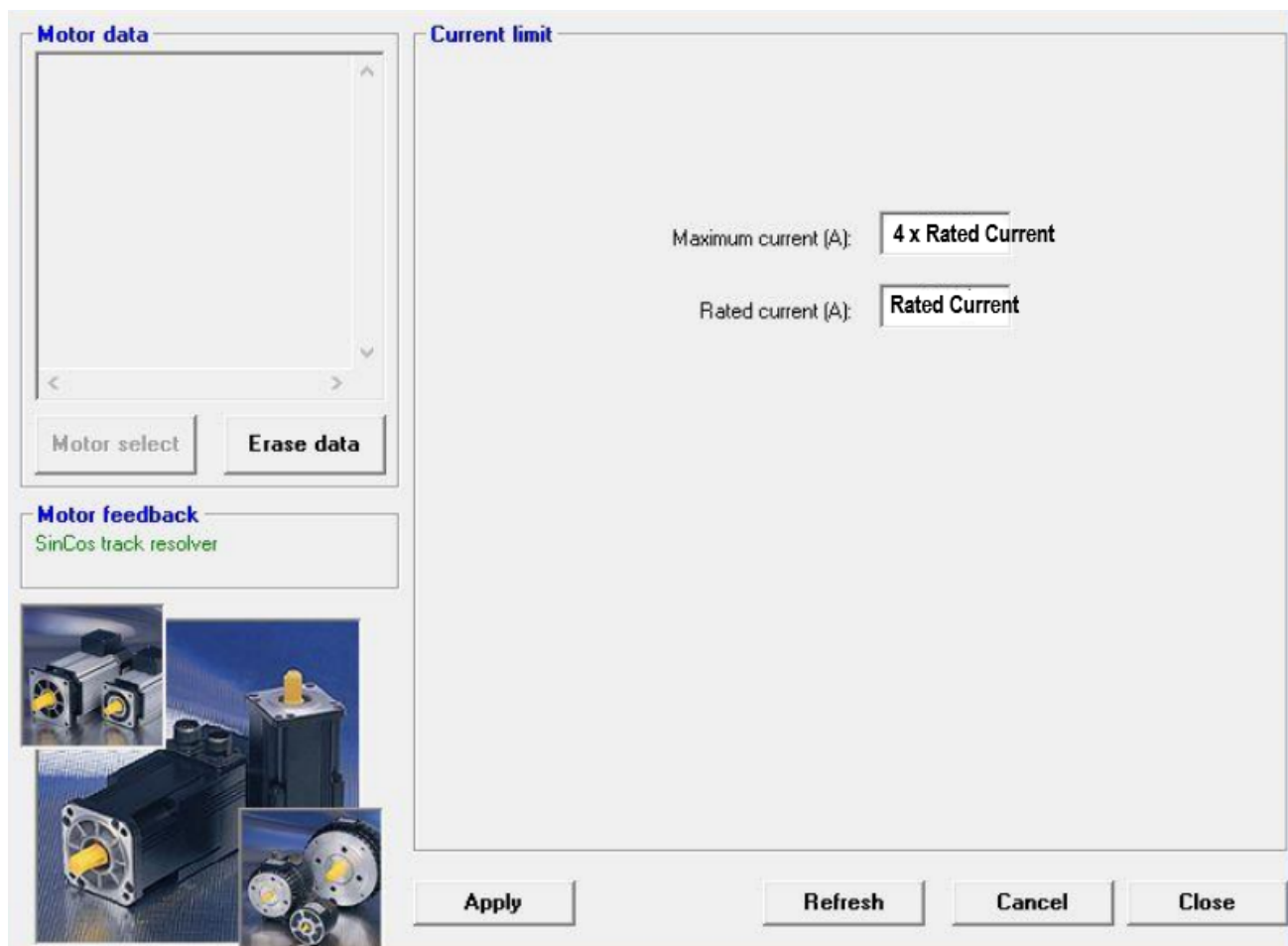


# Xtrapulspack Servo drive SIN/COS 1Vpp

for the configuration of the Xtrapulspack Gem Drive Studio software is used.

Please use our [Datasheet engine](#) to see the motor parameters.

## Step 1) ⇒ Motor config ⇒ Current limit



The screenshot displays the 'Current limit' configuration window in the Gem Drive Studio software. The window is divided into two main sections: 'Motor data' and 'Current limit'.

**Motor data:** This section contains a large empty text area for entering motor parameters. Below it are two buttons: 'Motor select' and 'Erase data'.

