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 TECHNICAL DATA SHEET

# Explosionproof enclosures – XPHV series

## Cast aluminum high voltage junction box

**T&B EX™**


XPHV explosionproof high voltage junction boxes provide for connecting high voltage cables in hazardous environments.

**Certifications / Standards:**



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**Features & Benefits:**

- 16 (1 x 1) and 10 (2 x 2) sizes available
- Up to 8kV and 1000A
- Hinged cover
- Custom steel mounting panel
- Set of three porcelain standoffs and hardware (1 x 1 connection only)
- Set of three porcelain bus supports insulators and hardware (2 x 2 connection only)
- “High Voltage” warning cover sign
- Internal and external ground lugs
- Removable lifting eye bolts on enclosures 18 x 24 and larger
- Lid-lifter cover alignment device on enclosures 18 x 24 and larger
- Cast-on mounting lugs / feet

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**Options:**

- Stainless steel cover bolts for NEMA Type 4X corrosion protection
- Conduit (NPT & metric) and device (NPSM) drilling & tapping
- Auxiliary devices such as breather / drains
- Custom machining - milling, counter-boring, spot-facing, blind drilled holes, entries, chamfers
- Powder and epoxy coating for additional corrosion resistance
- Special mounting provisions

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**Applications:**

- For use where high voltage cables need termination and/or connecting
- Indoors and outdoors – in damp, wet, dirty, dusty hazardous locations without the need for a protective shelter

- In areas where frequent washdowns are necessary or where heavy rain or water spray is prevalent
- On switchracks or other assemblies where it is required to join high voltage cables
- Suitable for petrochemical, water treatment, food processing, coating and chemical installations

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**Conforms to:**

- Class I, Divisions 1 & 2, Groups B, C, D
- Class II, Divisions 1 & 2, Groups E, F, G
- Class III
- Enclosure NEMA Type 4, 4X (W/ Stainless Steel cover bolts), 7BCD, & 9EFG
- UL Standard 1203
- UL Standard 50
- CSA C22.2 No. 25 & 30
- For IECEx or ATEX certifications, consult factory

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**Electrical ratings:**

- 1x1 Series: 8000 volts
- 2x2 Series: 7500 Volts

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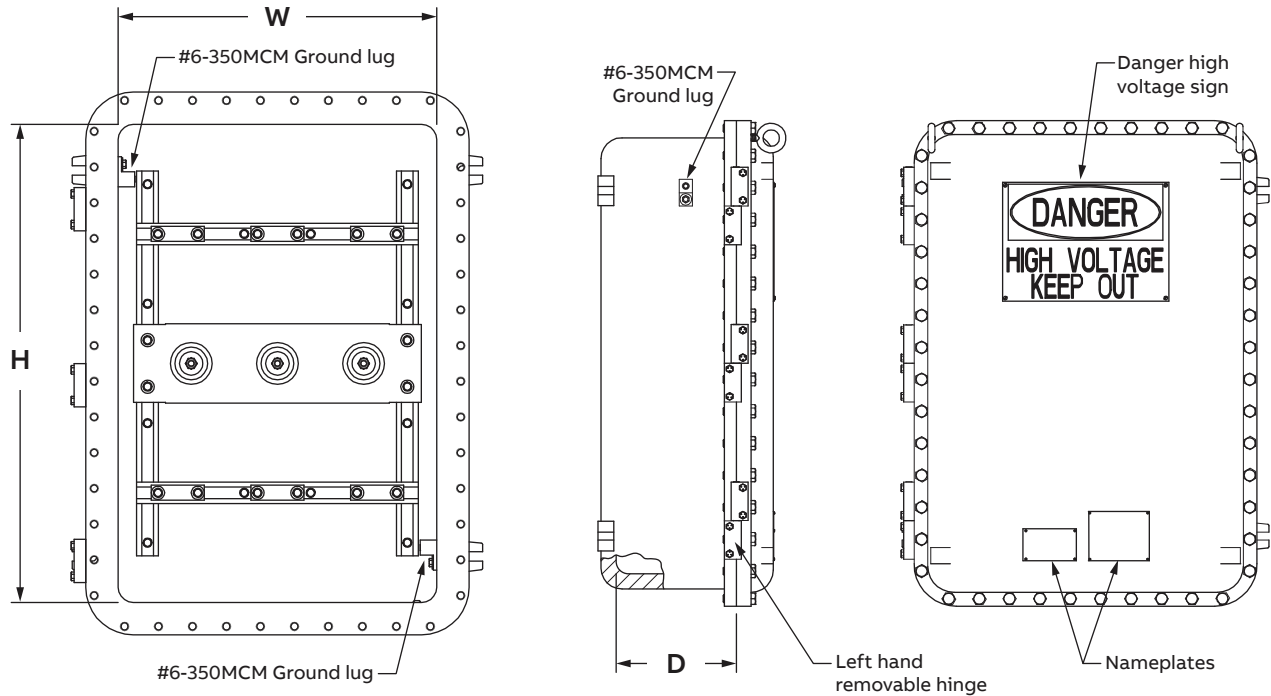
**Construction / Materials / Finishes:**

