Series 100 Modular Motor Controllers

Educational Training Equipment for the 21st Century

Bulletin 254-1E

Series 100
Modular Controls

Purpose

The Hampden Modular Controls provide students with the opportunity of observing the operation of electromagnetic contactors and relays. Each Lexan module contains one or more control components. The student interconnects these components into systems to control the operation of Hampden **Series 100** Fractional Horsepower Motors. Each system furnished complete with cords and bench rack. Also available: wall storage rack and mobile cart with storage for modules. Additional bench racks are available upon request.

MODEL ACC-100-K

Modules include:

- Pushbutton
- Forward/Reverse Contactor
- Contactor
- Time Delay Relay
- DC Field Contactor & Overload Relay
- Variable Resistors
- Autotransformer
- Rectifier
- Circuit Breaker

MODEL DCC-100-K

Modules include:

- Pushbutton
- Forward/Reverse Contactor
- CEMF Acceleration Relay
- Current Acceleration Relay
- Time Delay Relay
- Overload & Field Loss Relays
- Variable Resistors
- Circuit Breaker

The following Control Systems may be connected on the **Model ACC-100-K**:

1. Full Voltage Starter for a Squirrel-Cage Induction Motor.
2. Full Voltage Reversing Starter for a Squirrel-Cage Induction Motor.
3. Full Voltage Starter for a Squirrel-Cage Induction Motor with Overload Protection.
4. Reduced Voltage Resistor Type Starter for a Squirrel-Cage Induction Motor - Two Steps.
5. Reduced Voltage Autotransformer Type Starter for a Squirrel-Cage Induction Motor - Two Steps.
6. Reduced Voltage Reversing Starter for a Squirrel-Cage Induction Motor - Two Steps.
7. Reduced Voltage Three Step Resistor Type Starter for a Squirrel-Cage Induction Motor.
8. Full Voltage Starter for a Squirrel-Cage Motor with Dynamic Braking.
9. Two Step Resistor Type Starter for a Wound-Rotor Induction Motor.
10. Two Step Resistor Type Reversing Starter for a Wound-Rotor Induction Motor.
11. Three Step Resistor Type Starter for a Wound-Rotor Induction Motor.
12. Full Voltage Starter for a Synchronous Motor.
13. Reduced Voltage Resistor Type Starter for a Synchronous Motor.
14. Full Voltage Starter for a Synchronous Motor with Dynamic Braking.

The following Control Systems may be connected on the **Model DCC-100-K**:

1. Full Voltage Starter for a Shunt Motor.
2. Full Voltage Reversing Starter for a Shunt Motor.
3. Full Voltage Reversing Starter for a Compound Motor.
4. Reduced Voltage Starter for a Shunt Motor with Series Current Relay Acceleration - Two Steps.
5. Reduced Voltage Starter for a Shunt Motor with CEMF Accelerating Relay - Two Steps.
6. Reduced Voltage Starter for a Shunt Motor with Definite-Time Acceleration - Two Steps
7. Reduced Voltage Starter for a Shunt Motor with Series Current-Relay Acceleration - Three Steps.
8. Reduced Voltage Starter for a Shunt Motor with CEMF Accelerating Relays - Three Steps
9. Reduced Voltage Reversing Starter for a Shunt Motor with Definite-Time Acceleration - Two Steps.
10. Full Voltage Starter for a Shunt Motor with Overload Protection.
11. Full Voltage Starter for a Shunt Motor with Field Failure Protection.
12. Full Voltage Starter for a Shunt Motor with Dynamic Braking.
13. Full Voltage Starter for a Shunt Motor with Field Accelerating Relay.
14. Two-Step Red. Voltage Starter for Shunt Motor with Definite-Time Acceleration; Dynamic Braking, Field Accelerating Relay, Overload and Field Failure Protection.

All Hampden units are available for operation at any voltage or frequency

Hampden® ENGINEERING CORPORATION

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