D-31, DH-31, and DHL-31 Series, Rated up to 120 Amps, 115/200 VAC, 400 Hz

Product Facts

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



Performance Data

Electrical Characteristics

Contact Arrangement — 3PDT, Center Off

Rated Operating Voltage — 115/200 VAC, 400 Hz, 3 phase

Resistive Rating — 120 Amps

Inductive Rating — 120 Amps

Motor Rating — 80 Amps

Rupture Rating — 1,000 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

Altitude — D-31 — 50,000 ft
DH-31, DHL-31 — 70,000 ft

Weight — 2.60 lbs

Coil Characteristics

Duty Cycle — Continuous (Type A, See diagram below)
Continuous with suppression (Type B or Type C, See diagram below)

Operating Voltage, Nom. — 28 Vdc

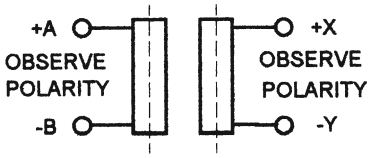
Pickup Voltage @ 25°C, Max. — Coil Type A and C — 18 Vdc
Coil Type B — 15 Vdc

Dropout Voltage @ 25°C, Max. — Coil Type A and C — 1.5 to 7 Vdc
Coil Type B — 2 to 7 Vdc

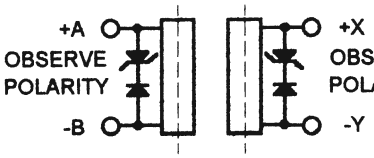
Coil Resistance ±20% @ 25°C — Coil Type A — N/A
Coil Type B — 100 Ohms
Coil Type C — 132 Ohms

