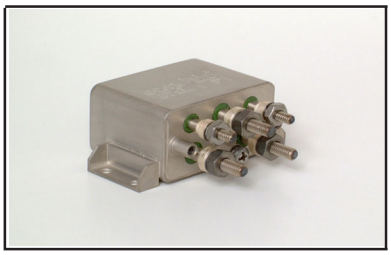
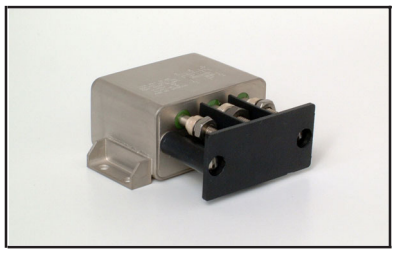
Index

A COMPANY OF STPI GROUP

D50 Characteristics





General characteristics

	D50
No. of poles	1 Form Z
Volume	45 cm^3 *[2.75 in^3]*
Mass	195 grams *[.43 lb. Max]*

Switching characteristics

Operate time @ 25° C	25 ms max.
Release time @ 25° C	25 ms max.
Bounce time @ 25° C	2 ms max.
Mechanical Life (reduced current)	100,000 cycles

Contact rating

Type of load (High level)	Cycles x 10^3	28 Vdc
Resistive	50	50 amps
Inductive	50	50 amps
Motor	50	20 amps
Lamp	50	20 amps
Overload current	N/A	400 amps
Rupture current	N/A	500 amps

Environmental characteristics

Temperature Range	-70°C to +125°C
Vibration, any axis (Sinusoidal)	15 g 10-2000 Hz
Shock, any axis	25 g 11 ms
Seal	Hermetic (1 x 10^{-8} atm cm^3/s)

Electrical characteristics

Contact voltage drop (@ Rated resistive load)	
- Initial	150 mV Max.
- After guaranteed life	175 mV Max.
- Initial	

Dielectric strength @ sea level
- Initial @ 60Hz

Coil to Case	All other points
1050 Vrms	1050 Vrms

Insulation Resistance - Initial	100 Megohms min. @ 500 Vdc
Reference Military Specifications	MIL-PRF-6106

A COMPANY OF STPI GROUP

D S 50 E 4 2 D

RELAY TYPE

'D' SERIES

OPTIONAL

'S' OR 'R' Internal Voltage suppressor

RELAY AMPS

50 AMPS

COIL CODE

See Page 4

MOUNTING STYLES

See Page 5

TERMINAL STYLE AND FINISH

See Page 6

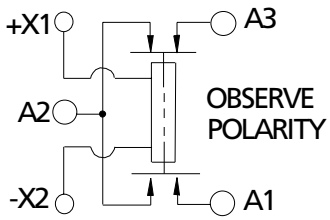
'D' FOR CATALOG STANDARD OR
'A' FOR CATALOG STANDARD WITHOUT TERMINAL BARRIERS
'XXXX' FOR SPECIAL INSTRUCTIONS OR SPECIFICATIONS
(ASSIGNED BY DRI)

Coil Characteristics

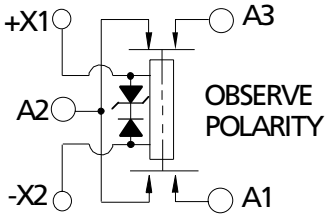
COIL CODE	DC E
Nominal coil voltage	28
Maximum pick-up voltage at 25°C	13,5
Maximum pick-up voltage at 125°C	18
Minimum drop-out voltage at -70° C	1,5
Coil resistance (ohms ± 10% at 25°C)	290
Maximum coil transient suppression (where applicable) VDC	SEE CIRCUIT DIAGRAM

Circuit Diagram

TERMINAL STYLE 1

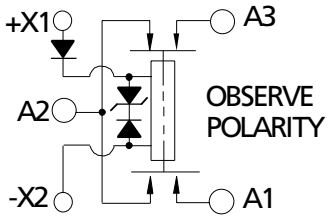


D50



DS50

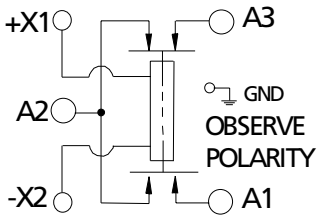
INTERNAL VOLTAGE SUPPRESSOR
(-42 Vdc MAX.)



