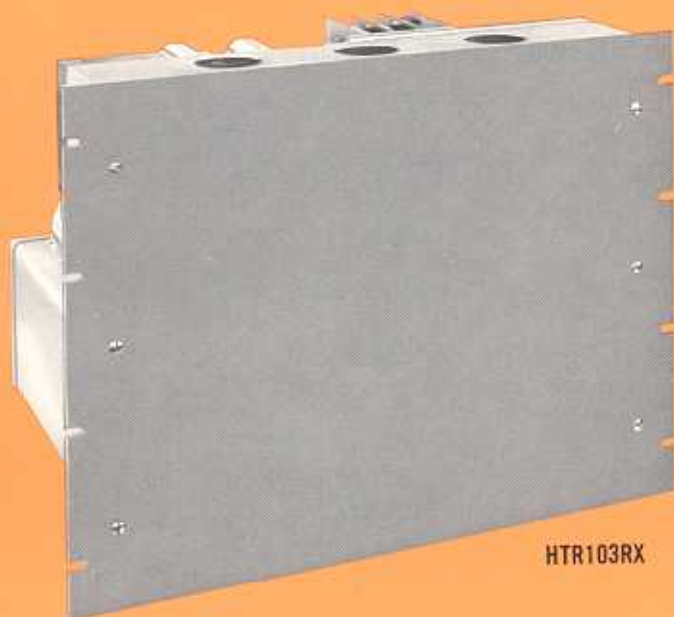


SUPERIOR ELECTRIC NEDERLAND N.V.

3K and 5K SLO-SYN[®] TRANSLATORS



HTR103RX



- DRIVE SLO-SYN MOTORS AT RATES TO 3000 or 5000 STEPS/SECOND
- ADJUSTABLE ACCELERATION AND DECELERATION
- RACK MOUNTING
- PLUG-IN, SOLID-STATE CIRCUITRY

3K and 5K SLO-SYN® Translators



The new 3K and 5K SLO-SYN Translators are intended for control of SLO-SYN Precision Stepping Motors in high speed positioning applications. Each pulse received from the built-in oscillator or from an external source will cause the translator to advance the motor shaft one step. Models are offered with stepping capabilities of 3000 or 5000 steps per second. The units are designed for rack or bench mounting.

MODELS

TRANSLATOR MODEL	USED WITH MOTOR TYPE	OSCILLATOR SPEED RANGE	AC INPUT
HTR105RTX	HS25B, HS55 or HS55L (must be ordered separately)	100 to 5000 steps per second	200-240 volts, 1.5 amperes, 50/60 hertz
HTR103RX	HS450 (motor supplied)	100 to 3000 steps per second	200-240 volts, 3 amperes, 50/60 hertz

SPECIFICATIONS

MOUNTING	rack mounting — can also be mounted horizontally on a bench with front panel removed
EXTERNAL TRIGGERING	
PULSE	-10 to -12 volt, 500 ohm impedance, 30 microsecond minimum pulse width
TEMPERATURE	operating: 0°C to 40°C storage: -55°C to 85°C

TRIGGERING SIGNAL REQUIREMENTS

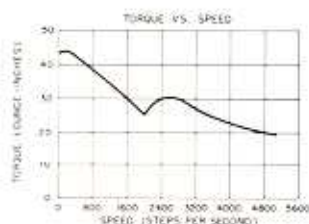
The translator is triggered by a negative change of voltage. Each triggering signal will cause the translator to drive the motor one step. The required triggering signal is a 10 to 12 volt negative change of voltage with a minimum pulse width of 30 microseconds. The translator will trigger on the leading edge of negative going pulses. Triggering pulses can be supplied by tape readers, computers, oscillators, pulse generators and other signal producing equipment.

SPEED

Figures 1 through 4 show speed vs torque characteristics for appropriate SLO-SYN Precision Stepping Motors driven by 3K and 5K SLO-SYN Translators. When driven from the internal oscillator, the motor is automatically accelerated to the speeds shown and decelerated to zero when the oscillator is turned off. Acceleration and deceleration times can be adjusted to match the characteristics of the load being driven. Acceleration and deceleration are also required when operating from external pulses. The time required for accelerating and decelerating will vary depending on the motor and the inertial load being driven.

SPEED-TORQUE CHARACTERISTICS

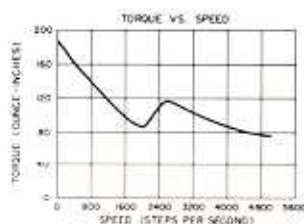
(ONE STEP EQUALS 1.8°)



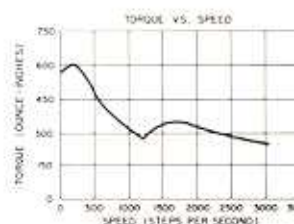
HS25B MOTOR
FIGURE 1



HS55 MOTOR
FIGURE 2



HS55L MOTOR
FIGURE 3



HS450 MOTOR
FIGURE 4

The right to make engineering refinements on all products is reserved. Dimensions and other details are subject to change. When dimensions are critical, detailed drawings should be obtained from the factory.

**SUPERIOR ELECTRIC
NEDERLAND N.Y.**

Koperwerf 33
The Hague, Netherlands

Telephone: (070) 679590

Telex: 31436 Super nl

Cable Address: SUPELEC