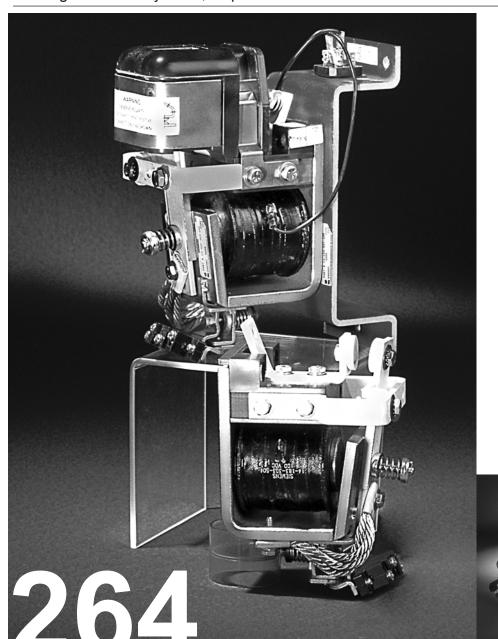
# Type 264 400 Ampere 600 Volt DC Contactor

Catalog 42264 • May 2013, Replaces March 2013



### **Highlights**

- Permanent magnet (polarized) arc chutes
- Main contact options: SPNO, SPDT, Series Field Reverser
- · Silver alloy main contact tips
- Two-million-cycle mechanical life
- · Front access for serviceability
- · UL recognized/CSA certified

Part of a family of rugged, industrialquality, definite-purpose units, the Type 264 is ideal for use with solid-state adjustable speed drives, uninterruptible power supplies, fuel cells, crane controls, and mining machinery.

# 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.

Rated at 400 Ampere continuous at 600 VDC in still air with a maximum interrupt rating of 600 kW@ 300 VDC/500 kW@ 500 VDC. Both UL recognized and CSA certified as a definite-purpose contactor. Available with SPNO, SPDT, or Series Field Reverser main pole configurations, and can be ordered with or without permanent magnet arc chutes. With arc chute, it is polarized with respect to arc interruption: external power connections must observe proper polarity, as marked on the power connection terminals, to provide proper arc interruption. When used, the permanentmagnet-type arc chute provides full interrupting capability on normally open power contacts only. For normally closed power contacts (SPDT and reverser), the application should be reviewed to ensure makeand-break capabilities of the normally closed power contacts are not exceeded.

Available in ratings from 12 VDC to 250 VDC, coils are designed for continuous duty and are provided with screw terminals. AC coil operation requires a full-wave bridge rectifier.

Pilot Duty auxiliary contact blocks are available in 1NO&1NC and 2NO&2NC configurations.

Vertical mounting is recommended for this contactor (consult factory for non-vertical mounting considerations). Each device is provided with either an insulated mounting sheet (sheet mounted) or insulated mounting base (base mounted) for mounting on conductive surfaces, and the insulated mounting base provides a location for mounting a full-wave bridge rectifier for AC operation. All terminals and mounting holes are front-accessible for ease of mounting and wiring with the provided hardware. Front-accessible arc chutes can be easily removed/replaced without tools.

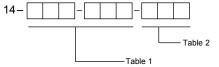
Silver alloy main contact tips with generous wiping action provide high closing capability and a reliable, low-resistance main contact circuit. Steel components are zinc-dichromate plated for corrosion resistance, while the stainless steel springs are low-stressed for long life.

# **Product Listing**

## Special Purpose – Type 264 Series

Ordering Information

➤ Type 264 contactors are ordered by Catalogue Number as follows: Catalogue Number



- The first eight digits specify the arc chute configuration, mounting arrangement, and AC or DC coil operation (see Table 1).
- Select the last three digits from Table 2 for the desired coil voltage, main contact, and auxiliary contact arrangement.
- a Insulated mounting sheet (1/32" thick) provided with contactor.
- b For maximum break rating of polarity-sensitive arc chutes, connect indicated polarity to normally open stationary terminal
- c Coil voltage tolerance 85 to 110% of rated voltage.
- d For reversers, price two auxiliary contacts: (1) for forward, (1) for reverse.
- e Configured for series field reversal.
- f For 120 volt, 60 Hz operation, use 100 volt DC coil with full-wave bridge rectifier.

