

## IHV250 SERIES RELAY



### Product Features

- Hermetically sealed — intrinsically safe. Operates in explosive /harsh environments without oxidation or contamination of contacts, during long periods of non-operation
- Inert gases in contact chamber, and arc-blow magnet, allow contact works in 900VDC condition
- Optional auxiliary contact for easy monitoring of power contact position
- Built-in coil economizer — only 1.7W hold power @ 12VDC and it limits back EMF to 0V. Models requiring external economizer also available
- Designed accordance to AIAG QS9000
- Not position sensitive, can be mounted in any orientation
- RoHS versions available

### Applications

- DC Charging, Solar Inverter, Energy Store Station, Test Equipment
- Battery Pack, Electric Vehicle-Mounted, Rail Transit, Motor Control
- Circuit Isolation, Circuit Protection and Safety in Industrial Machinery

### Approval

cULus

### Coil Operating Voltage (Valid Over Temperature Range)

Voltage (Will Operate)	9-36 VDC
Maximum Voltage	36 VDC
Pickup (Close) Voltage Max.	9 VDC
Hold Voltage (Min.)	7.5 VDC
Drop Out Voltage (20°C) Max.	6 VDC
Inrush Current (Max.)	3.8 A
Holding Current (Avg.)	0.13A@12V 0.07A@24V
Inrush Time (Max.)	130mS

### Insulation data

Dielectric Withstand Voltage	
Between Open Contacts —	2200Vrms
Contacts to Coil —	2200Vrms
Insulation Resistance, Terminal to Terminal / Terminals to Coil	
When New	100 megohms, min. @ 500Vdc
At End of Life	50 megohms, min. @ 500Vdc

# High Voltage DC Contactors

## Main Contact data

Contact Form	SPST-NO-DM (1 Form X)
Switching Voltage (Max):	900VDC
Load Current	250A (Continuous)
Break current (Max) :	2,500A, 450VDC
Initial Voltage drop:	< 60mV (250A after 1 minute)
Operate time (Max)	25mS
Operate bounce (Max)	7mS
Release Time (Include arc time), under 2,500A, Max.	12mS
Mechanical Life (With Auxiliary contact)	500,000 cycles (300,000 cycles)

## Auxiliary Contact data

Contact Form	SPST-NO (1 Form A)
Contact Current, Max.	2A,30VDC / 3A, 125VAC
Contact Current, Min.	100mA, 8VDC
Contact Resistance, Max	0.5Ω @ 30VDC / 0.15Ω @125VAC

## Hot Switching Performance (Polarity Sensitive)

250A	+450VDC	make / break	3,000 ops.
250A	+750VDC	make / break	500 ops.*
250A	-450VDC	make / break	50 ops.*
2,500A	+450VDC	break only	3 ops.*
650A		make only	26 ops.

\* Without auxiliary contact

## Environmental Data

Shock, 11ms 1/2 sine (operating) — 20G peak

Sine Vibration, 20G peak — 80-2,000 Hz.

Operating Temperature Range — -40°C to +85°C

Weight - about 430g

IHV250    A    A    A    N    A    XX

### Product series

IHV250 = 250 Amp, 12 - 900VDC Relay

### Contact form

A = Normally Open

H = Normally Open + NO Aux Contacts

### Coil Voltage

A = 12~24VDC (Coil with the Economizer)

### Coil wire length

A = 15.3 inch / 390mm

### Coil Terminal connection

N = NONE

### Mounting & Power Terminal

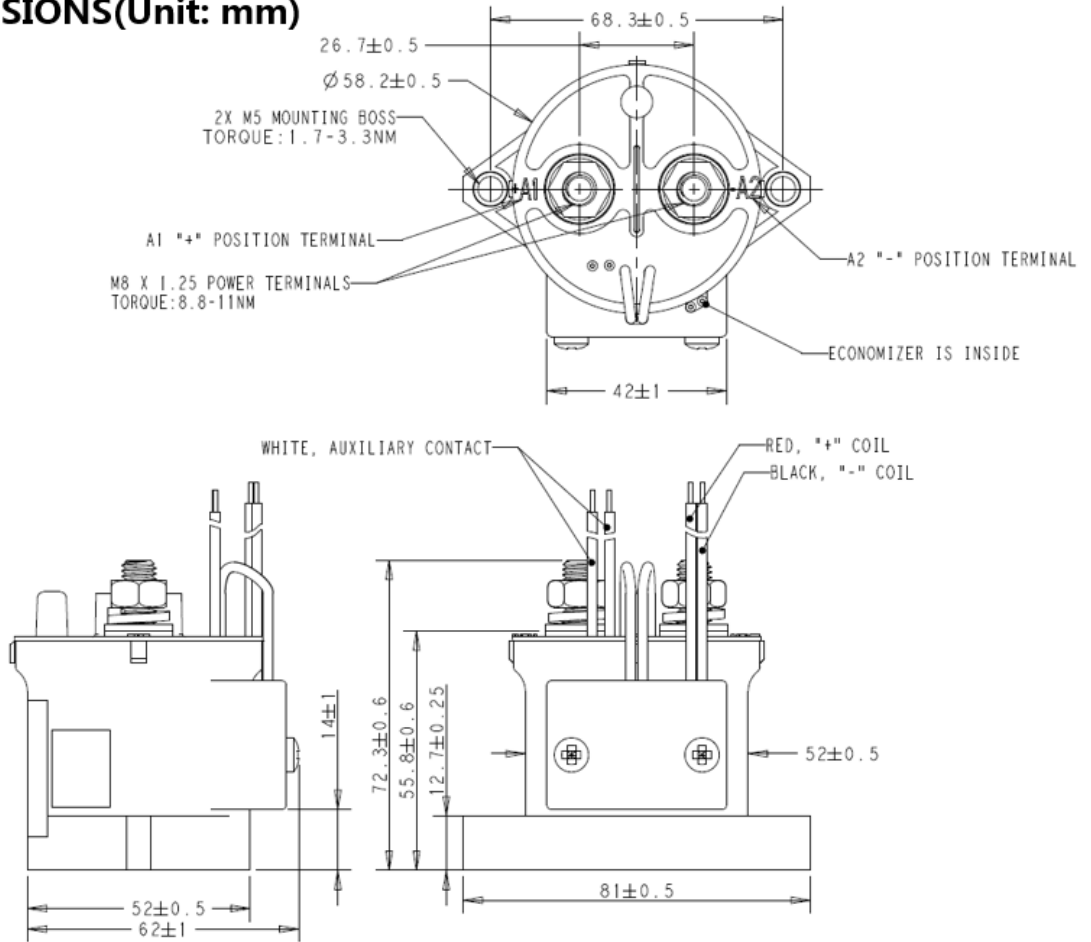
A = Bottom mount & Male 10mm X M8 Threaded terminal

### Customer Special Designator

XX 2 digit or letter specified by manufacture factory

# High Voltage DC Contactors

## DIMENSIONS(Unit: mm)



PART NUMBER	PRODUCT NAME	COIL VOLTAGE	AUX. CONTACT	ECONOMIZER
2071411-1	IHV250AAANA	12 - 24VDC	NONE	ATTACHED
2-2071411-1	IHV250HAANA	12 - 24VDC	NORMALLY OPEN	ATTACHED

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