DR50

INTERNAL VOLTAGE SUPPRESSOR
(-5 Vdc MAX.)

TERMINAL STYLE 2



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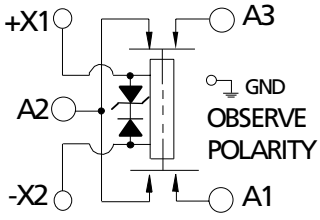
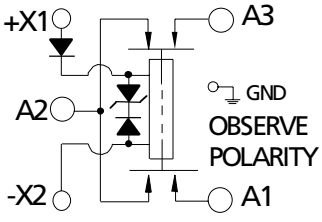


DS50

INTERNAL VOLTAGE SUPPRESSOR
(-42 Vdc MAX.)

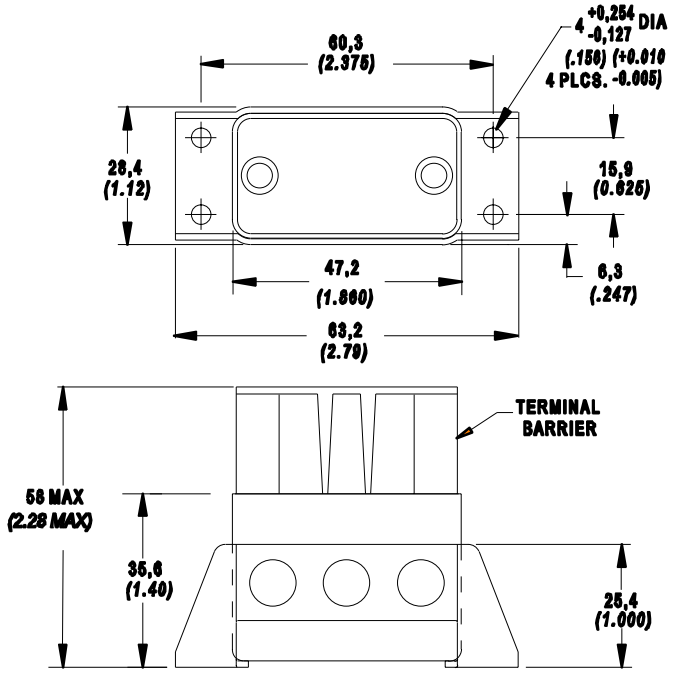


DR50

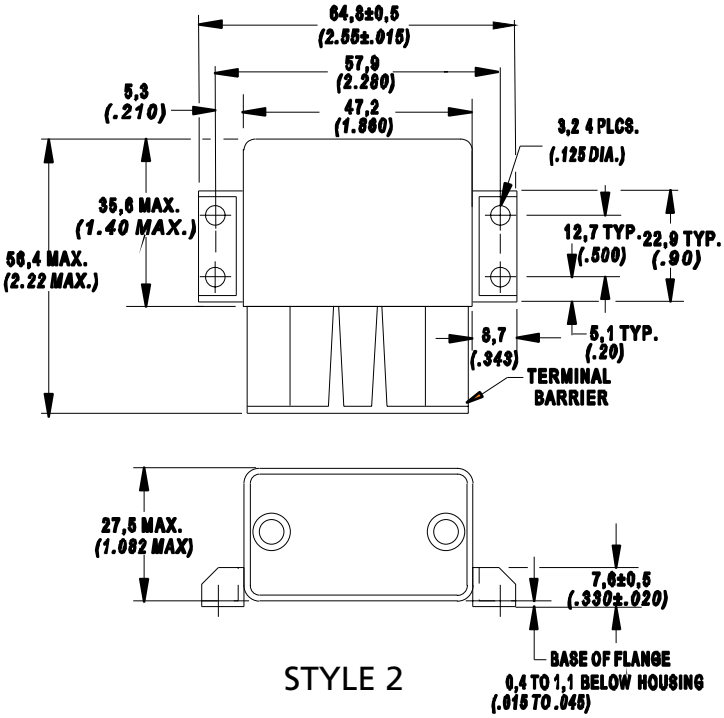
INTERNAL VOLTAGE SUPPRESSOR
(-5 Vdc MAX.)

