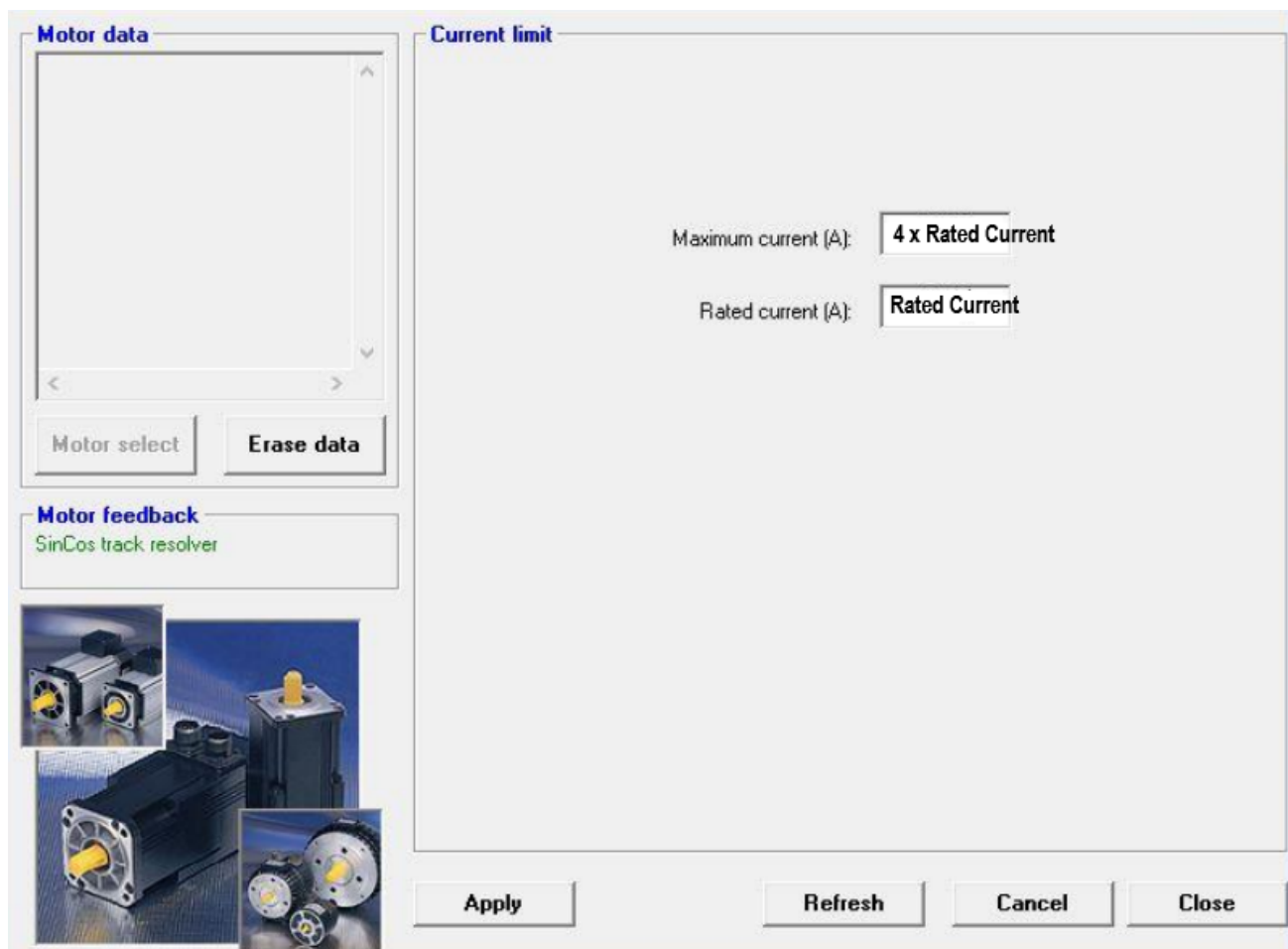


Servoazionamento Xtrapulspack Encoder incrementale TTL

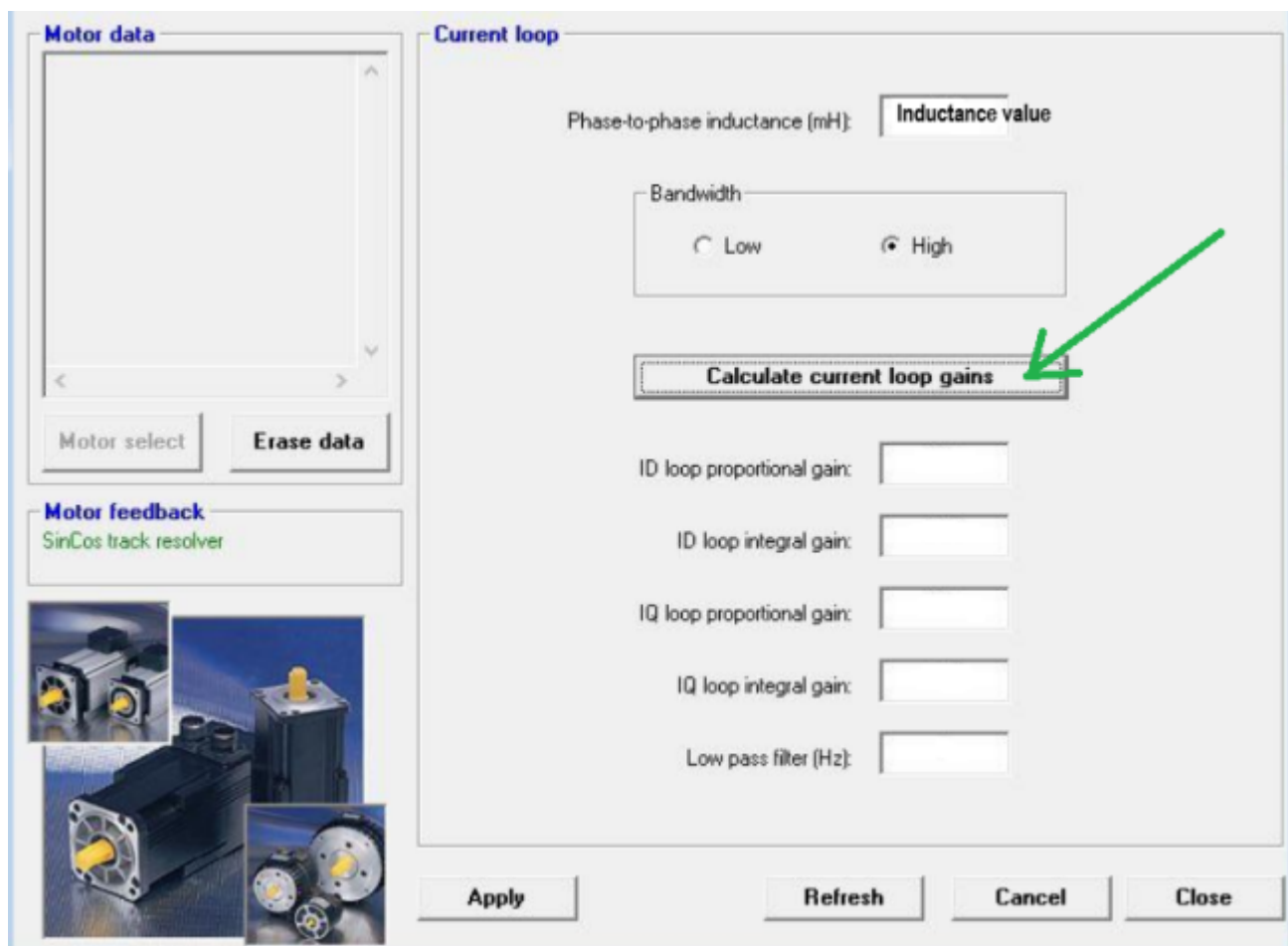
Per la configurazione dell'Xtrapulspack viene utilizzato il software Gem Drive Studio.

Si prega di usare il nostro [Datasheet Engine](#) per visualizzare i parametri del motore.