- Body and cover - copper-free aluminum (3/10 of 1%) finish - tumblast, natural aluminum
- Gasket (“O”- ring type) - nitrile rubber on 12x30x06 or larger silicone “O”- ring on smaller enclosures
- Cover bolts - premium, high strength steel (zinc plated and coated); optional stainless steel available
- Hinges - aluminum with stainless steel hardware
- Mounting panel - galvanized steel

## Cast aluminum high voltage box:

### 1 x 1 connection dimensions

- When ordering XPHV enclosure, specify 1x1 or 2x2 connection for proper hardware clarity when those sizes are used for both applications, e.g. XPHV182408 1x1



### Product selections, dimensions & weights

Part no:	Inside nom. (in)			Conductor size		Voltage max	Amperage max
	H	W	D	AWG/Kcmil	mm <sup>2</sup>		
XPHV121208	12	12	8	2/0	70	2.5kV	160
XPHV161608	16	16	8	3/0	95	6.6kV	200
XPHV162408	16	24	8	350	185	6.6kV	315
XPHV181808	18	18	8	4/0	120	6.6kV	225
XPHV182408	18	24	8	350	185	6.6kV	315
XPHV183008	18	30	8	350	185	6.6kV	315
XPHV183608	18	36	8	350	185	6.6kV	315
XPHV242408	24	24	8	350	185	6.6kV	315
XPHV243008	24	30	8	350	185	6.6kV	315
XPHV243608	24	36	8	350	185	6.6kV	315
XPHV162410	16	24	10	350	185	6.6kV	315
XPHV164610	16	46	10	350	185	6.6kV	315
XPHV182410	18	21	10	350	185	6.6kV	315
XPHV183610	18	36	10	350	185	6.6kV	315
XPHV242410	24	24	10	350	185	8kV	315
XPHV243610	24	36	10	400	240	8kV	400

Notes: When installing in classified areas, product must be installed in accordance with applicable national and local electrical/electronic codes.

