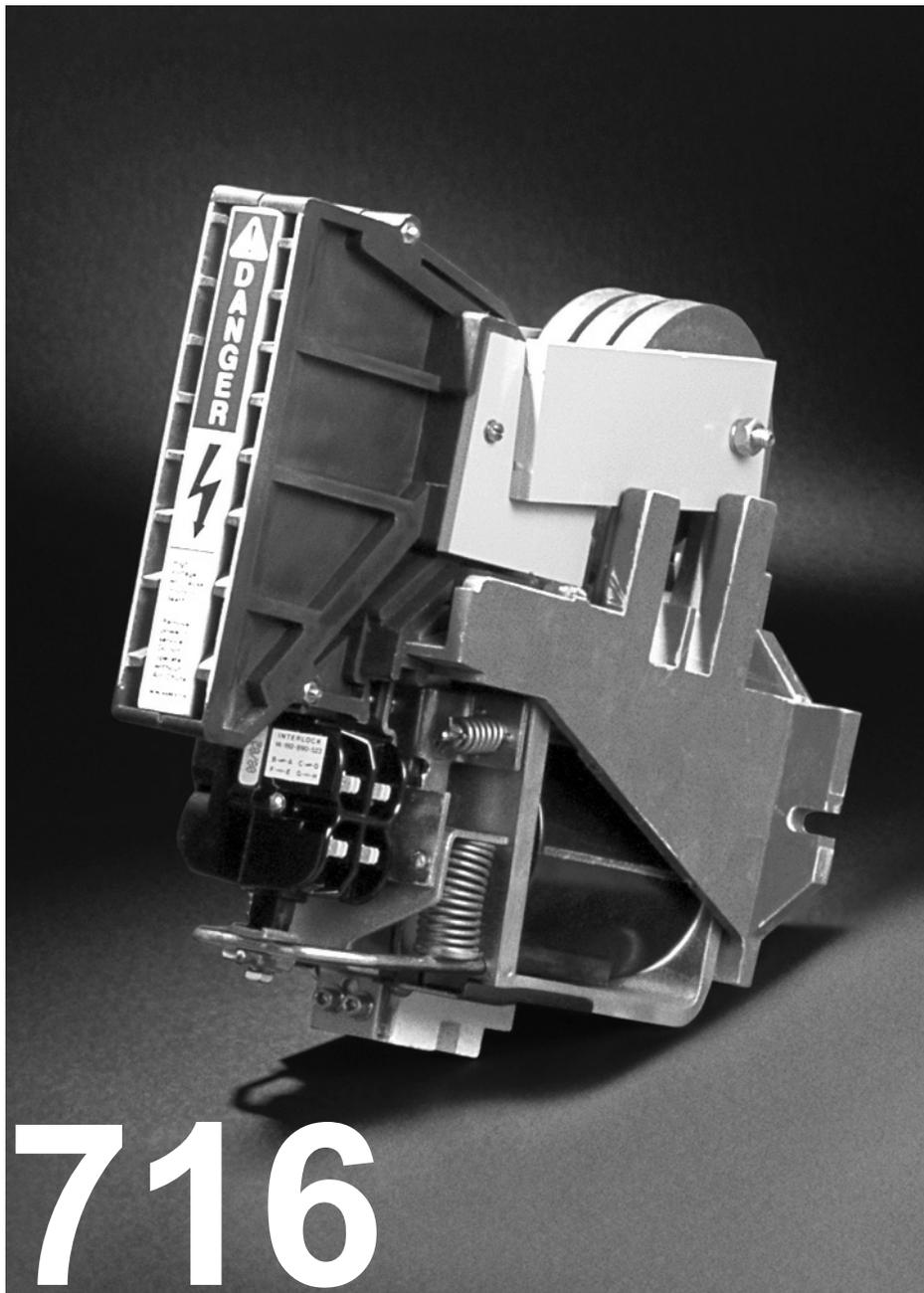


Hubbell Industrial Controls, Inc.