Passaggio 1) ⇒ Config motore ⇒ Limite di corrente



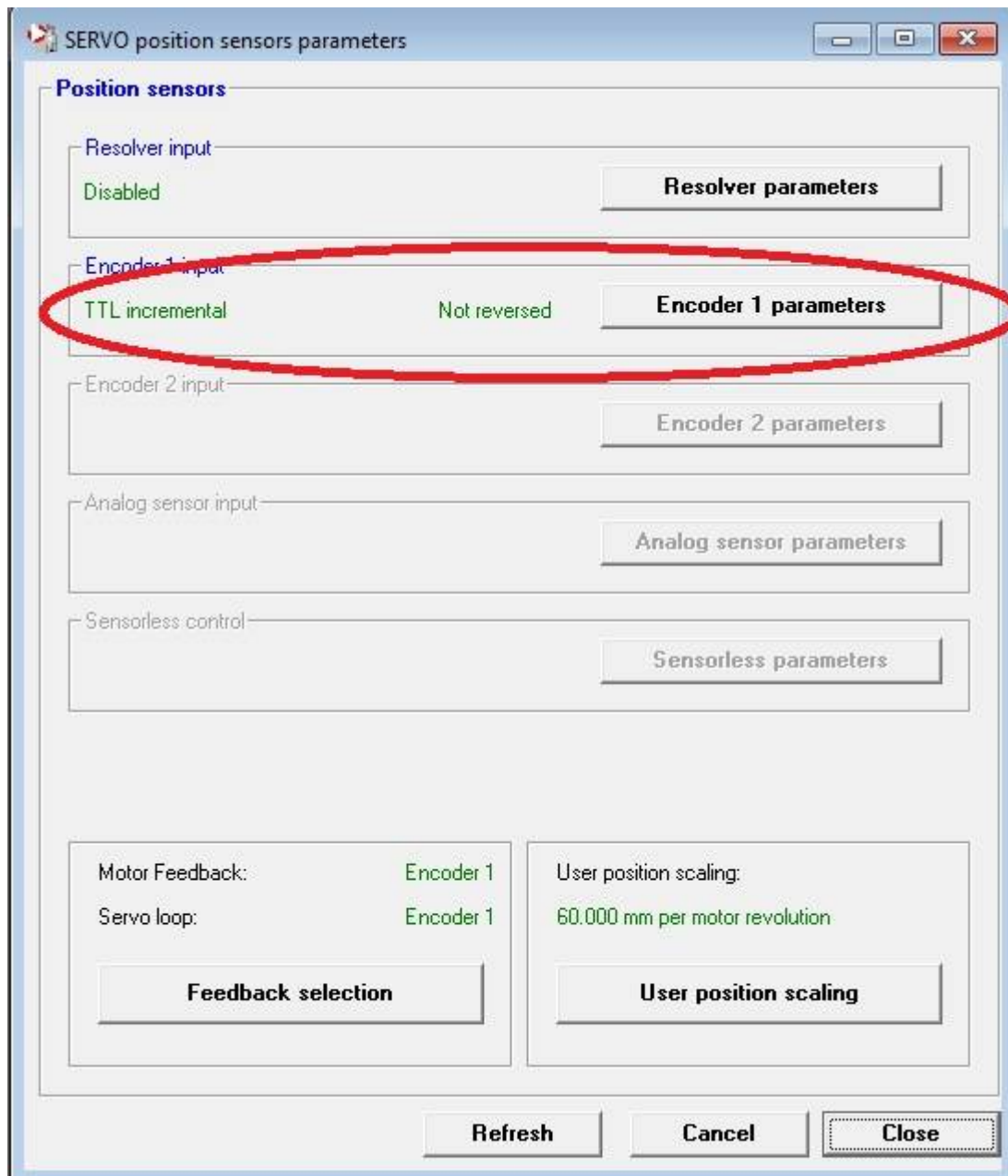
Passaggio 2) => Config motore => Loop di corrente