Mounting styles

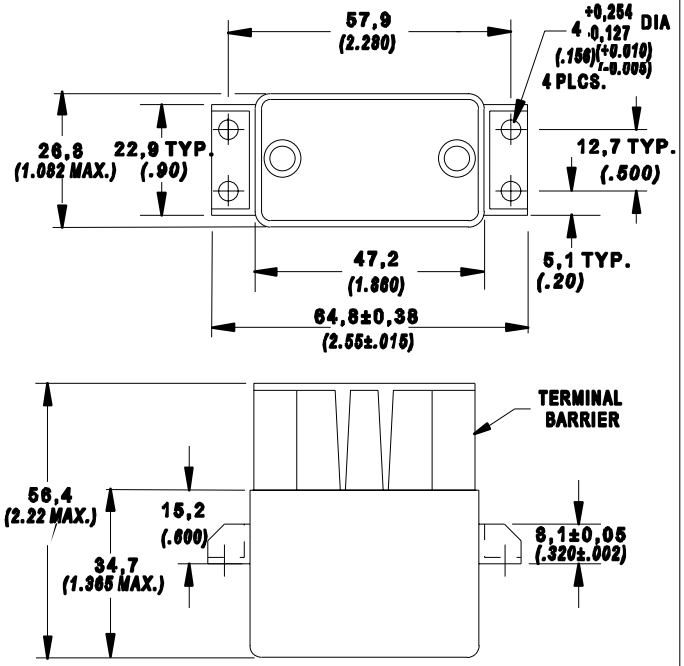
DIMENSIONS ARE IN MM (IN.)
UNLESS OTHERWISE SPECIFIED, TOLERANCE IS ±0,25 [.010]



