

GHG74

explosion protected terminal boxes

Cl. I, Div. 2, Groups A, B, C, D
 Cl. I, Zones 1 & 2, AEx de IIB + H₂, T6
 Cl. II, Div. 1, Groups E, F, G (cUL)
 NEMA 4X; IP66

Ex de IIC, T6, Zones 1, 2, 21, 22
 IECEx/ATEX
 CEPEL certified
 GOST-R
 GOST-K

3E

Applications:

Explosion protected terminal boxes are used in a metallic conduit or cable system for a marshalling cabinet between main circuits to the control room and branch circuits into the field.

- Junction boxes for intrinsically safe or increased safety connections
- Designed for industrial areas, such as chemical plants, oil and gas refineries, paint and varnish manufacturing plants, gasoline bulk loading terminals and finishing areas where non-metallic, weatherproof enclosures are required

Features:

- Enclosures can be mounted on walls, conduit or strut systems
- Connection terminals accessible from all sides
- Snap-out brass plates for metallic entry and grounding continuity
- Snap-out terminal rails
- Clip-in grounding PE rail
- Different sizes to accommodate any number of terminal connections

Certifications and compliances:

- Class I, Division 2, Groups A, B, C, D
- Class I, Zones 1 & 2, AEx de IIB + H₂, T6
- Class II, Division 1, Groups E, F, G (cUL)
- UL/cUL Listed
- NEMA 4X, IP66
- ATEX certified
- Ex de IIC, T6, Zones 1, 2, 21, 22
- GOST-R, GOST-K

Standard materials:

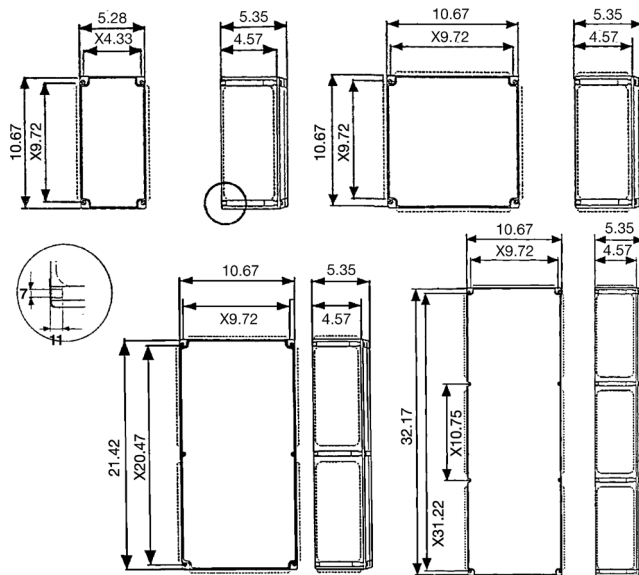
- Housing – fiberglass-reinforced polyester
- Enclosure gasket – silicone
- Cover screws – stainless steel
- Metal entry plates – brass
- Conduit entries – zinc Myers hubs

Technical specifications:

- Suitable from 1 to 296 terminal blocks (2.5mm²)
- Suitable for up to 90 – 3/4" hubs (largest size)
- Suitable for up to 72 – 3/4" metallic hubs
- Suitable for use as control panels
- Ex e boxes and brass flanges can be field drilled



Dimensions (in inches):



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Ordering information:

Contact factory for catalog numbers and pricing. When ordering, please have the following information ready:

- Number and size of terminals (see Table 1)
- Number, size and location of entries (see Tables 2 and 3)
- Required ground points (see Table 4); Eaton's Crouse-Hinds Division will provide you with an extended list

Panel and side designation:

- The sides of the enclosures are designated as W, X, Y and Z alphabetically in a clockwise rotation
- The narrow sides are always W and Y, and the long sides are X and Z

Dimensions (in inches):

