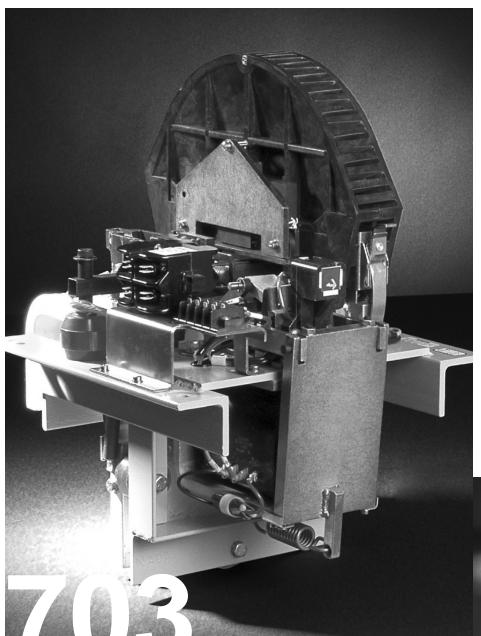
Catalog 42703 • September 2005



#### Highlights

- Multiple-path silver alloy main contacts
- Arc chute safety interlock
- Silver-plated current-carrying connections
- Dual coil operation
- High dielectric and mechanical strength
- Permanent magnet (polarized) arc chute

Ideal for use in systems requiring limited interrupting capacity, such as adjustable speed drives, transit and rail, gas and oil well drilling equipment, fuel cells, and crane controls. When used to replace a circuit breaker in a high-current DC application better suited to a contactor, the Type 703 is valued for its smaller size, lower cost, and longer life. This single pole, single throw normally open power contactor is rated at 5000 Ampere continuous duty at 1000 VDC in still air, with a maximum interrupting capacity of 4000 kW (within the limits of 5000 Ampere maximum and 1000 V maximum) and utilizing a polarized arc interruption system.

# DC CONTACTOR

#### Amazingly Reliable - Hubbell Industrial Controls Devices

The Hubbell ICD family of rugged, high-performance DC devices are in great demand by industries needing reliable, solid state, adjustable controls. Products include contactors, limit switches, crane controls, fire pump controls, transfer switches, motor controllers and resistors. Hubbell ICD has a device ideal for a wide range of applications. And if it's from Hubbell, you know you're getting amazingly reliable technology.



hubbell industrial controls, inc.

Exceptionally high reliability, low contact resistance, and long contact life are a result of its multiple path main contacts of silver alloy and flexible leaf contact supports. Silver-plated terminals allow for excellent electrical connections and corrosion resistance. Non-current-carrying steel parts are zinc-dichromate plated or painted for corrosion resistance. Operating coils are of molded construction to protect against corrosion, foreign material and moisture contamination, and damage caused by physical abuse.

Given that its arc chute is polarized for arc interruption, external power connections must observe proper polarity, as marked on the power connection terminals, to provide proper arc interruption. The 74 VDC (for other control voltages, consult factory) dual coil operation consists of a main coil that is energized

only long enough to close the main and arcing contacts while the pilot coil seals the contactor and changes state on the auxiliary contacts.

All wear parts are front-accessible for ease of inspection, maintenance, and repair functions. A latch used to securely hold the arc chute in place is easily removed without tools, while its safety electrical interlock prevents contact closure if it not properly installed.

A provided 2NO&2NC auxiliary contact block utilizes dual bifurcated, chisel-point moveable (H-bridge design) contacts of fine silver to provide exceptionally high switching reliability and suitability for low power signals.

### **Product Listing**

Part number is: 14-193-701-562

# **Specifications**

#### **Type 703**

#### **Main Contact Configuration**

Single pole, normally open (SPNO)

#### **Contactor Rating**

Continuous Open Air Rating at 80C ambient = 5000 Amps
Maximum Make Current = 12,000 Amps
Maximum Interrupting Capacity = 4000 kW
(Within the limits of 5000 Amps and 1000 VDC)
Maximum Thru-Current Capability = 30,000 Amps

#### **Auxiliary Contact Configuration**

2NO&2NC

#### **Auxiliary Contact Rating (Resistive Load)**

125 VDC or less = 10 Amps 250 VDC = 2.5 Amps

#### **Auxiliary Contact Connections**

Two 1/4 in. (6.35 mm) faston tabs per terminal

#### Mounting

Mounts on two 2in. (50.8 mm) x 2in. (50.8 mm) angle supports with three % in. (M8) screws

#### **Arc Chute Electrical Clearance**

3 in. (76.2 mm) minimum to any conductive surface

#### **Power Connections**

Eight 3/8 in. - 16 tapped holes per terminal

#### Coil Connections

Two 1/4 in. (6.35 mm) faston tabs per terminal

#### Weight

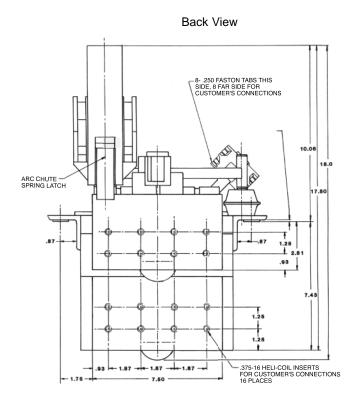
90 lbs. (40 kg)

#### Overall Dimensions

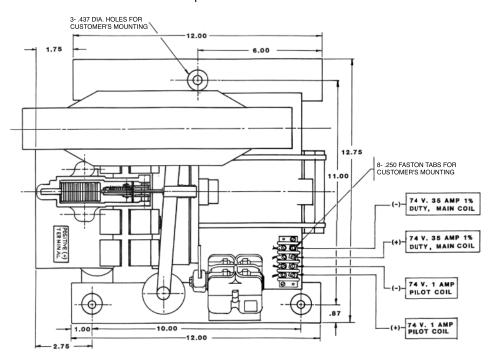
12.8 in. (325 mm) high x 14.6 in. (371 mm) wide x 18.0 in. (457 mm) deep+3 in. (76.2 mm) for electrical clearance. Note: From mounting support, 8 in. (203 mm) to rear and 10 in. (254 mm) to front

# **Outline Drawings**

Special Purpose - Type 703



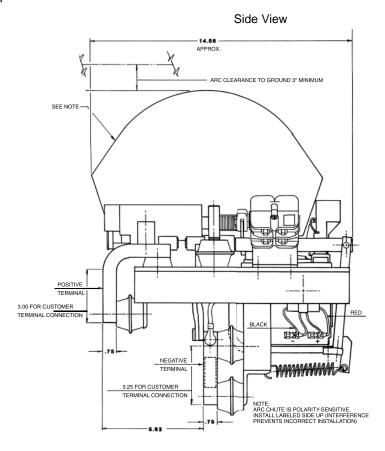
Top View

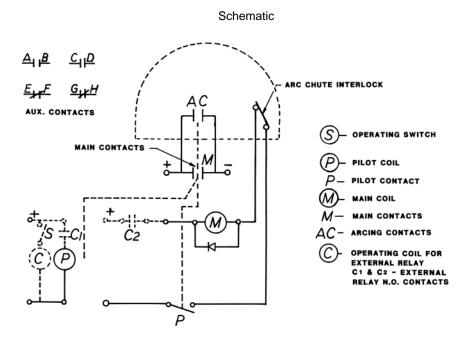


All dimensions shown in inches. For reference purposes only. Not to be used for design or construction purposes.

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Special Purpose - Type 703





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## **Hubbell Industrial Controls, Inc.**

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