Type 716 1600 Ampere 1500 Volt DC Contactor

42716

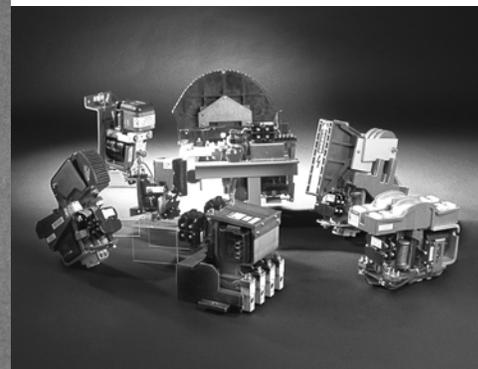
Catalog 42716 • March 2013, Replaces September 2005



Highlights

- Non-polarized arc chute (series blowout coil) design as standard
- Optional polarized arc chute (permanent magnet type) design available – Consult factory
- Silver alloy main contacts
- Arc chute safety interlock
- Trifurcated main contacts
- Silver-plated current-carrying parts
- High dielectric and mechanical strength

For regenerative and non-regenerative systems requiring limited interrupting capacity, the Type 716 is ideal. Applications include gas and oil well drilling equipment, transit and rail systems, adjustable speed drives, electric haul trucks, mining machinery, fuel cells, uninterruptible power supplies, and crane controls. A single pole, single throw normally open power contactor, it is rated at 1600 Ampere continuous duty at 1500 VDC in still air.



716 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.

It has a maximum interrupting rating of 2400 kW (within the limits of 2400 V maximum and 2400 A maximum) utilizing a non-polarized arc interruption system.

Highly reliable and consistent main contact closure is assured by its tri-furcated stationary main contact design, with wiping action. Silver alloy main contacts provide long life. Silver-plated copper terminals allow for excellent electrical connections and corrosion resistance. Non-tracking molded glass polyester parts provide high dielectric and mechanical strength, and zinc-dichromate plated non-current-carrying steel parts offer excellent corrosion resistance. Operating coils are of molded construction for protection from corrosion, foreign material and moisture contamination, and damaging physical abuse.

Front-accessible wear parts ease inspection, maintenance, and repair functions. A secure latch spring closure for arc chute is easily removed without the use of tools, while mechanical interlock prevents contact closure if arc chute is not properly installed.

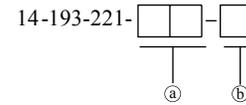
An optional four-circuit auxiliary contact block (total of eight auxiliary circuits are available on special order – consult factory) is available in any combination of normally open and normally closed circuits. Dual bifurcated, chisel-point moveable (H-bridge design) contacts of fine silver provide exceptionally high switching reliability and are suitable for low power signals.

Product Listing

Special Purpose – Type 716 Series

Ordering Information

➤ Catalogue Number as follows:



- Ⓐ Next two digits specify coil voltage per coil voltage suffix table.
- Ⓑ Last digit specifies auxiliary contact arrangement.

Specifications

Type 716

Main Pole Configuration

Single pole, normally open (SPNO)

Contacting Rating

Continuous open air rating = 1600 Amps @ 40°C ambient
Maximum break current = 2400 Amps
Maximum make current = 10,000 Amps
Maximum interrupting capacity = 2400kW (within limits of 2400 Amps, and 2400 V MAX)
Thru-Current Capability = 30,000 Amps
Special ratings available. Consult factory.

Auxiliary Interlock Rating

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

Mounting

Mounts on 3 in. (76.2 mm) wide support with three 3/8 in. (M8) screws

Arc Chute Clearance

3 in. min. (face to nearest conductive surface)

Power Connections

Top and bottom of contactor
Two 3/8 in.–16 tapped holes per terminal

Coil Connections

Four 1/4 in. fastons
Two tabs each side of line

Auxiliary Contact Connections

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

Weight

60 lbs. (27 kg)

Coil Suffix Table

DC Volts Coil Voltage	Suffix
12	51
28	52
36	55
48	54
74	56
96	57
125	58
250	59

Auxiliary Contacts ^{ab}

Configuration	Code
1 NO & 3 NC	1
2 NO & 2 NC	2
3 NO & 1 NC	3
4 NO & 0 NC	4
0 NO & 4 NC	5
None	7

Illustration	Description	Configuration	Rated Voltage	Catalogue No.	Approx. Wt. Lbs (Kg)
 <p>TYPE 716</p>	<p>Type 716, 1600 Ampere</p> <p>Contactors without auxiliary contact^a</p>	<p>Single pole, normally open contactor</p>	<p>1500 V</p>	<p>14-193-221-===</p>	<p>60 (27.2)</p>

- ^a A maximum of two 4 circuit auxiliaries may be added. Consult factory.
- ^b Special configurations available. Consult factory.

