

**High Voltage Contactors IHV150 Series**

- Hermetically sealed. Operates in explosive/harsh environments without oxidation or contamination of contacts, including 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 compliance

Typical applications

DC Charging, Solar Inverter, Energy Store Station, Test Equipment  
Battery Management System, Electric Forklift, AGV, Rail Transit  
Motor Control Circuit Isolation, Circuit Protection and Safety in Industrial Machinery

Approvals  
cULus E58304

Main Contact Data	
Contact arrangement	1 Form X (SPST-NO-DM)
Switching voltage (Max)	12-900VDC <sup>1)</sup>
Rated current	200A (Continuous)
Break current (Max)	1500A, 450VDC
Initial voltage drop	< 60mV (150A after 1 minute)
Operate time max.	25ms
Operate bounce time max.	7ms
Release time, (Include arc time), under 2,500A, Max.	12ms
Mechanical life	Without Aux. contact = 500,000 cycles With Aux. contact = 300,000 cycles

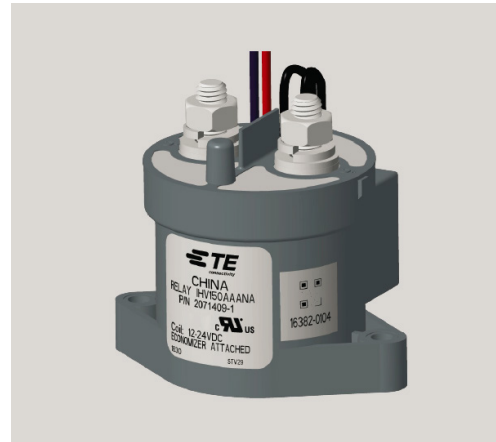
Contact ratings	
Load	Cycles
150A, +450VDC, make / break	3,000
150A, +750VDC <sup>1)</sup> , make / break	2,000
150A, -450VDC, make / break	500
1500A, +450VDC, break only	10
600A, make only	26

1) Please contact TE engineers for above 450VDC high voltage switching application.

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

Coil versions, DC coil							
Nominal Voltage	Operate Voltage Max.	Maximum Voltage	Hold Voltage (Min.)	Release Voltage	Inrush Current (Max.)	Holding Current (Avg.)	Inrush Time (Max.)
9-36VDC	9VDC	36VDC	7.5VDC	6VDC	3.8A	0.13A @ 12V; 0.07A @ 24V	130ms

All figures are given for coil without pre-energization, at ambient temperature +20°C

