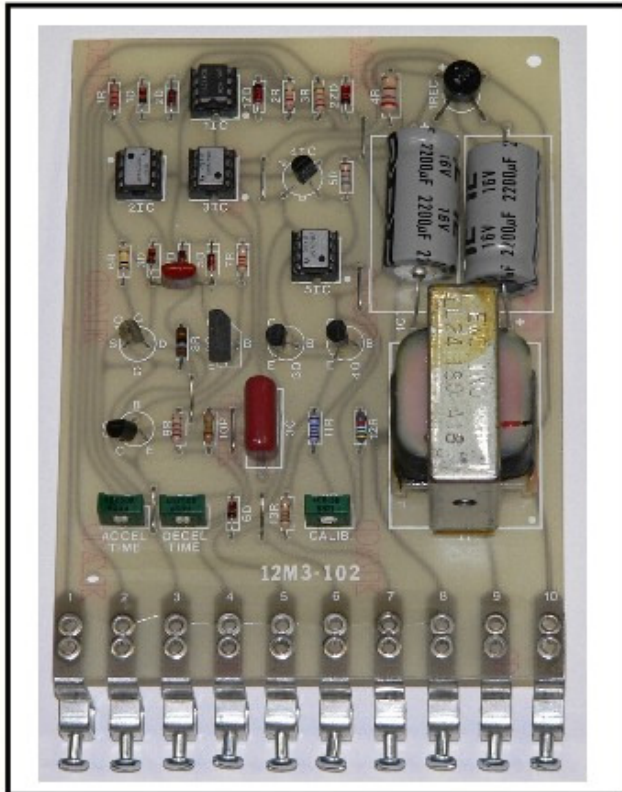


# MODEL 206 PRECISION (MASTER) REFERENCE

## PART NUMBER 12M03-00102



### FEATURES

- COMPACT, SELF-CONTAINED
- MODERATELY PRICED
- WIDE RANGE OF ADJUSTMENT
- COMPATIBLE WITH PACKAGED DRIVES OF MOST MANUFACTURERS
- POSITIVE FRONT-ACCESS CONNECTION
- EASILY REMOVED, REPAIRED OR REPLACED
- CONSERVATIVELY RATED FOR RELIABILITY
- DETAILED TECHNICAL MANUAL

### TYPICAL APPLICATIONS

- DC, AC AND EDDY CURRENT PRECISION DRIVES
- PAPER MACHINES
- PROCESS LINES
- TEST STANDS

### GENERAL DESCRIPTION

The MODEL 206 PRECISION REFERENCE is a low-drift, temperature independent control for use as the reference in precision closed-loop control systems such as single and multi-motor drives.

It converts step changes in input to a ramp output and can be used as a Master Reference in a multi-motor coordinated drive system. Timing ranges can be easily extended if desired.

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 detailed technical manual makes installation and service easy.

The MODEL 206 PRECISION REFERENCE can be used with other REFLEX® SERIES 200 CONTROL MODULES and POWER CONVERTERS for smooth, precise control in many applications. It is compatible with equipment of other manufacturers.