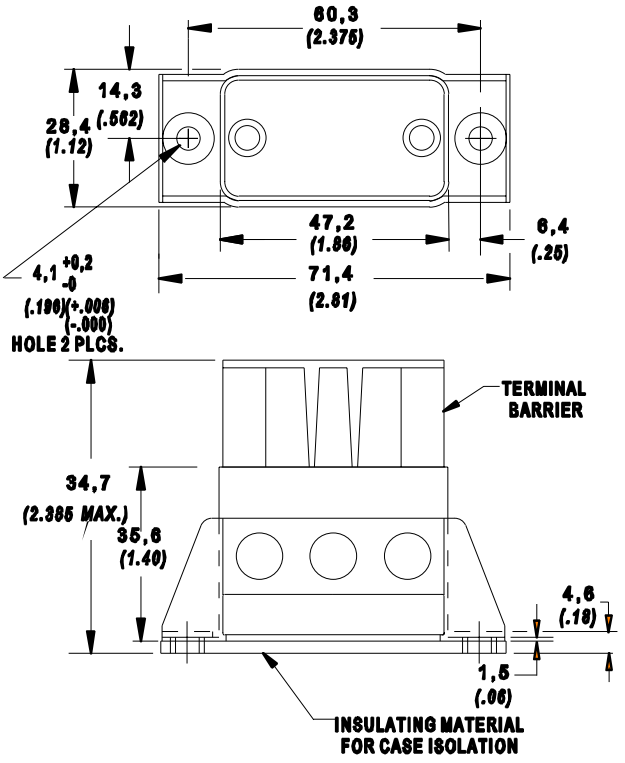
STYLE 1



STYLE 2



STYLE 3

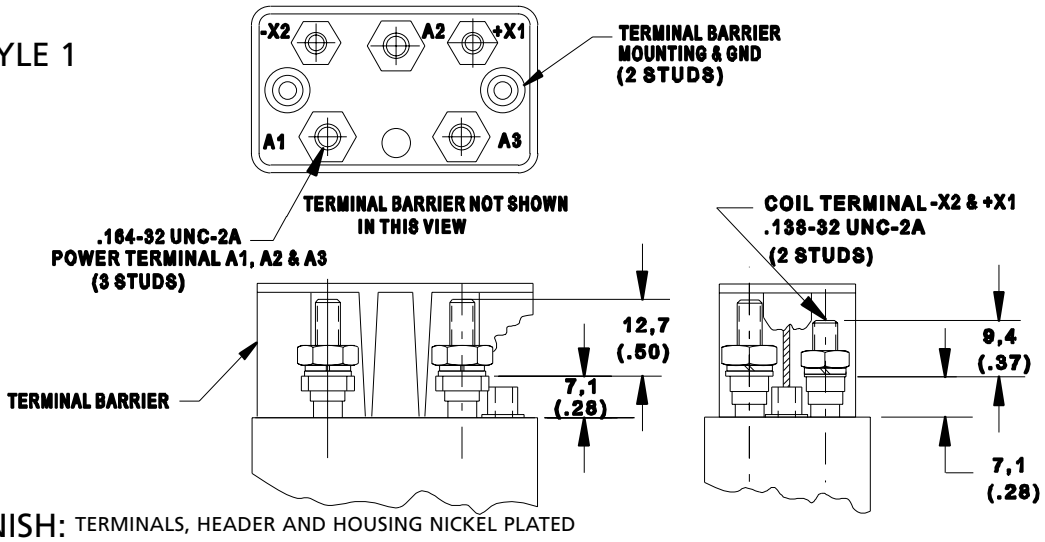


STYLE 4

Terminal styles

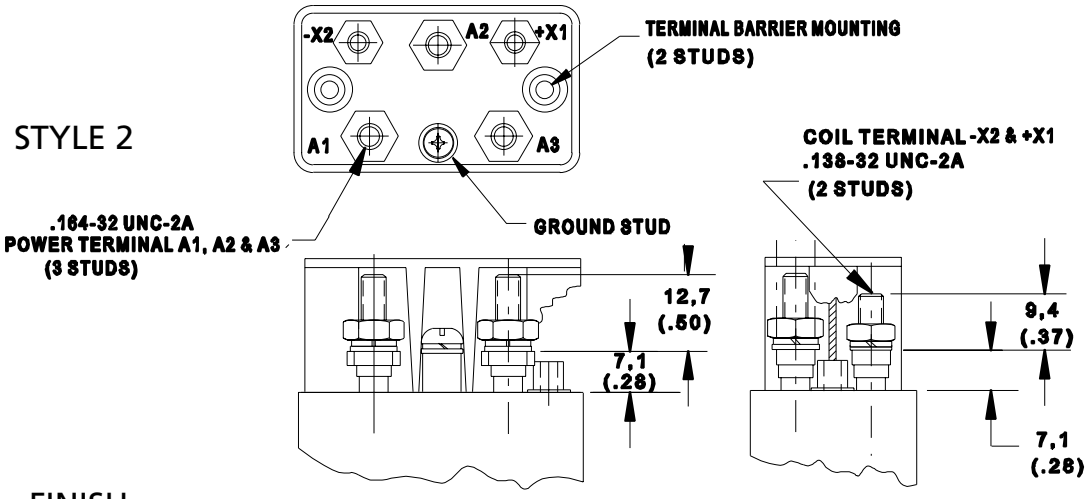
DIMENSIONS ARE IN MM (IN.)
UNLESS OTHERWISE SPECIFIED, TOLERANCE IS ±0,25 [.010]

STYLE 1



FINISH: TERMINALS, HEADER AND HOUSING NICKEL PLATED

STYLE 2



FINISH: TERMINALS, HEADER AND HOUSING NICKEL PLATED

HARDWARE SUPPLIED:

STYLE 1	QTY
#6 NUT	2
#8 NUT	3
#6 LOCKWASHER	2
#8 LOCKWASHER	3
#6 FLAT WASHER(NARROW)	2
#6 FLAT WASHER(NARROW)	3
#6 FILLISTER HEAD SCREW	2
* TERMINAL BARRIER	1

STYLE 2	QTY
#6 NUT	
#8 NUT	2
#6 LOCKWASHER	3
#8 LOCKWASHER	3
#6 FLAT WASHER(NARROW)	3
#8 FLAT WASHER(NARROW)	3
#6 FILLISTER HEAD SCREW	3
#6 PAN HEAD SCREW	2
* TERMINAL BARRIER	1
	1

*NOT SUPPLIED WHEN SPECIFYING P/N ENDING WITH 'A'

General characteristics

PHL50

No. of poles	1 Form Z (Main) 1 Form C (Aux)
Volume	45 cm³ *[2.75 in³]*
Mass	193 grams *[.43 lb. Max]*
Operate time @ 25° C	20 ms max.
Release time @ 25° C	20 ms max.
Bounce time @ 25° C	2 ms max.
Mechanical Life (reduced current)	100,000 cycles