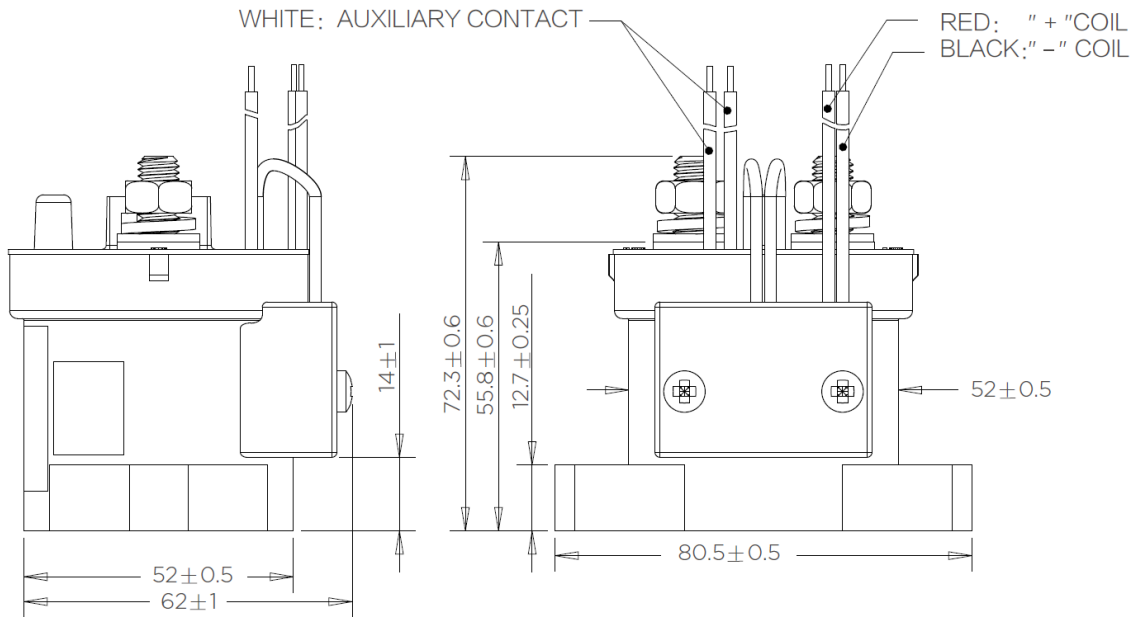
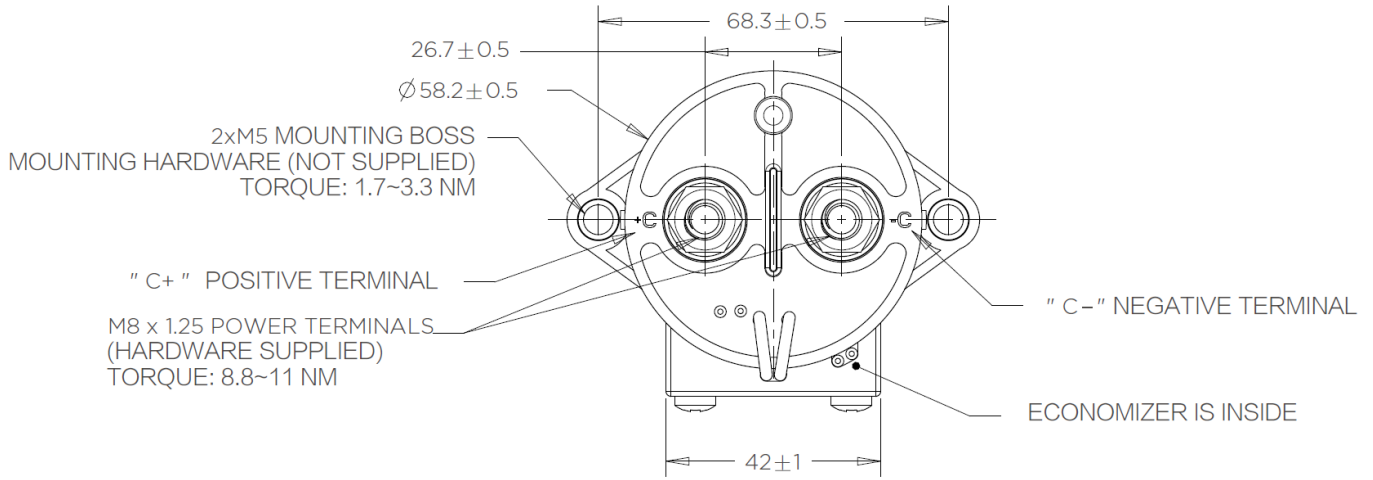


Insulation Data	
Dielectric withstand voltage (leakage current <1mA)	
between open contacts	2,200Vrms
between contact and coil	2,200Vrms
Initial resistance @ 500VDC	
between open contacts	> 1×10 <sup>8</sup> Ω
between contact and coil	> 1×10 <sup>8</sup> Ω

Other Data	
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customer-support/rohssupportcenter">www.te.com/customer-support/rohssupportcenter</a>	
Ambient temperature	-40°C to 85°C
DC coil	
Vibration resistance (functional),	Sine, 80 – 2000Hz, 18G
Shock resistance (functional)	11ms 1/2 Sine, Peak 20G
Terminal type	Screw for contact, wire for coil
Weight	About 430g
Packaging/unit	20pcs/carton

**High Voltage Contactors IHV150 Series** (Continued)

**Dimension**



Tolerances are shown for reference purposes only

**High Voltage Contactors IHV150 Series** (Continued)

<b>Product code structure</b>	IHV150	A	A	A	N	A	XX
<b>Product series</b> IHV150 = 150A Contactor							
<b>Contact form</b> A = 1 Normally Open H = 1 Normally Open + NO Aux Contacts							
<b>Coil Voltage</b> A = 12~24VDC							
<b>Coil Wire Length</b> A = 390mm							
<b>Coil Terminal Connection</b> N = None							
<b>Mounting &amp; Power Terminal</b> A = Bottom Mount & Male 10mm X M8 Threaded Terminal							
<b>Customer Special Designator</b> XX = 2 digits or Letters Specified by Manufacturer							

Product code	Contact form	Mounting position	Coil	Part number
IHV150AAANA	Normally Open	Bottom	12-24VDC	2071409-1
IHV150HAANA	Normally Open + NO Aux Contact			2-2071409-1