Hubbell Industrial Controls, Inc.
Type 710700 Ampere 1500 Volt Dual Two Pole Switch
Catalog 42710 • March 2013, Replaces June 2011


## Highlights

- Mechanically interlocked
- Silver alloy main contacts
- Molded coils
- Silver-plated current-carrying connections
- High dielectric and mechanical strength
- Special ratings available - consult Factory

Compact in size, the Type 710 is ideally suited for DC systems in such applications as gas and oil well drilling equipment, transit and rail, adjustable speed drives, electric haul trucks, mining machinery, fuel cells, and crane controls. Typically, it is used in conjunction with compatibility sized power contactors (such as Hubbell Type 7001250 Ampere 1000 VDC SPNO power contactor) for power circuit reversal. The Type 710 device is two double pole, single throw mechanically interlocked, non-interrupting switches in a single housing. Each switch is rated at 700 Ampere (special ratings available - consult factory) continuous per pole in dead air and carries a 1500 VDC rating.


## 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.

This rugged, dependable device utilizes silver alloy main contact tips with wiping action to provide exceptionally high reliability, contact continuity, and low contact resistance. Power terminations and major current-carrying parts are silver plated for reliable corrosion-resistant electrical connections. Zinc-dichromate plated non-current-carrying steel parts offer excellent corrosion resistance, while non-tracking molded glass polyester parts provide high dielectric and mechanical strength. Operating coils are of molded construction for protection from corrosion, foreign material and moisture contamination, and damaging physical abuse.

Each two-pole switch can be equipped with its own four-circuit pilot-duty auxiliary
contact block, available in any combination
of normally open and normally closed circuits. Dual bifurcated, chisel-point moveable (H-bridge design) contacts of fine silver provide exceptionally high switching reliability and are suitable for low power signals.

The two individual two-pole switches are mechanically interlocked to allow only one switch to be energized at any given time.

Front accessibility to all wear parts eases inspection, maintenance, and repair functions.

## Product Listing

## Special Purpose - Type 710 Series

Ordering Information

- Catalogue Number as follows:

14-193-120-

(a) Next two digits specify coil voltage per coil voltage suffix table.
(b) Last digit specifies auxiliary contact arrangement. For 710 switch, price two auxiliary contacts, (1) for forward and (1) for reverse.

## Specifications

## Type 710

## Main Pole Configuration

Optional Four-Pole, Single-Throw configuration - consult factory.

## Switch Rating

Continuous Current $700 \mathrm{Amps} @ 40^{\circ} \mathrm{C}$ Ambient
Non-Interrupting Switch
Thru Current Capability 15,000 Amps
Special ratings available. Consult factory.

## Auxiliary Interlock Rating

Resistance Load
125 VDC or less, 10 Amps
250 VDC, 2.5 Amps

## Auxiliary Contact Connections

Two $1 / 4 \mathrm{in}$. $(6.35 \mathrm{~mm})$ faston tabs per terminal

## Mounting

Mounts on 3 in. ( 76.2 mm ) wide channel support with two $3 / 8 \mathrm{in}$. (M8) screws

## Power Connections

Top and bottom of switch
Two $3 / 8$ in.-16 tapped holes per terminal
Coil Connections
Four $1 / 4$ in. faston tabs
Two tabs each side of line
Weight
$38 \mathrm{lbs} .(17.3 \mathrm{~kg})$


## Operating Coils

| Volts DC | Ohms (20 $\left.{ }^{\circ} \mathrm{C}\right)$ |
| :---: | :---: |
| 12 | 4.9 |
| 28 | 20 |
| 36 | 32 |
| 48 | 45 |
| 74 | 125 |
| 96 | 177 |
| $110-125$ | 294 |
| 250 | 1160 |

Coil voltage tolerance $80 \%$ to $110 \%$ of rated voltage.
Minimum pickup voltage is $60 \%$ of rated coil volts, with cold $\left(20^{\circ}\right)$ coil and $80 \%$ of rated coil volts with hot $\left(140^{\circ}\right)$ coil. Dropout is from $5 \%$ to $25 \%$ of rated coil volts. All temperatures in ${ }^{\circ} \mathrm{C}$

## Outline Drawings

## Special Purpose - Type 710



