

Chassis Optional

GENERAL DESCRIPTION

The FENNER RATIO CALCULATOR is a digital-based module that provides an analog output voltage proportional to the ratio of two analog or digital inputs. It has a denominator range of 1000 to 1 with 1% accuracy, making it ideal for diameter calculations in wide-range constant centerwind drives, and other applications where precision division of DC or digital signals is required.

It is a single quadrant divider with positive inputs to both numerator and denominator. Output is normally positive, but an on-board inverter can supply a negative output. The 1000 to 1 range can be doubled with reduced accuracy.

Advanced circuit design insures a high level of accuracy, noise immunity and reliability in industrial environments. A field-proven mounting arrangement provides reliable connection, but allows easy removal without disturbing permanent wiring. Front access and a comprehensive Technical Manual make engineering and field service easy.

The FENNER RATIO CALCULATOR can be used with other FENNER SERIES 200 CONTROL MODULES and POWER CONVERTERS and drives of most manufacturers for remote control of Speed, Torque, Position, Tension, Draw or Trim, and many other process variables (see Bulletin SB-200).

REFLEX RATIO CALCULATOR

HIGH ACCURACY, WIDE RANGE DIVIDER

Part No. 12M03-136

SPECIFICATIONS

SUPPLY: 115VAC \pm 10%

50/60 Hz, single phase

AMBIENT TEMPERATURE: 0 to 40°C (50°C in cabinet)

INPUTS:

ANALOG: 0 to 10 volts positive

DIGITAL: TTL or CMOS logic 1; 100ns to 2 μ s duration

LOCK: +5 volts DC or TTL logic 1

OUTPUT: 0 to 10 volts positive or negative

UPDATE FREQUENCY: 10 to 450 times per second nominal

STANDARD FEATURES

- Compact, Self-Contained
- Moderately Priced
- Digital Based
- Accepts Digital or Analog Inputs
- Lock Feature for Memory or preset
- Input Scaling By On-Board DIP Switches
- Positive, Front-Access Connection
- Easily Removed, Repaired or Replaced
- Conservatively Rated for Reliability
- Three Year Warranty

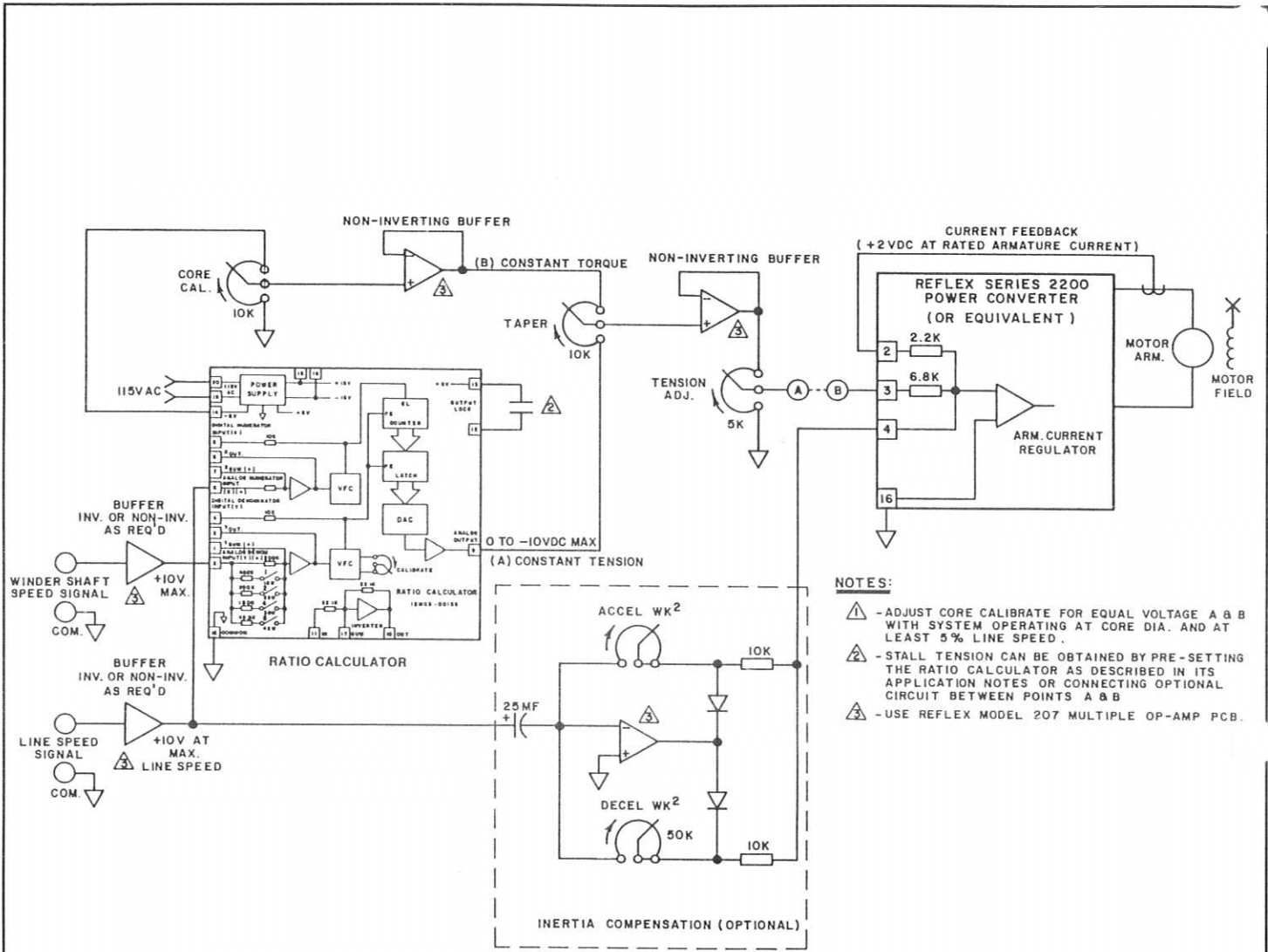
OPTIONS

- Compatible with other Series 200 Controls (see Bulletin SB200)
- System Application Drawings Available (see centerwind system, over)

TYPICAL APPLICATIONS

- Constant Tension Centerwind Drives
- Constant Cutting Speed Calculations
- Wherever Precision Division of Two Signals is Required

RATIO CALCULATOR



- NOTES:**
- ⚠ - ADJUST CORE CALIBRATE FOR EQUAL VOLTAGE A & B WITH SYSTEM OPERATING AT CORE DIA. AND AT LEAST 5% LINE SPEED.
 - ⚠ - STALL TENSION CAN BE OBTAINED BY PRE-SETTING THE RATIO CALCULATOR AS DESCRIBED IN ITS APPLICATION NOTES OR CONNECTING OPTIONAL CIRCUIT BETWEEN POINTS A & B
 - ⚠ - USE REFLEX MODEL 207 MULTIPLE OP-AMP PCB.

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DATE	SCALE	SHEET	CF	
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PRODUCT				REF FILE No. 1
CONSTANT TENSION CENTER WINDER SYSTEM USING THE RATIO CALCULATOR FOR DIAMETER				JOB No.
TITLE				DWG No.
SIMPLIFIED SCHEMATIC DIAGRAM				AN - 0125

Fenner

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