The screenshot shows a software interface for motor configuration. On the left, there is a 'Motor data' section with a list box and 'Motor select' and 'Erase data' buttons. Below it is the 'Motor feedback' section, which currently shows 'SinCos track resolver' and includes several images of different motor types. The main area is the 'Current loop' configuration panel. It contains a 'Phase-to-phase inductance (mH)' field with a 'Inductance value' button. Below this is a 'Bandwidth' section with 'Low' and 'High' radio buttons, where 'High' is selected. A prominent green arrow points to the 'Calculate current loop gains' button. Below this button are five input fields for: 'ID loop proportional gain', 'ID loop integral gain', 'IQ loop proportional gain', 'IQ loop integral gain', and 'Low pass filter (Hz)'. At the bottom of the interface are four buttons: 'Apply', 'Refresh', 'Cancel', and 'Close'.

Passaggio 3) Sensori di posizione

Per utilizzare l'encoder incrementale a uscita digitale come feedback del motore, disabilitare l'ingresso Resolver e selezionare TTL incrementale.



Come default usare la risoluzione di 8192 impulsi/ciclo. Se il motore ha una risoluzione diversa, usare quella corretta qui.

The screenshot shows a software window titled "SERVO position sensors parameters". Inside, the "Encoder 1 parameters" section is active. It includes a checked checkbox for "Enable encoder 1 input". Below this, the "Encoder type" is set to "TTL incremental encoder" in a dropdown menu. Two input fields specify "Resolution (inc per motor revolution): 8192" and "Zero mark pitch (inc): 0", both with a note "(1 signal period = 4 inc)". The "Encoder 1 parameters" section contains "Zero mark shift (inc): 0" and "Zero mark width (inc): 32", along with an unchecked "Reverse direction" checkbox. The "Absolute encoder init." section shows "Max. value (encoder modulo): 4095", two buttons "Init. position range" and "Read encoder position", and a label "Encoder position value: ...". At the bottom are "Apply", "Refresh", "Cancel", and "Close" buttons.

SERVO position sensors parameters

Encoder 1 parameters

Enable encoder 1 input ☒

Encoder type: TTL incremental encoder

Resolution (inc per motor revolution): 8192
(1 signal period = 4 inc)

Zero mark pitch (inc): 0
(1 signal period = 4 inc)

Encoder 1 parameters

Zero mark shift (inc): 0

Zero mark width (inc): 32

Reverse direction ☐

Absolute encoder init.

Max. value (encoder modulo): 4095

Init. position range Read encoder position

Encoder position value: ...

Apply Refresh Cancel Close

Passaggio 4) Sensori di posizione ⇒ Ridimensionamento posizione utente

User position scaling

Position unit

☐ Revolution

☐ Increment

☒ Millimeter

☐ Meter

☐ Degree

☐ Other unit:

Display factor

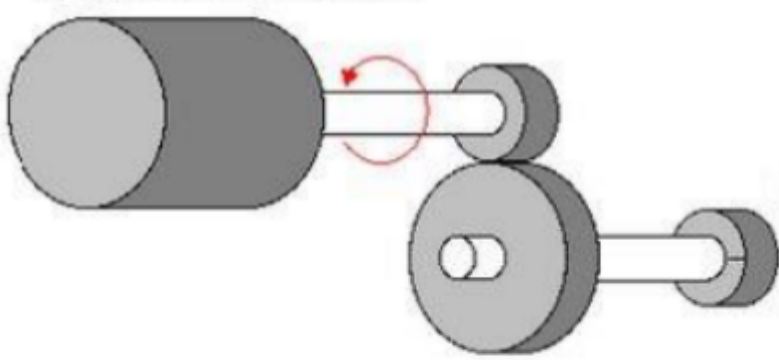
☐ 1

☐ 0.1

☒ 0.01

☐ 0.001

Motor displacement: 1 revolution



Load displacement in mm:

Apply Refresh Cancel Close

Passaggio 5) Config motore ⇒ 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

Passaggio 6) Specificare i requisiti del profilo di movimento

Usare le modalità Profilo, per specificare con la **modalità Profilo di posizione** i requisiti di velocità e accelerazione per la tua applicazione.

Passaggio 7) Eseguire un Autotune

Usare Controller ⇒ Autotuning per tarare il motore seguendo le specifiche della modalità Profilo di posizione.

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