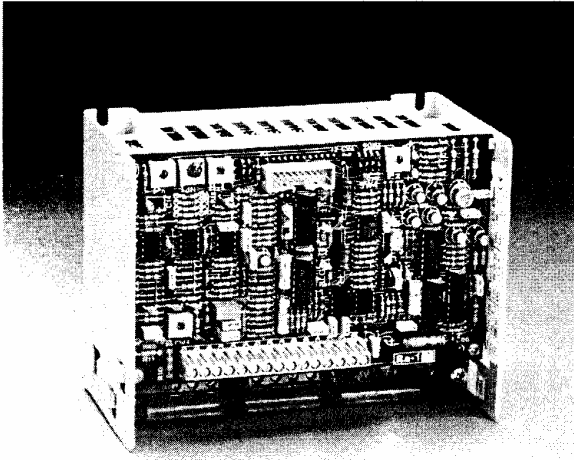


TPa2

NON-REGENERATIVE DC DRIVES



TPa2 Non-Regenerative DC Drives

The Amicon TYPACT Series TPa2 is a step above the standard low HP DC drive and allows the speed of the DC motor to be varied by armature voltage control. The TPa2 is a non-regenerative, full-wave control designed to regulate the speed or torque of non-overhauling loads. Fully isolated control circuitry, picket fence SCR firing and conservative ratings assure excellent performance and reliability, all at a low price. Program switches, L.E.D. indicators and aux. input capabilities offer flexibility and simplify installation. The TPa2 is designed for use with both shunt wound and PM DC motors with a maximum rating of 1HP at 90VDC and 2HP at 180VDC (115 and 230VAC respectively).

STANDARD FEATURES:

- Inputs - all inputs are low level. No buffers or isolator cards required for tach follower or multi-drive applications.
- Speed or torque control inputs.
- Full wave bridge.
- Tachometer feedback.
- 150% overcurrent capability for 60 seconds.
- Integral Field Supply.
- Transient suppression.
- Compatible with shunt wound or PM motors.
- Built-in common accel/decel ramp
(Range 5,10,20 sec.) can be used or bypassed.

1/8 - 2HP

- SINGLE PHASE 50/60 Hz AC INPUT
- FULL WAVE OUTPUT
- FULLY ISOLATED
- TACH OR VOLTAGE FEEDBACK
- L.E.D. INDICATORS

TYPACT

ADJUSTMENTS:

- Maximum speed.
- Speed Loop -
integral and proportional compensation.
- Current Loop -
integral and proportional compensation.
- Current Limit.
- IR compensation.

SWITCH SELECTABLE FUNCTIONS:

AC Input Voltage: 115 or 230VAC
50 or 60 Hz
Horsepower Range
Tach/Voltage Feedback
Speed/Torque Input

OPTIONAL FEATURES:

The TPa2 series of drives can be supplied in chassis form, single drive preassembled panel or in multi-drive systems. Refer to the front of the DC Controls Section for a complete description of various panel options. Contact your AMICON local representative or distributor for multi-drive system quotations. **The TPa2 has no available option power supply.**

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TPa2 NON-REGENERATIVE DC DRIVES			
Model Number	Input Code	1 Phase AC Input	HP Range
TPa2-121	X	115	1/8 - 1
TPa2-121	A	230	1/8 - 2

DIMENSIONS			
TYPE	H"	W"	D"
- C Chassis	4.625	6.125	3.374

NOTES:

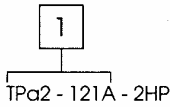
Normal start/stop logic via maintained contact interface.

ORDERING INSTRUCTIONS

Select the TPa2 Model Number and HP required.

Example

The model number for a 2HP non-regenerative control chassis 230VAC input is:



SPARE PARTS	
Part No.	Description
A25X20	Power Fuse
L19193	Control Fuse (5 x 20mm, 250 mA)

SPECIFICATIONS

SERVICE CONDITIONS

- Altitude (Standard) 3,300 ft(1000m)Max.
- Ambient Temperatures 0 to 40°C (32° to 104°F)
- AC Line Voltage Variation ±10%
- AC Line Frequency Variation ±2Hz
- Service Factor 1.0
- Maximum Load 150% for 1 minute
- Speed Reference Potentiometer 1 to 10K, 1/2 W
2K typical
- AC Input Voltages (50 or 60Hz) 115/230

ADJUSTMENT RANGE

- Maximum Speed 80 to 120%
- Current Limit 0 to 150%
- IR (Load) Compensation 0 to 20%

PERFORMANCE CHARACTERISTICS

- Operating Range 0 to rated speed
- Range for quoted regulation
 - Armature feedback with IR Comp 20:1
 - DC Tachometer Feedback 100:1
- Speed Regulation for a 95% load change
 - Armature feedback with IR Comp 2 to 5%
 - Type APY DC Tachometer 1%*
- *% of motor base speed