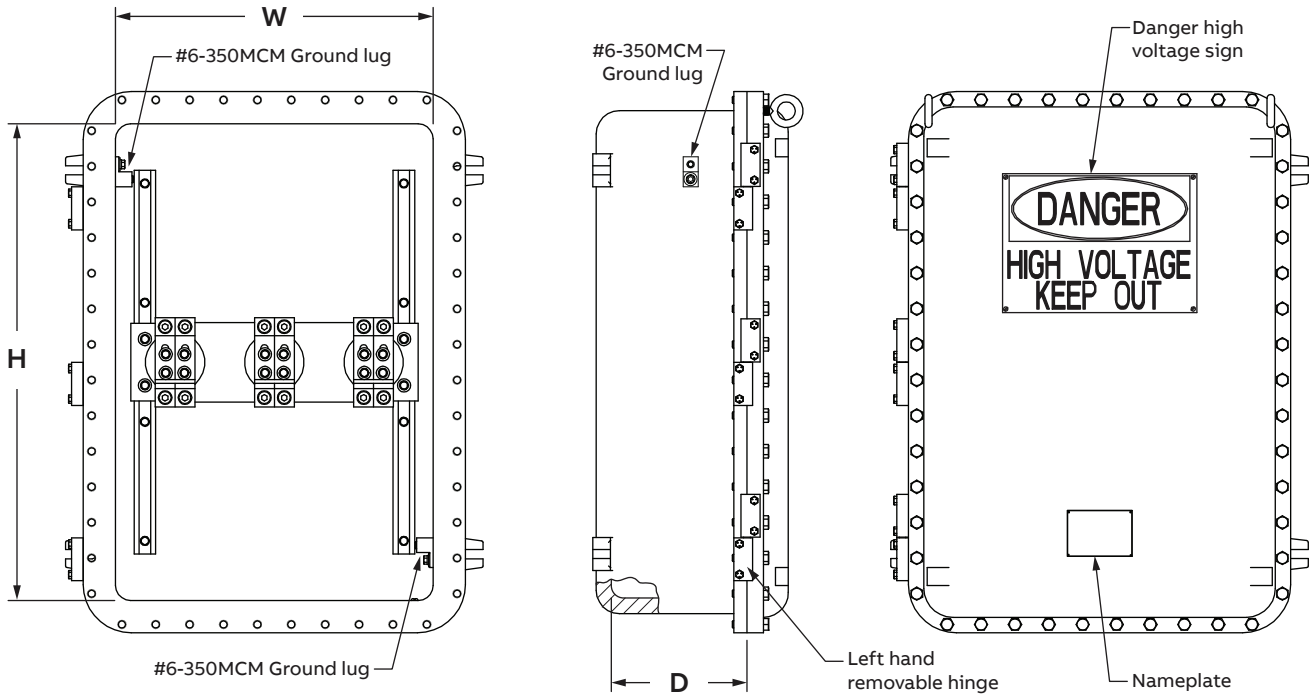
### Conductor reference dimensions & weights

Min. conductor size		Amperage max
AWG/Kcmil	mm <sup>2</sup>	
8	10	50
6	16	80
4	25	100
2	35	125
1/0	50	160
2/0	70	200
3/0	95	225
250	150	250
350	185	315
400	240	400

**Cast aluminum high voltage box:**

**2 x 2 connection dimensions**

- When ordering XPHV enclosure, specify 1x1 or 2x2 connection for proper hardware clarity when those sizes are used for both applications, e.g. XPHV182408 2x2



Product selections, dimensions & weights							
Part no:	Inside nom. (in)			Conductor size		Amperage phase	Amperage conductor
	H	W	D	AWG/Kcmil	mm <sup>2</sup>		
XPHV182408	18	24	8	350	185	630	315
XPHV183008	18	30	8	400	240	800	400
XPHV182410	18	24	10	350	185	630	315
XPHV183610	18	36	10	400	240	800	400
XPHV183608	18	36	8	400	240	800	400
XPHV242408	24	24	8	350	185	630	315
XPHV243008	24	30	8	400	240	800	400
XPHV243608	24	36	8	400	240	800	400
XPHV242410	24	24	10	350	185	630	315
XPHV243610	24	36	10	500	300	1000	500

Notes: When installing in classified areas, product must be installed in accordance with applicable national and local electrical/electronic codes.

Conductor reference		
Min. conductor size		Amperage max
AWG/Kcmil	mm <sup>2</sup>	
8	10	50
6	16	80
4	25	100
2	35	125
1/0	50	160
2/0	70	200
3/0	95	225
250	150	250
350	185	315
400	240	400
500	300	500

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