# **Specifications**

# **Type 264**

#### **Contactor Configuration**

Single pole, normally open (SPNO) Single pole, double throw (SPDT)

Series Field Reverser (2 SPDT bussed together)

Special combinations are available.

Consult local Factory sales office.

#### **Voltage Rating**

600 VDC standard

UL Recognition File: E79773 CSA Certification File: LR91674

#### **Mechanical Life**

2 million operations

#### Connection

One 5/16-18 tapped hole per terminal

#### **Coil Connection**

Two No. 6-32 tapped holes

#### Full-Wave Bridge Rectifier Connections (for AC operation)

Four - ½ in. x 1/32 in. fastons

#### Mounting

- 1) Two 1/4-20 screws through contactor and insulation sheet (sheet mounted)
- 2) Three 1/4–20 screws through mounting base (base mounted)

#### **Operating Coils**

Volts DC	Ohms (20°C)	Volts DC	Ohms (20°C)
12	3.42	74	130
24	13.6	96	307
36	31.3	125	507
48	47.9	250	1895

Minimum pickup voltage is 55% of rated coil volts, with cold ( $20^{\circ}$ C) coil and 80% of rated coil volts with hot ( $105^{\circ}$ C) coil. Dropout is from 5% to 25% of rated coil volts. Coil overvoltage tolerance is 10%.

#### **Table One** Without Auxiliary Contacts Illustration Description Catalogue No Type 264 A. Contactor without Arc Chute<sup>a</sup> 14-428-131-††† **SPNO** 10 (4.5) Sheet Mounted DC Operation **SPDT** 10 (4.5) REVde 20 (9.0) B. Contactor with Arc Chuteb **SPNO** 1. Sheet Mounteda DC Operation 12.6 (5.7) a. Positive Arc Chute Polarity **SPDT** 14-429-464-†† 12.6 (5.7) b. Negative Arc Chute Polarity 14-429-470-††† REVde 25.2 (11.4) 2. Base Mounted DC Operation **SPNO** a. Positive Arc Chute Polarity 14-193-805-††† **SPDT** 12.6 (5.7) b. Negative Arc Chute Polarity 14-193-806-††† REVde 25.2 (11.4) 3. Base Mounted with Rectifier for AC Operation<sup>cf</sup> **SPNO** 12.6 (5.7) a. Positive Arc Chute Polarity 14-193-807-††† SPDT 12.6 (5.7) b. Negative Arc Chute Polarity 14-193-808-††† REVde 25.2 (11.4) WITH ARC CHUTE

# **Table Two**

Main	Complete Last Three Digits of Catalogue Number from this Table Coil Voltage (Volts DC)						Auxiliary Cont	tacts <sup>d</sup>			
Contacts	12	24	36	48	74	100	125	250	None	1NO&1NC	2NO&2NC
SPNO	561	504	501	502	503	562	563	564	Yes	_	_
1 NO	566	567	506	507	508	569	509	510	-	Yes	_
	571	572	511	512	513	574	514	515	-	_	Yes
SPDT	591	592	531	532	533	594	534	535	Yes	_	_
1NO&1NC	601	602	536	537	538	605	539	540	-	Yes	_
	606	607	541	542	543	609	544	545	-	_	Yes
REV	611	612	546	547	548	614	549	550	Yes	_	_
2-SPDT <sup>d</sup>	616	617	551	552	553	619	554	555	-	Yes	_
2NO&2NC	621	622	556	557	558	624	559	560	l –	_	Yes