Switching characteristics

Contact rating

Type of load (High level)	Cycles x 10^3	28 Vdc	50Vdc
Resistive	50	75 amps	n/a
Resistive	100	50 amps	n/a
Resistive	20	n/a	50 amps
Auxiliary contacts: Resistive 2 AMPS @ 28VDC			

Environmental characteristics

Temperature Range	-70°C to +125°C
Vibration, any axis (Sinusoidal)	20 g 10-2000 Hz
Shock, any axis	100 g 11 ms
Seal	Hermetic (1 x 10^{-8} atm cm³/s)

Electrical characteristics

Contact voltage drop (@ Rated resistive load)
- Initial: 125 mV Max.
- After guaranteed life: 250 mV Max.

Dielectric strength @ sea level
- Initial @ 60Hz

Coil to Case	Main Contacts	Contact to case
1000 Vrms	1000 Vrms	1250 Vrms

Insulation Resistance
- Initial: 100 Megohms min. @ 500 Vdc

PHL S 50A 28 E ***

RELAY TYPE
PHL50

OPTIONAL
'S' Internal Voltage suppressor

RELAY AMPS
50-75 AMPS

COIL CODE
See page 9

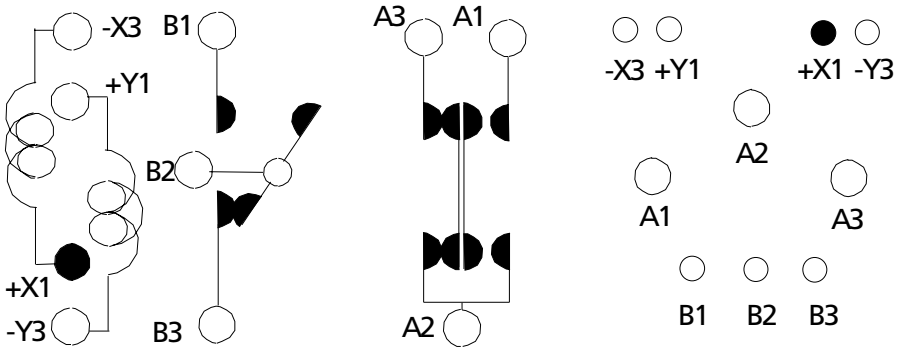
MOUNTING STYLE
See page 10

'XXX' FOR SPECIAL INSTRUCTIONS OR SPECIFICATIONS
(ASSIGNED BY DRI)

Coil Characteristics

COIL CODE	28
Nominal coil voltage	28
Maximum operate voltage at 20°C	14
Maximum operate voltage at 125°C	20
Coil resistance (ohms ±10% at 20°C)	145
Maximum coil transient suppression (where applicable) VDC	-42

