

#### Model DSI-700

(Eddy Current Control with torque limit)



#### **Description**

The Model DSI-700 Dynamatic Analog controller is a high quality, high performance, universal eddy current drive controller capable of providing excitation for the Dynamatic brand Eddy Current drives as well as similar drives manufactured by others. The DSI-700 may be used with drives ranging from 1 through 200 HP, dependent on the clutch amp rating. The DSI-700 is offered in an Original Equipment Manufacturers' (OEM) package as a basic, central control unit to provide maximum performance at the lowest possible price. It features single circuit board construction with integral heat dissipater for the power components. The controller board is conformally coated to protect components from damage in harsh environments. The controller may be mounted to a substrate panel using four (4) standoff insulators and mounting screws, provided. This allows for easy integration into larger systems with the addition of the appropriate supporting controls such as starters, switches, and interlocks, on/off controls as required.

#### **Features & Benefits**

- Selectable input voltage 115/230 VAC single phase 50 Hz or 60 Hz makes it compatible with existing installations.
- One control for all types of adjustable/selectable 45 or 90 VDC output voltage eddy current drives.
- Adjustable torque limits enable safe starting of high inertia loads.
- Single PC surface mount construction with low-component count makes it easy to integrate into modern PLC controlled systems.
- Conformal coating provides protection for harsh environments.
- One, small, easily retrofitted package makes it interchangeable with obsolete eddy current controllers.



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(Eddy Current Control with Torque Limit)

DCI 700 Controllor	Units used with	AS-14 - 27 Drives
DSI-700 Controller	Office used with	AT-140 – 440 Drives DCD-132 - DCD-160 Drives AS-703 – AS-705 Brakes
	Horsepower range	1 - 200 HP - Standard
	Input power, maximum	115/230 VAC, 1 phase, 50/60 Hz
	Output power, maximum	45/90/180 VDC, 5.5 Amps
	Speed regulation, for 75% load change	0.5% Standard
	Enclosures	Panel Mount – Standard NEMA 13 - Optional
	Built-in Features	Log acceleration/deceleration, current (voltage) limit, PID adjustments, torque limit (with external current transformer), remote 0-10 volt and 4-20mA input signal, 0-10 VDC and 4-20 mA speed output signal, activity indicator.
	Field modifications	None
	Operator devices (on controller)	Open Panel - None NEMA-13 – Start, Stop push buttons and Run Speed potentiometer – Standard, RPM Indicator - Optional
	Closed loop speed control	Standard
	Controller protective features	Input fuses, line transient protection, isolated signal circuits, torque limit
	Line regulation for +/-6% input line voltage change	+/-0.1%
	Thermal drift	+/-0.05% per degree, C
	Minimum regulated speed	50 RPM
	Maximum ambient	104° F (40° C) 149° F (65° C)



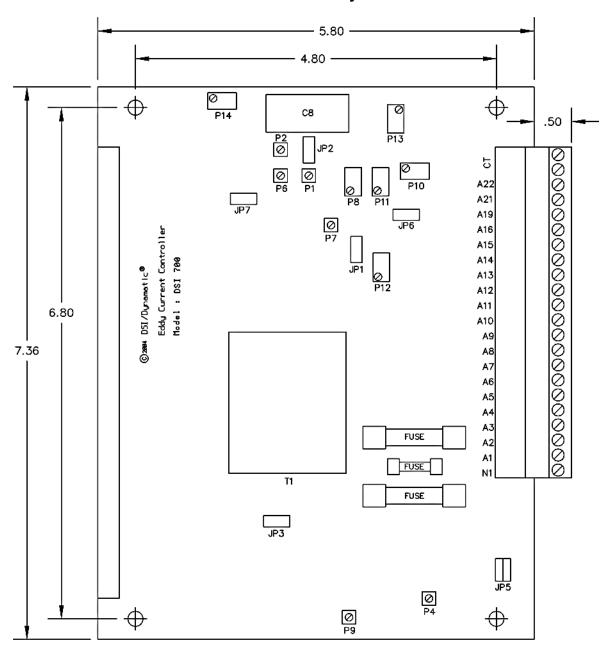
# **Ordering Information**

## **DSI-700 Controller Selection Table**

Description	Part Number
Universal Eddy Current Controller 5.5 Amp - includes controller PCB, mounting hardware and Instruction Manual	15-000700-0100
Universal Eddy Current Controller High Power 10.0 Amp – includes controller on a back plate, mounting hardware and Instruction Manual	15-000700-0220
Universal Eddy Current Controller 5.5 Amp – includes controller PCB, NEMA 13 Enclosure and Instruction Manual. No operator elements	15-000700-0400
Universal Eddy Current Controller 5.5 Amp – includes controller PCB, NEMA 13 Enclosure and Instruction Manual Operator elements: Jog-Run, Potentiometer	15-000700-0401
Universal Eddy Current Controller 5.5 Amp – includes controller PCB, NEMA 13 Enclosure and Instruction Manual Operator elements: Jog-Run, Potentiometer RPM Meter	15-000700-0402
Universal Eddy Current Controller High Power 8.0 Amp – includes controller PCB, NEMA 13 Enclosure and Instruction Manual. No Operator elements.	15-000700-0410
Universal Eddy-Current Speed Brake Controller 5.5 Amp - includes controller PCB, Reverse control modification, mounting hardware and Instruction Manual	15-000700-0050
Current Transformer for Torque Limit. Adjustable 7-70A	15-000203-0003
Current Transformer for Torque Limit. Adjustable 70A – 125 Amp (For Higher Currents Consult the Factory)	15-000203-0125



### **DSI-700 Panel Layout**



\*\*Mounting studs included but are not shown

**DIMENSIONS ARE IN INCHES**