# **Connection Diagrams**

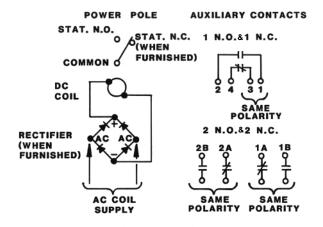
#### Main Contact Rating\*

Description	Normally Open	Normally Closed				
Continuous Carry Current Convection Cooled	425 Amps	400				
Maximum Make Rating	2000 Amps, 600V DC	2000, 500V DC				
Maximum Break Rating	Maximum Break Rating					
(Resistive Load, consult F	actory for inductive loa	ds).				
Without Arc Chute	2000 Amps, 48V DC	-				
With Arc Chute	1000 Amps, 500V DC	-				
	2000 Amps, 300V DC	-				

Arc chute is permanent magnet type. Polarities must be observed.

#### **Auxiliary Contacts**

Configuration	Continuous Current	Make and Break
1 NO & 1 NC**	15 Amps	15 Amps, 600V AC, resistive
		0.4 Amps, 115V DC, inductive
		0.2 Amps, 230V DC, inductive
2 NO & 2 NC**	10 Amps	10 Amps, 600V AC, resistive
		0.2 Amps, 115V DC, inductive
		0.1 Amps, 230V DC, inductive



- Resistive load consult sales office for inductive load break ratings. For arc chute spacings to ground, consult sales office.
- \*\* Each normally open and normally closed pair must be wired to the same side of the same supply (same polarity).

# **DC Contactor Type 264 Replacement Parts:**

Coils, DC

Туре	Coil Voltage	Catalog No.
	12V	14-183-245-501
	24V	14-183-297-501
	36V	14-182-904-501
264	48V	14-182-943-501
204	74V	14-183-252-501
	96V	14-183-303-501
	125V	14-182-853-501
	250V	14-182-698-501

# **Auxiliary Contact Blocks**

Type	Cino	Arrangement		Catalag Na
Type Size		NO	NC	Catalog No.
264	264 4004	1	1	14-232-550-013
264   400A	400A	2	2	00-871-383-404

# **Main Contacts**

Туре	Size	Contact Type	Catalog No.
264 400A		SPNO (1x)	14-189-790-511
	SPDT (2x)	14-189-790-511 <sup>①</sup>	
		REV (4x)	14-189-790-511 ①

① For one set only.

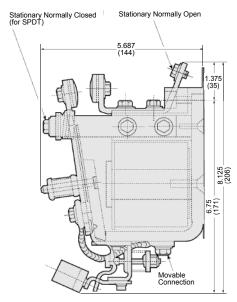
For SPDT, and Reversers, order required quantities.

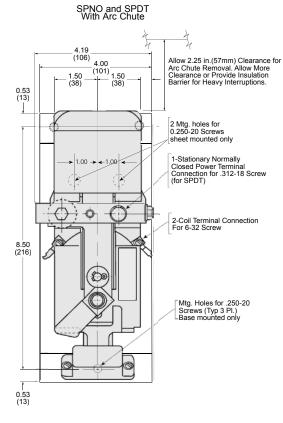
# **Arc Chutes**

Туре	Size	Polarity/ Capacity	Catalog No.
264	400A	STAT+	14-178-821-501
		STAT-	14-178-821-502

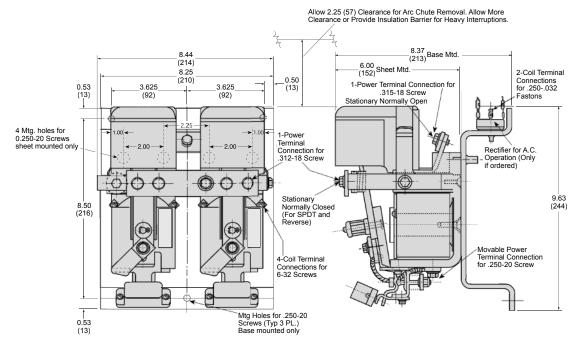
# **Outline Drawings**

Special Purpose Type 264 SPNO and SPDT Without Arc Chute





Reverser Side View



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



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