Circuit Diagram



Mounting styles

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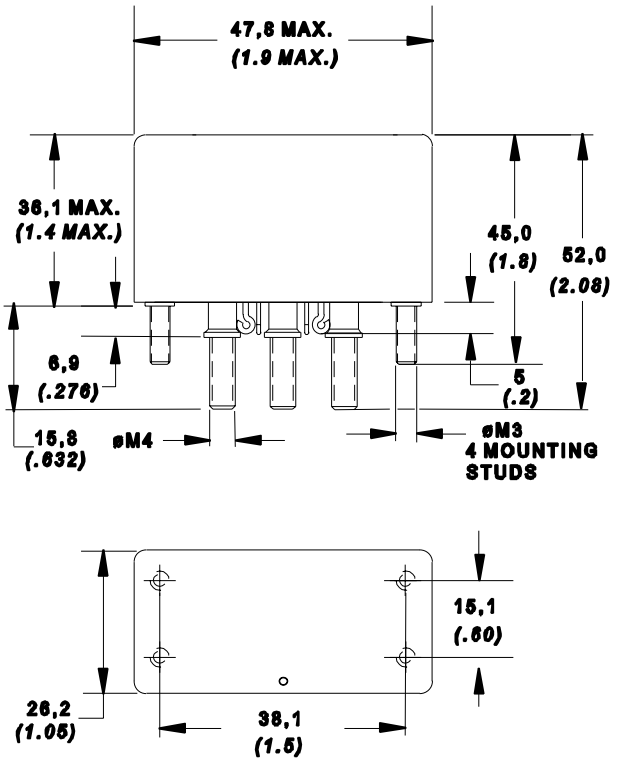
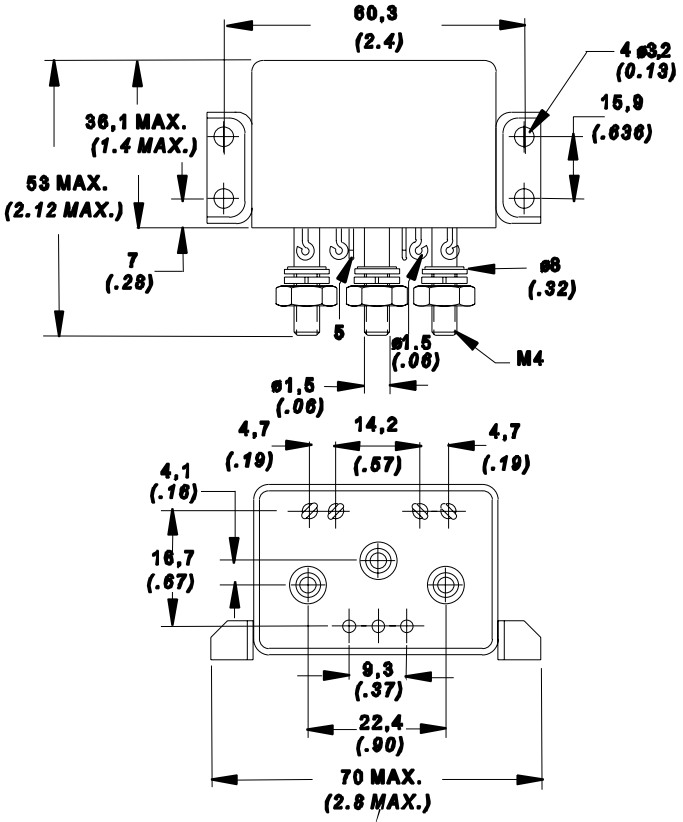
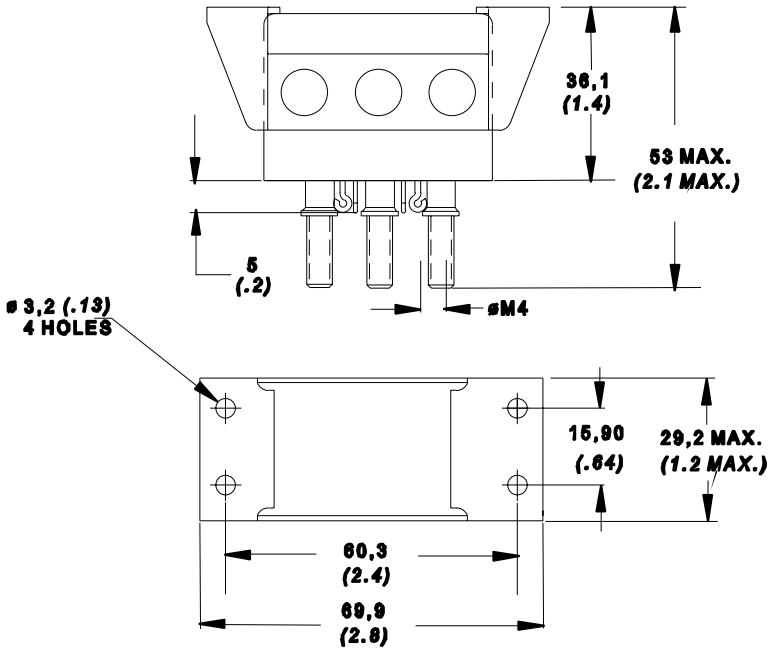


STYLE G



STYLE L



STYLE E

E150 Characteristics

A COMPANY OF STPI GROUP

General characteristics

	E150
No. of poles	1 Form X , 1 Form C
Volume	16.4 cm^3 *[.1 in^3]*
Mass	90 grams *[.2 lb. Max]*