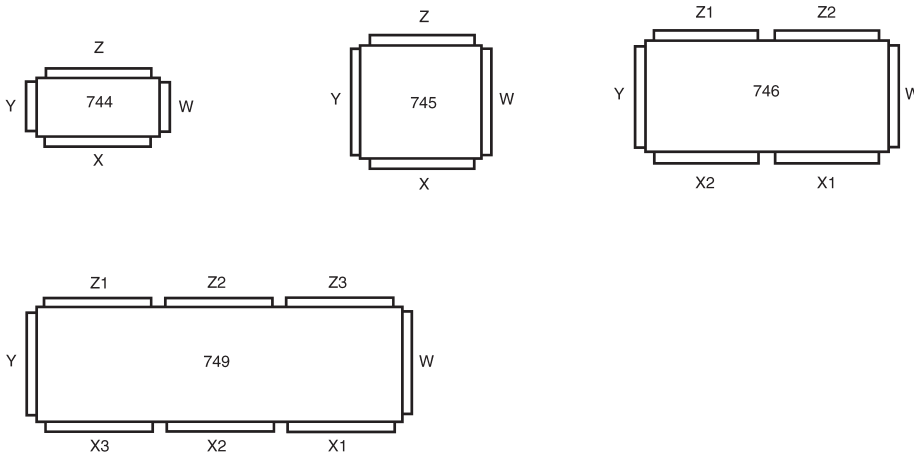


Table 1
 Maximum number of built-in terminals supplied with enclosure

Type	Terminal cross-section (mm ²)							Length of terminal rail
	2.5	4	6	10	16	25	35	
GHG 744	39	33	33	33	17	13	–	(1) 230mm
GHG 745	2 x 40	2 x 33	2 x 39	2 x 33	40	30	20	(2) 235mm
GHG 746	2 x 94	2 x 78	2 x 78	2 x 35	2 x 45	2 x 34	2 x 32	(2) 510mm
GHG 749	2 x 148	2 x 124	2 x 94	2 x 75	2 x 63	2 x 63	2 x 51	(2) 795mm

Table 2
 Flange arrangement for each enclosure

Enclosure	744	745	746	749
Removable flanges	2 total: (1) top and bottom	4 total: (1) per side	6 total: (2) top and bottom, (1) each side	8 total: (3) top and bottom, (1) each side
Covers ^A	Shallow	Deep or shallow	Deep or shallow	Shallow
No. of DIN rails	1	1 or 2	1, 2 or 4	1, 2 or 6

Table 3
 Maximum number of glands per side

Type	Side	M12	M16	M20	M25	M32	M40	M50	M63
NPT equivalent				1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
GHG 744	X/Z	60	36	26	18	10	7	4	3
GHG 745	X/Z	60	36	26	18	10	7	4	3
GHG 746	X/Z	120	72	52	36	20	14	8	6
GHG 749	X/Z	180	108	78	54	30	21	12	9
No. of glands/flange ^B		46	25	20	11	8	4	3	2
No. of Myers hubs/flange ^B		–	–	10	9	6	3	3	2

^A The shallow cover is standard for terminal boxes. The deep cover is used when mounting larger sized terminal (>95mm²) or switches for 80 amperes and larger.

^B If flanges are used, fewer glands can be installed. See Table 1 for flange arrangement. Example: In the GHG 745 box, a maximum of (10) 1/2" Myers hubs can be installed on each brass flange plate. Each side will take one brass flange for a total of (40) 1/2" Myers hubs.

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Ground rails:

- Used to connect ground points to common ground
- PE “potential earth” – European designation
- Designated by 3 number ordering code (see Table 4)

Table 4
Explanation of 14 x 2 x 4mm²

Number	Meaning	Example
1 st	Number of screw terminals	14 screw terminals on strip
2 nd	Number of wires that can be connected on each terminal	2 ground wires can be connected
3 rd	Maximum conductor diameter	4mm ² conductors can be terminated on the ground rail (28 total: 14 terminals; 2 wires per terminal)

Note: Use Table 5 as a conversion from AWG to mm².

Table 5
Equivalent of AWG conductor to mm²

AWG	Area mm ²
14	2.08
12	3.31
10	5.26
8	8.37
6	13.30
4	21.15
3	26.66
2	33.63
1	42.41
1/0	53.51
2/0	67.44
3/0	85.03
4/0	107.22

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