

**D18, DH18 and DHR18 Series, Rated up to 50 Amps,  
115/200 VAC, 400 Hz**

**Product Facts**

- 3PDT, Center off
- Gasket sealed or Hermetically sealed
- Meets many requirements of MIL-PRF-6106



For factory-direct application assistance, phone 419-521-9500 or fax 419-526-2749.

**Performance Data**

**Electrical Characteristics**

**Contact Arrangement** — 3PDT, Center Off

**Rated Operating Voltage** — 115/200 VAC, 400 Hz

**Resistive Rating** — 50 Amps

**Inductive Rating** — 50 Amps

**Motor Rating** — 30 Amps

**Lamp Rating** — 15 Amps

**Rupture Rating** — 400 Amps

**General Characteristics**

**Temperature Range** — -55°C to +71°C

**Operating Cycles (Life) at Rated Resistive Load, Min.** — 50,000 cycles

**Operating Cycles (Life) Mechanical, Min.** — 100,000 cycles

**Dielectric Strength** — All Circuits to Ground — 1,500 Vrms  
Circuit to Circuit — 1,500 Vrms  
Coil to Ground and Aux. Contacts — 1,000 Vrms

**Insulation Resistance, Initial** — 100 megohm min.

**Altitude** — D-18 — 50,000 ft.  
DH-18, DHR-18 — 80,000 ft.

**Weight, Max.** — .94 to 1.50 lbs

**Sinusoidal Vibration** — 10 G @ 70 to 2,000 Hz

**Shock, Max.** — 25 G

**Operate Time @ Nom. Voltage, Max.** — 35 msec

**Release Time @ Nom. Voltage, Max.** — 15 msec

**Bounce Time @ Nom. Voltage, Max.** — 5 msec

**Coil Characteristics**

**Duty Cycle** — AC Continuous (Type E, See diagram below)

DC Continuous (Type A-D, See diagram below)

**Operating Voltage, Nom.** — 28 Vdc

**Pickup Voltage @ 25°C, Max.** —

Coil Type A — 18 Vdc

Coil Type B — 15 Vdc

**Dropout Voltage @ 25°C, Max.** —

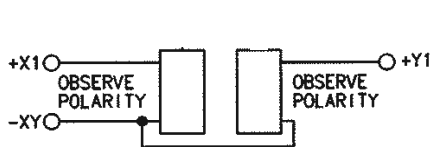
Coil Type A — 1.5 to 7 Vdc

Coil Type B — 2.5 to 6.5 Vdc

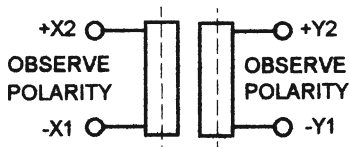
**Coil Resistance ±20% @ 25°C** — 175 Ohms

**Coil Current @ 25°C, Max.** — .175 Amp

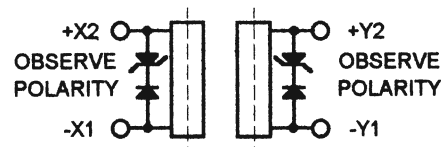
**Coil Type**



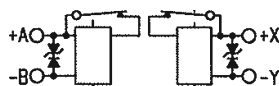
A — DC Continuous



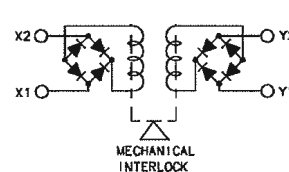
B — DC Continuous



C — DC Continuous with Suppression



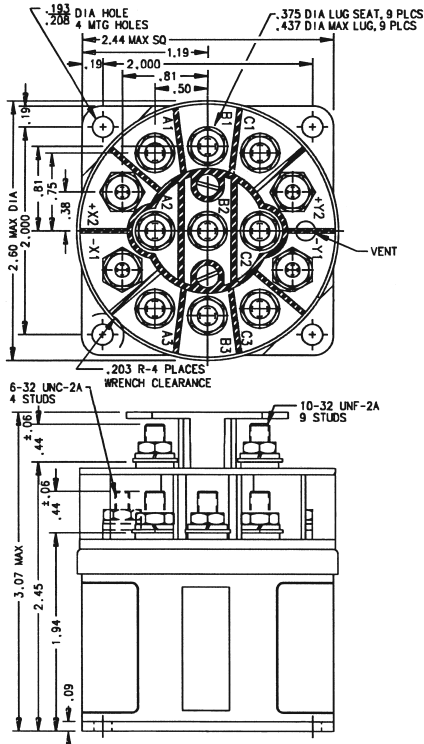
D — DC Continuous - Economical w/Suppression



