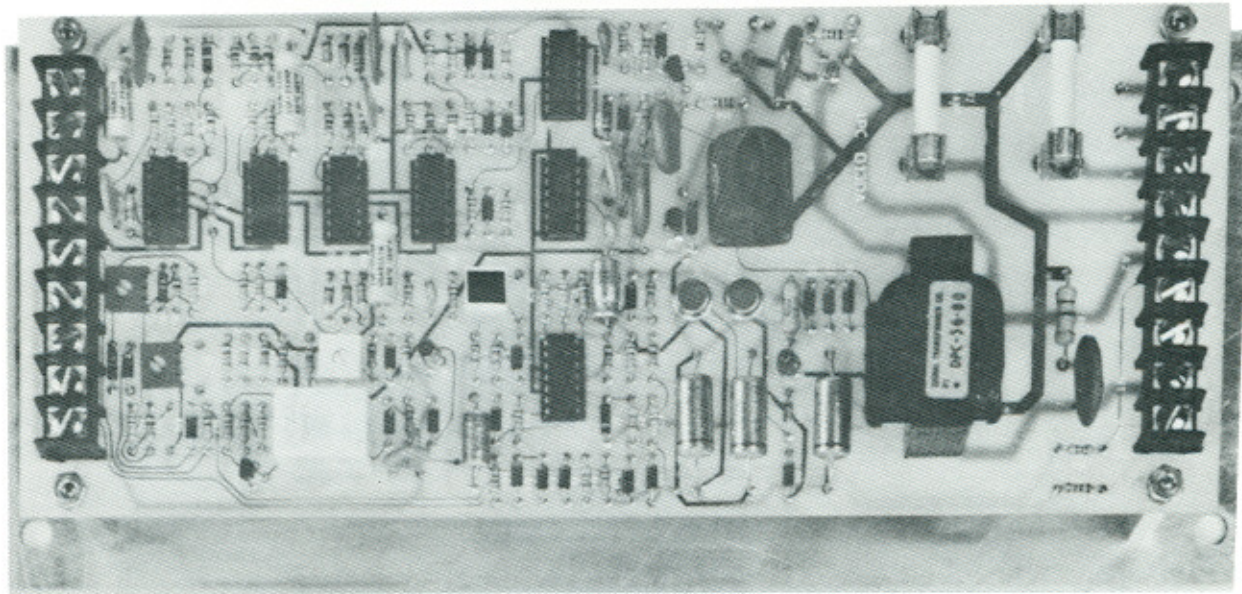


# REGENERATIVE CONTROLS



## MODEL DR05

### PRODUCT DESCRIPTION:

The DR05, designed to meet the stringent requirements of dancer-controlled operations, utilizes back-to-back SCR'S and a unique logic design to provide extremely fast response. It will operate from a dancer or follower signal without the need for a master running-speed reference. The DR05 control operates fully in all four quadrants to provide starting, running (positive or negative torque) and stopping.

A special feature provides a zero-speed point at the far-back position of the dancer, eliminating the need for external limit switches. Separate auxiliary contacts open when the dancer is in the far-back position to provide a "broken wire" signal.

A feed-forward circuit within the drive, insures stable dancer operation without the necessity of an accumulator. The control responds to the direction and velocity of the dancer movement, as well as the actual position of the dancer.

The DR05 operates a DC motor on half-wave power providing an economical approach to the regenerative requirements.

Current limit keeps peak motor current down to a pre-set level to prevent excessive armature wear and degradation of the permanent magnet field.

### FEATURES AND BENEFITS:

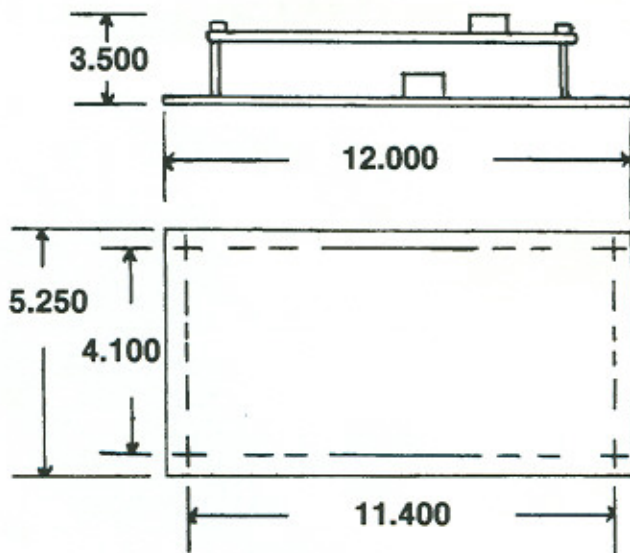
- SAFE, EFFICIENT, QUIET OPERATION
- COMPACT PANEL CONSTRUCTION
- ECONOMICAL DESIGN
- INCREASED PRODUCTION RATES
- NEMA PACKAGING AVAILABLE
- REDUCED MAINTENANCE
- INHERENT ENERGY SAVINGS: When stopping or applying retarding torque, the controlled DC motor becomes a generator and the energy normally dissipated is saved and returned to the AC mains. The user thus realizes reduced operation costs.

### PRODUCT SPECIFICATIONS:

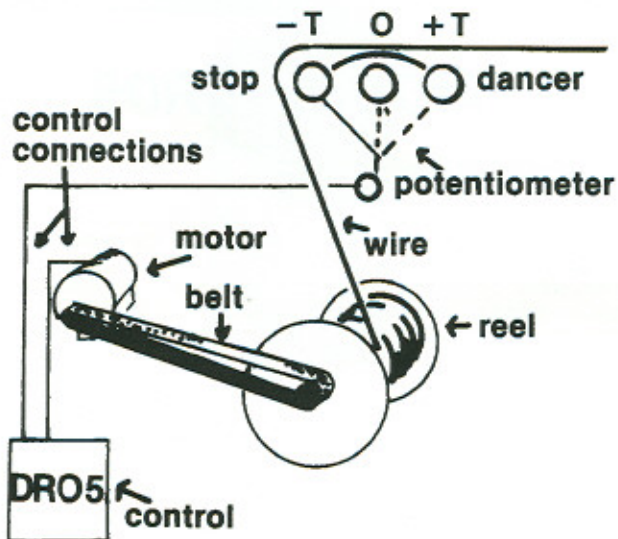
Input Voltage .....	110V or 220V 1Ø AC 60 Hz (50 Hz optional)	Protection .....	Line suppression, standard
Output .....	DC four-quadrant ½ wave	Line fuse type AB, optional	
Operating Temperature .....	40°C ambient; convection cooled	Field .....	Permanent magnet standard
Construction .....	Open chassis	Field supply optional	
Control Inout .....	Potentiometer (@ 15V DC) dancer control	Broken Wire Stop Circuit .....	Relay contacts for customer use
Regulation .....	Dancer position and velocity	Stop position at far-back position of dancer	
Adjustments .....	Current limit fwd. torque 50% to 150%		
	Current limit rev. torque 50% to 150%		

- APPLICATIONS:**
- Power pay-off systems
  - Power take up
  - Tension controls
  - Position controls

## DIMENSIONS



## TYPICAL SYSTEM



HOW TO ORDER	DR05-11-025	TYPICAL PART NUMBER
D	direct-online	1/4 horsepower (see Table 1)
R	regenerative control	11 110v AC mains
05	half-wave power	22 220v AC mains

Table 1

h-p	volts	amps	code
1/4	110	2.5	025
1/2	110	4.5	050
1/2	220	2.3	050
3/4	220	3.3	075
1	220	4.2	100