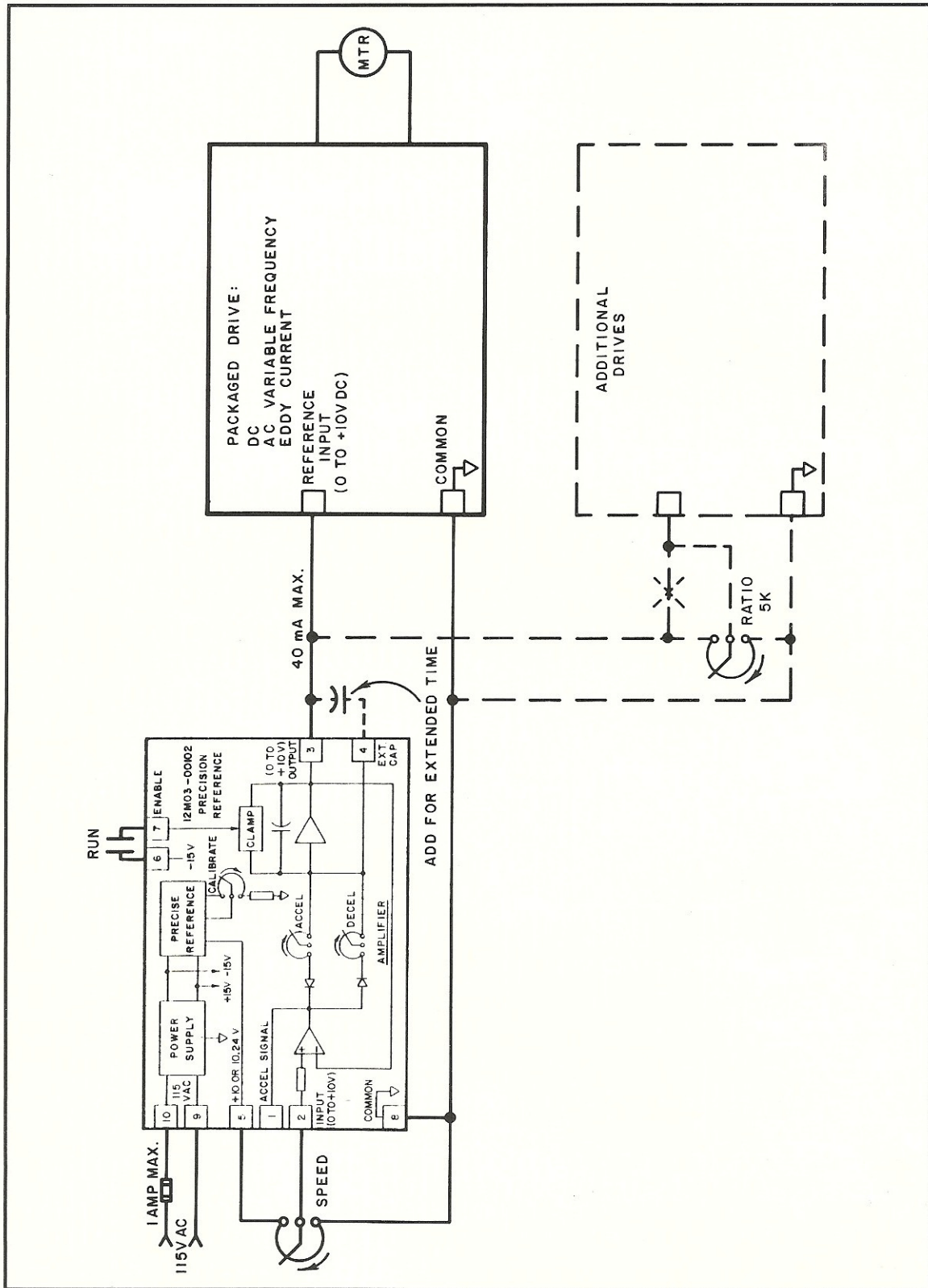
### SPECIFICATIONS

- SUPPLY: 120V AC  $\pm 10\%$   
50/60 Hz, Single Phase
- AMBIENT TEMPERATURE: 0° to 40°C  
(32°-104°F) 50°C in Cabinet
- INPUT: 0 to positive 10 (or 10.24 volts for binary applications)  
from Reference Potentiometer or Digital Ladder Switch
- INPUT CURRENT: .007  $\mu$ A Maximum
- OUTPUT: 0 to positive 10 or 10.24 volts @ 40mA
- ACCURACY: Typical, 0.025% of full output  
Minimum, 0.1% of full output
- TIMING RANGE: Acceleration 2 to 40 seconds. Deceleration 2  
to 40 seconds. Easily reprogrammed for increased time.
- ADJUSTMENTS: Acceleration, Deceleration, Calibrate

### OPTIONS

- PRECISION SPEED AMPLIFIER
- SIGNAL ISOLATOR
- COMPATIBLE WITH OTHER SERIES 200 CONTROLS (See Bulletin SB200)
- SYSTEM APPLICATION DRAWINGS AVAILABLE

# MODEL 206 PRECISION (MASTER) REFERENCE



MODEL 206 PRECISION REFERENCE

PART NUMBER 12M03-00102-01

APPLICATION NOTES

1. Minimum load resistance between terminals 5 and 8 is 500 ohms (20mA).
2. Maximum reference source impedance is limited only by the requirement for .007 microamperes input current.
3. The ramp adjustment range can be extended by the addition of a low-leakage film type capacitor between terminals 3 and 4.  

Add 1 MFD - Range 4 to 80 seconds  
Add 2 MFD - Range 6 to 120 seconds
4. If remote control of Accel/Decel rates is required, duplicate the network consisting of 1D, 2D, 1P, 9R and 10R externally between terminals 1 and 4, with internal adjustments 1P and 2P turned to a maximum (full CW). The maximum time will now be limited to 20 seconds. Additional capacitance may be added between terminals 3 and 4 if a longer time is required (see Para. 3 above).
5. Short circuiting of the output is not recommended but can be tolerated up to 3 minutes maximum.
6. If the external "Enable" circuit is not required, jumper terminals 6 and 7.
7. If reversed output polarity is required (so that terminal 3 is connected to system common) the assembly will function properly but the "Enable" (terminal 7) must not be returned to any power supply other than the minus 15 volt internal supply (terminal 6).



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