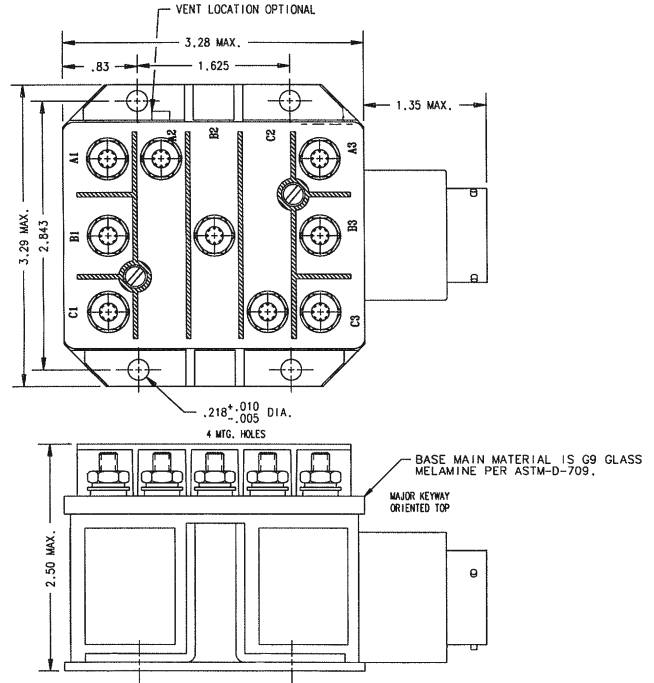
E — AC Continuous

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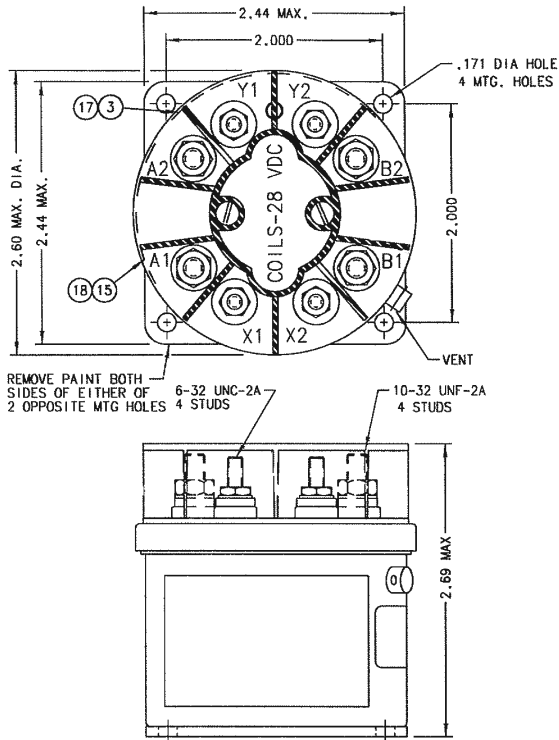
**D18, DH18 and DHR18 Series Contactors, Rated up to 50 Amps,  
115/200 VAC, 400 Hz (Continued)**