Switching characteristics

Operate time @ 25° C	15 ms max.
Release time @ 25° C	15 ms max.
Bounce time	2 ms max.
Mechanical Life	100,000 cycles

Contact rating

Standard

Type of load (High level)	Cycles x 10^3	28 Vdc	115 Vac 400 Hz
Resistive	50	50 amps	50 amps
Inductive	20	20 amps	20 amps
Motor	20	20 amps	20 amps
Lamp	20	16 amps	16 amps

Lamp Load

Resistive	50	35 amps	35 amps
Lamp	50	20 amps	20 amps

Auxiliary Contact: Resistive 5 amps @28vdc

Environmental characteristics

Temperature Range	-70°C to +125°C
Vibration (Sinusoidal)	20 g 10-2000 Hz
Shock, any axis	100 g 11 ms
Seal	Hermetic (1 x 10^{-8} atm cm^3/s)

Electrical characteristics

Contact voltage drop (@ Rated resistive load)	
- Initial	125 mV Max.
- After guaranteed life	250 mV Max.

Dielectric strength @ sea level	Coil to Case	All other points
- Initial @ 60 Hz	1000 Vrms	1250 Vrms

Insulation Resistance	
- Initial	100 Megohms min. @ 500 Vdc
Reference Military Specifications	MIL-R-6106

A COMPANY OF STPI GROUP

E S 150 1 4 2 W ***

RELAY TYPE

OPTIONAL
'S' Internal Voltage suppressor

MODEL: 1PSTNODM
50 AMPS

IDENTIFICATION OF
1 = STANDARD
2 = FOR LAMP LOAD
See page 11

COIL CODE
page 13

MOUNTING STYLE
page 14

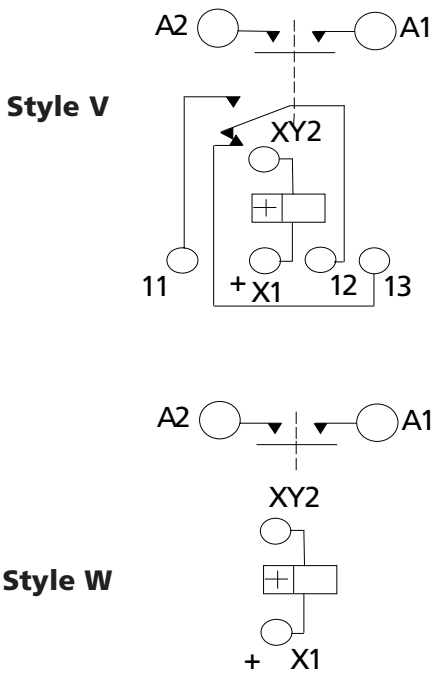
TERMINAL STYLE
V = with auxiliary contact
W = without auxiliary contact
See page 13

'XXX' FOR SPECIAL INSTRUCTIONS OR SPECIFICATIONS
(ASSIGNED BY DRI)

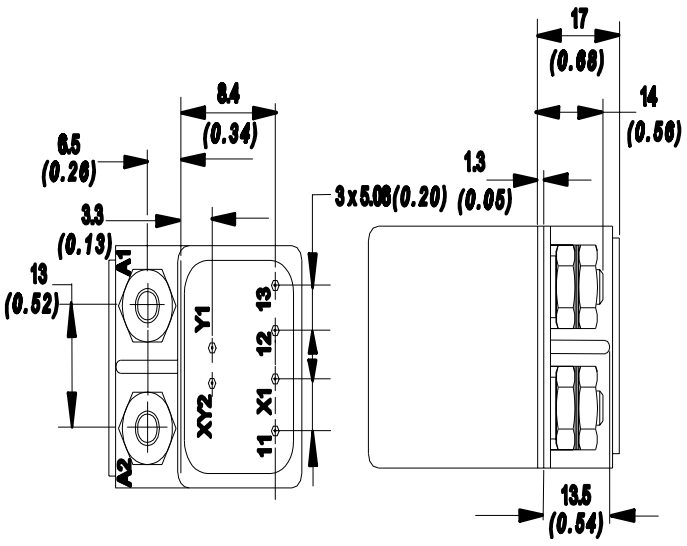
Coil Characteristics

COIL CODE	2	4
Nominal voltage	12 Vdc	28 Vdc
Coil Resistance ohms ± 10% at 25°C	70	290
Maximum pick-up voltage at 25°C	6 Vdc	14 Vdc
Maximum pick-up voltage at 125°C	8,5 Vdc	19,8 Vdc
Minimum Drop out voltage at -70°C	0,5-4 Vdc	1,5-7 Vdc