Coil Current @ 25°C, Max. — .350 Amp

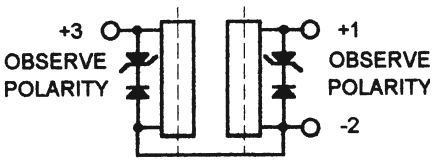
Coil Type



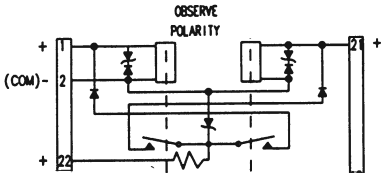
A — Continuous



B — Continuous with Suppression



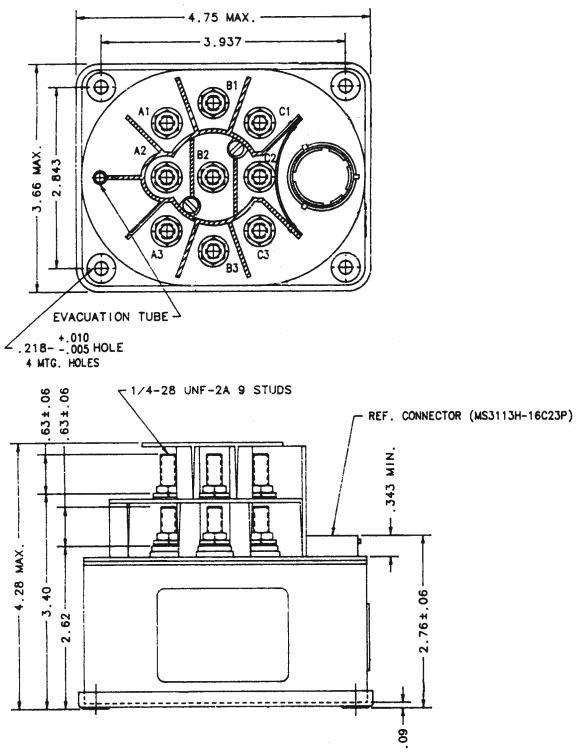
C — Continuous with Suppression



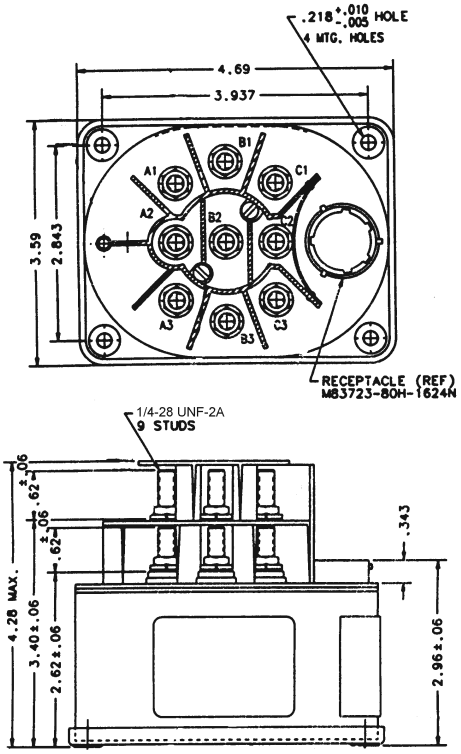
D — Latching

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

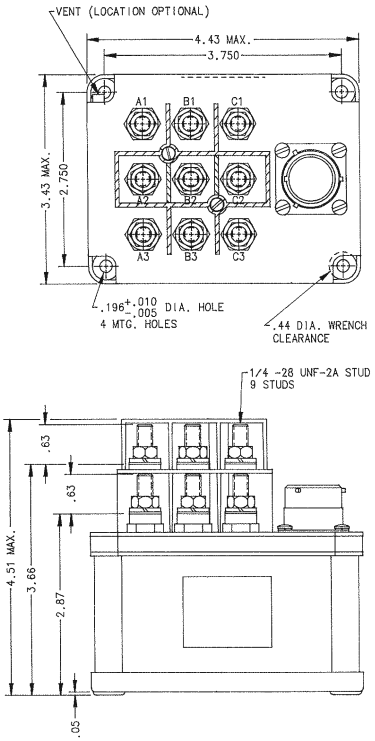
D-31, DH-31, and DHL-31 Series, Rated up to 120 Amps, 115/200 VAC, 400 Hz (Continued)



Mounting Style A



Mounting Style B

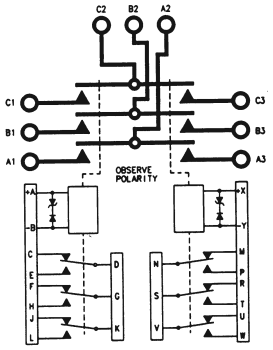


Mounting Style C

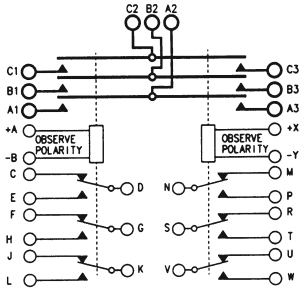
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D-31, DH-31, and DHL-31 Series, Rated up to 120 Amps, 115/200 VAC, 400 Hz (Continued)

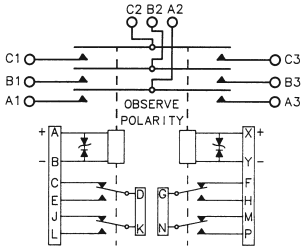
Circuit Configurations (Consult factory for other available circuit configurations)



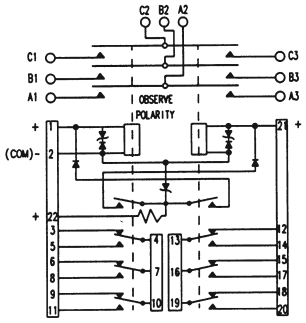
Circuit Configuration 1



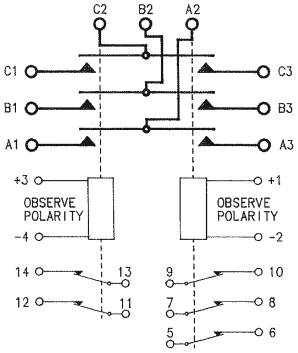
Circuit Configuration 2



Circuit Configuration 3



Circuit Configuration 4



Circuit Configuration 4

HARTMAN Part Number	Construction Type	Mounting Style	Coil Type	Circuit Config.	TE Part Number
D-31DB	Gasket/Vented	A	B	1	1616049-2
D-31TH	Gasket/Vented	C	A	5	1616524-5
DH-31A	Hermetically Sealed	A	A	2	1616050-4
DH-31DA	Hermetically Sealed	A	B	3	1616050-5
DH-31DAA	Hermetically Sealed	A	A	3	1616050-6
DHL-31B	Hermetically Sealed	B	D	4	1616050-8

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1903112-2 1969656-1 3430B2F51RTDF 936348-1 1393431-1 2-292161-3 CPF0402B37K4E1 2310537-1
2380312-2 2834055-1 RH73H2A40MKTN ROX05SJ18R 141991-2 650075-000 SBCHE154R7K 1743455-2