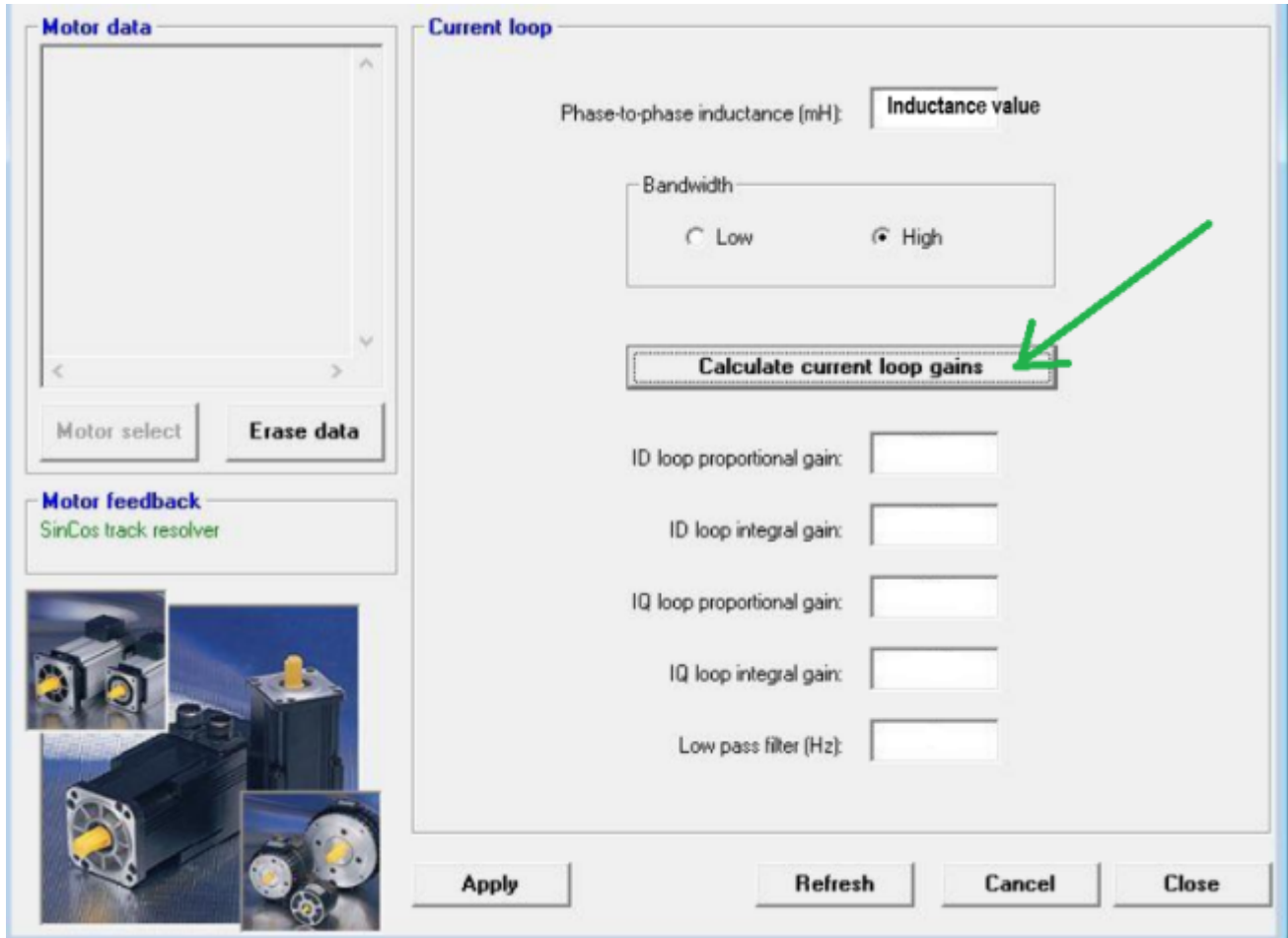
**Motor feedback:** This section shows 'SinCos track resolver' as the selected feedback type.

**Current limit:** This section contains two input fields for current values:

- Maximum current (A): 4 x Rated Current
- Rated current (A): Rated Current

At the bottom of the window, there are four buttons: 'Apply', 'Refresh', 'Cancel', and 'Close'.

## Step 2) => Motor config => Current Loop



### Step 3) Position sensors

**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**

**Note that if you use NL80Q or NL080X you need to use scaling set to 30mm and if you use NL040Q or NL040X you need to set the scaling to 18mm.**

Step 4) Position sensors ⇒ User position scaling

### User position scaling

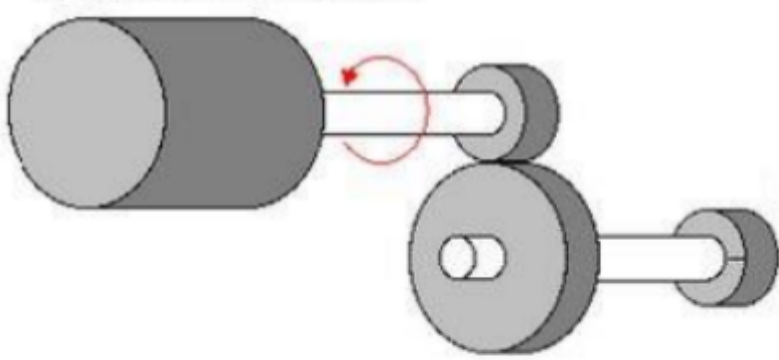
Position unit

- Revolution
- Increment
- Millimeter
- Meter
- Degree
- Other unit:

Display factor

- 1
- 0.1
- 0.01
- 0.001

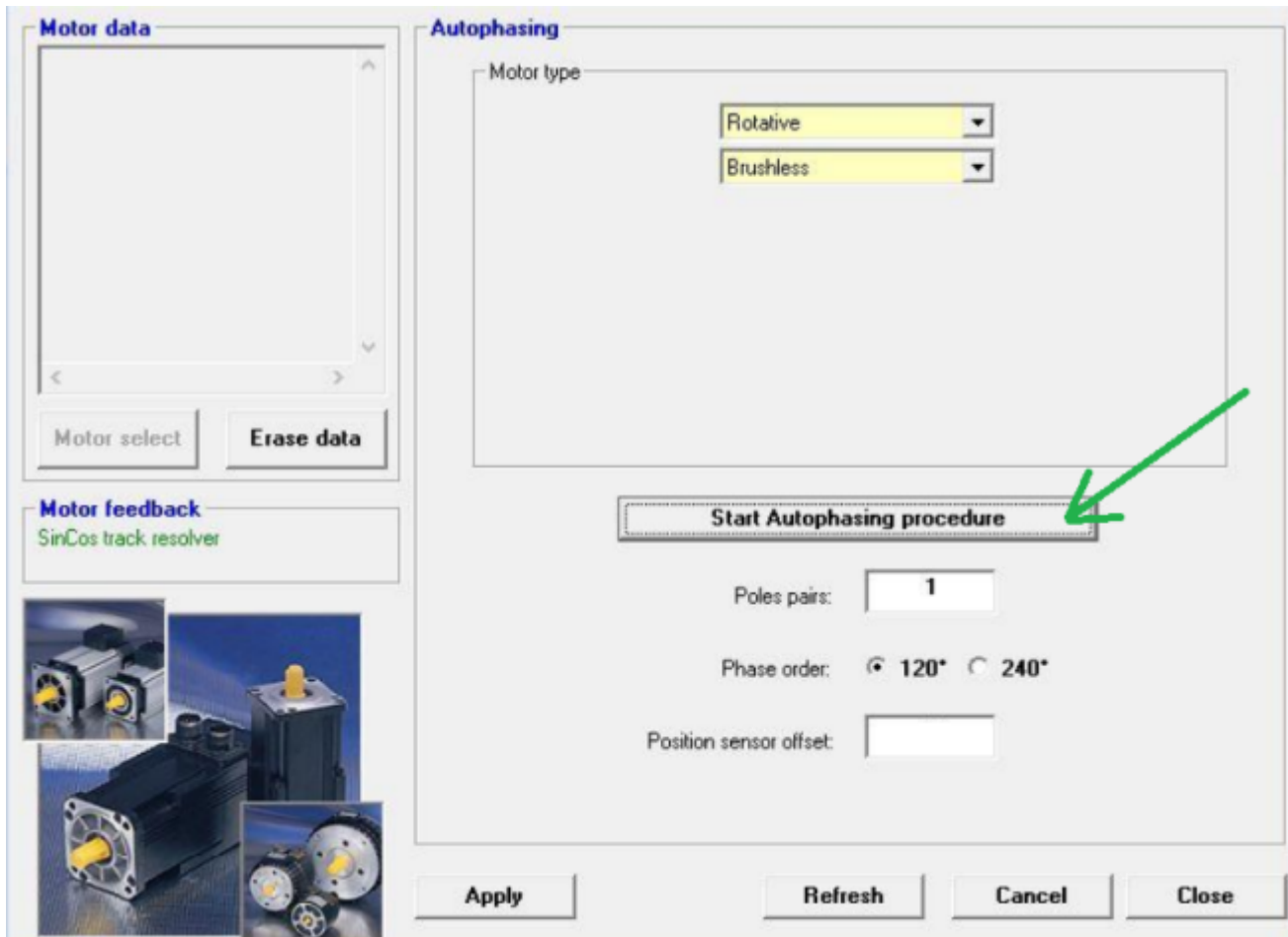
Motor displacement: 1 revolution



Load displacement in mm:

**Apply** **Refresh** **Cancel** **Close**

### Step 5) Motor config ⇒ Autophasing



## Step 6) Specify the motion profile requirements

Use Profile modes to specified using **Position profile mode** the speed and acceleration requirements for your application.

## Step 7) Perform an Autotune

Use Controller ⇒ Autotuning to tune the motor following the position profile mode specifications.

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