Circuit Diagram



Terminal style



Mounting styles

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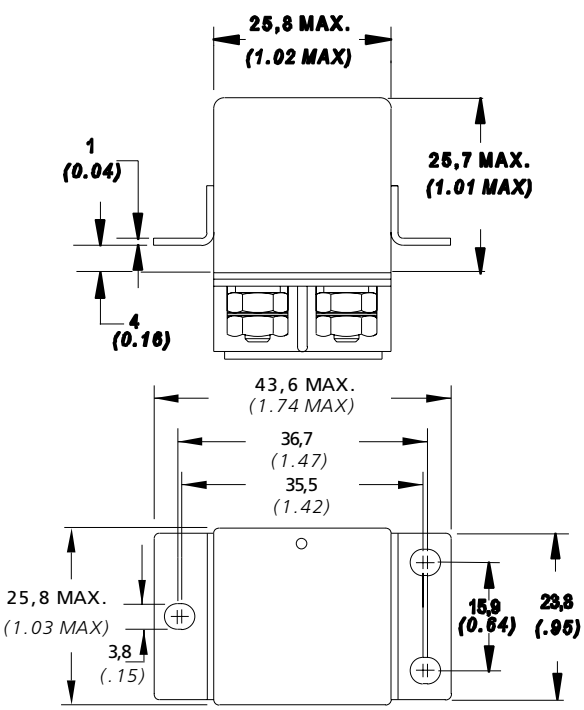
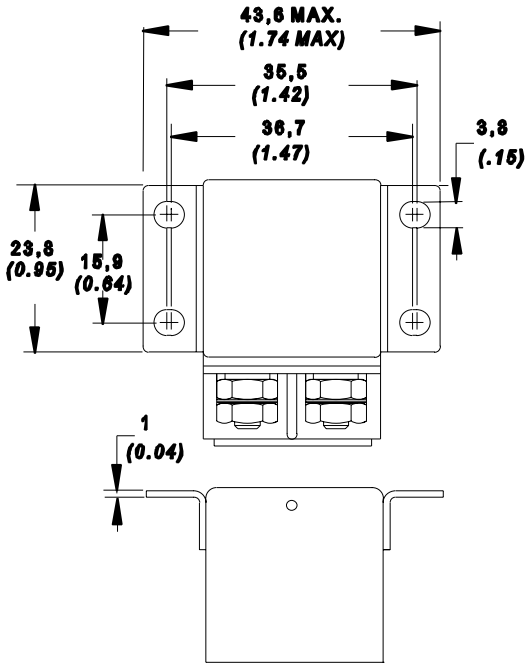
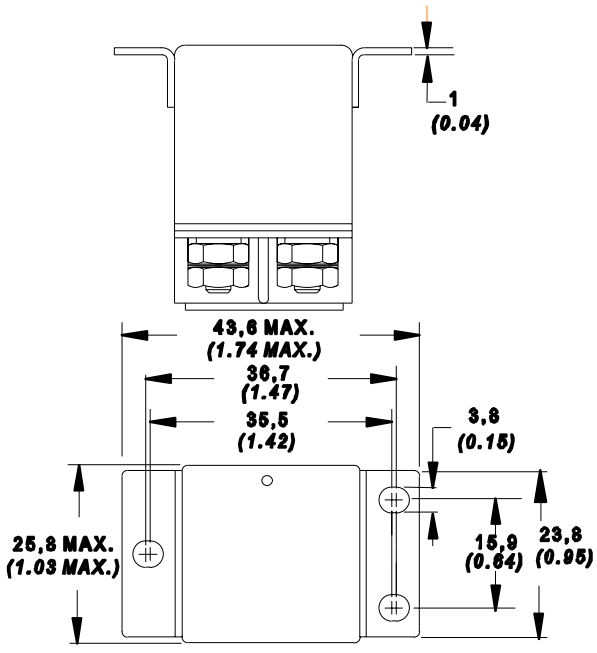


STYLE 2



STYLE 3



STYLE 11