Operating Coils

Volts DC	Ohms (20°C)
12	3.1
24	12
36	26
48	41
74	120
96	173
125	270
250	1044

Coil voltage tolerance 80% to 110% of rated voltage.

Minimum pickup voltage is 60% of rated coil volts, with cold (20°) coil and 80% of rated coil volts with hot (140°) coil. Dropout is from 5% to 25% of rated coil volts. All temperatures in °C.

DC Contactor Type 716 Replacement Parts:

Coils, DC, Cont.

Type	Coil Voltage	Catalog No.
716	12V	14-183-296-503
	24V	14-183-296-502
	36V	14-183-296-504
	48V	14-183-296-505
	74V	14-183-296-501
	96V	14-183-296-506
	125V	14-183-296-507
	250V	14-183-296-508

Auxiliary Contact Blocks

Type	Size	Arrangement		Catalog No.
		NO	NC	
716	1600A	1	3	14-192-890-524
		2	2	14-192-890-523
		3	1	14-192-890-513
		4	0	14-192-890-522
		0	4	14-192-890-525

Main Contacts

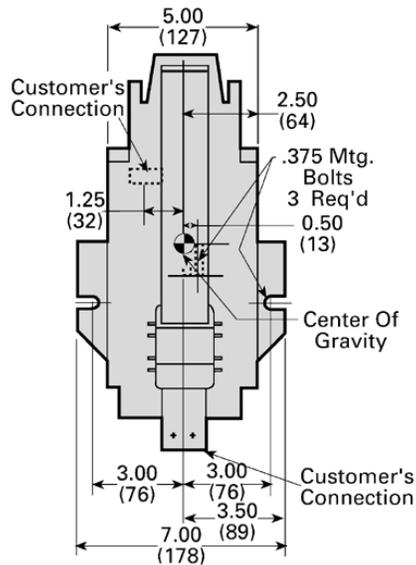
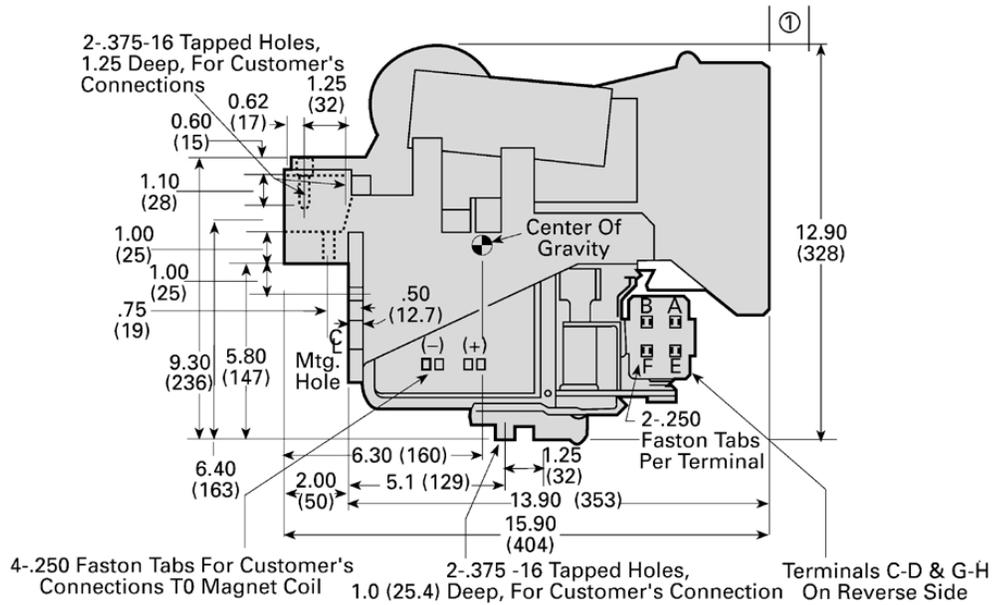
Type	Size	Contact Type	Catalog No.
716	1600A	-	14-192-908-801

Arc Chutes

Type	Size	Polarity/ Capacity	Catalog No.
716	1600A	-	14-192-908-802

Outline Drawings

Special Purpose – Type 716



① Electrical clearance to ground 3.00 (76).

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



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