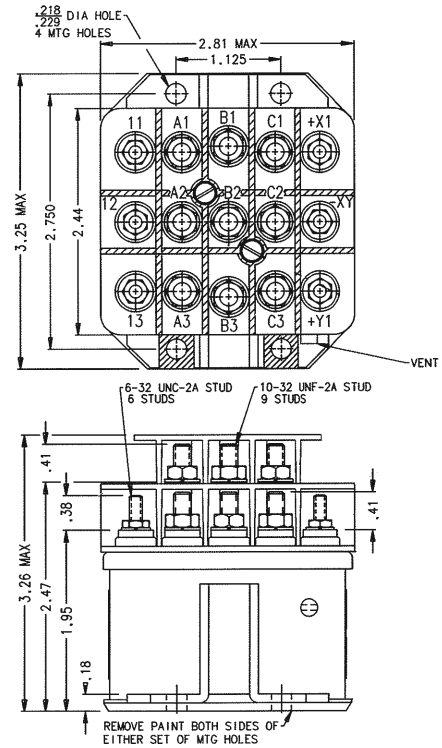
Mounting Style A



Mounting Style B



Mounting Style C



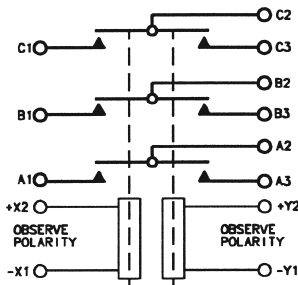
Mounting Style D

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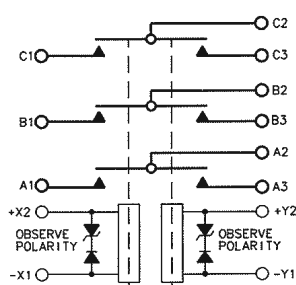
**6**  
HARTMAN Power Switching  
AC Contactors

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115/200 VAC, 400 Hz (Continued)**

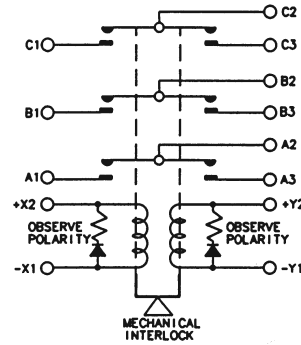
Circuit Configurations (Consult factory for other available circuit configurations)



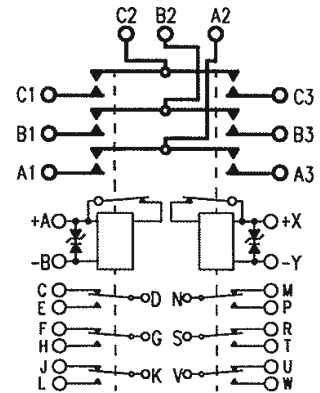
Circuit Configuration 1



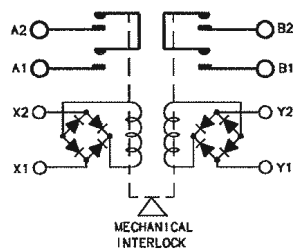
Circuit Configuration 2



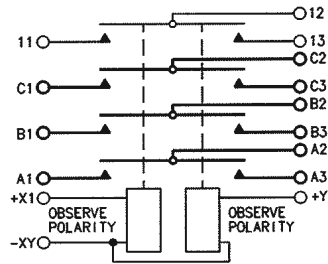
Circuit Configuration 3



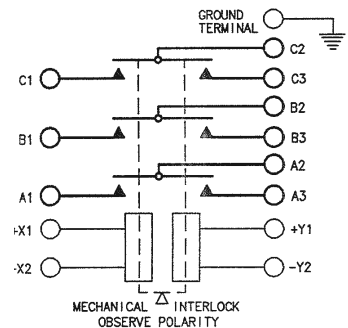
Circuit Configuration 4



Circuit Configuration 5



Circuit Configuration 6



Circuit Configuration 7

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
D-18	Gasket/Vented	A	A	1	1616048-1
D-180A	Gasket/Vented	D	C	6	1616048-2
D-18AA	Gasket/Vented	A	B	2	1616048-3
D-18F	Gasket/Vented	A	B	3	1616048-4
D-18ZZC	Gasket/Vented	B	D	4	1-1616957-3
DH-18	Hermetically Sealed	A	A	1	1616050-1
DH-18Y	Hermetically Sealed	A	A	7	1616524-3
DR-18E-5	Gasket/Vented	C	E	5	1616099-1

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