

Universal Terminal Boxes

Product Introduction

Ex-e/Ex-i Technology

plastic version measuring and controlling for Zone 1 and Zone 21

The terminal boxes were designed for measuring and controlling utilization in the Ex-e and Ex-i technology. They are used as a link between the main cable to the control room and the branch cables into the field. In addition to this, they may also be used for the direct connection of actuators and sensors.

The new terminal boxes for instrumentation installations are available in 5 sizes, ranging from 6 to max. 60 connection terminals. The optional interior coating protects your data cable connections against external radiation fields. The choice between screw and tension spring (screwless) terminals for single and multi-wire conductors makes it possible for engineers to select the type of connection most suitable for the particular application.

Eaton's Crouse-Hinds installation system provides an economical way of mounting the terminal boxes on walls, trellis work and pipes. The terminal boxes are suited for the use of single or multiple cable glands.

With Eaton's Crouse-Hinds terminal boxes it is possible to apply separate potentials such as screen-grid leads or PE/PA conductors to the plug-in PE rails.

The snap-out terminal rails allow a problem-free feeding-in of cables.

The well-proven clip-in flanges in moulded plastic or metal design allowing multiple application possibilities. As a result of the optimized design, a large drilling surface was created. This can be fitted with a sufficient number of moulded plastic glands or an equal number of metal glands.

International approvals

- **Decisive cost saving with the Crouse-Hinds installation system**
- **Safety standard IP66**
- **Freely accessible connection terminals**
- **Clip-in flange technique**
- **Snap-out terminal rails**
- **Internal coating**
- **For EMC-Protection on request**



Overview Terminal Boxes / Plastic Version For Zone 1

To make it easier for you to be able to choose a terminal or junction box, you will find in table-form all the basic data that is required below. Using the table below you can choose and configure your terminal boxes.

The maximum number of terminals derives from the rated current of the terminal. If the load per terminal lies below the rated current, then the maximum number of terminals for the terminal rail can be used.

Using the maximum drill surface and the interference diameter of the wire and cable entries tables plus the number of terminals you require, you can choose the right terminal box for your application.

The terminal boxes can also be equipped with (when requested) brass flanges and external earthing connectors.

Plastic Version for Zone 1

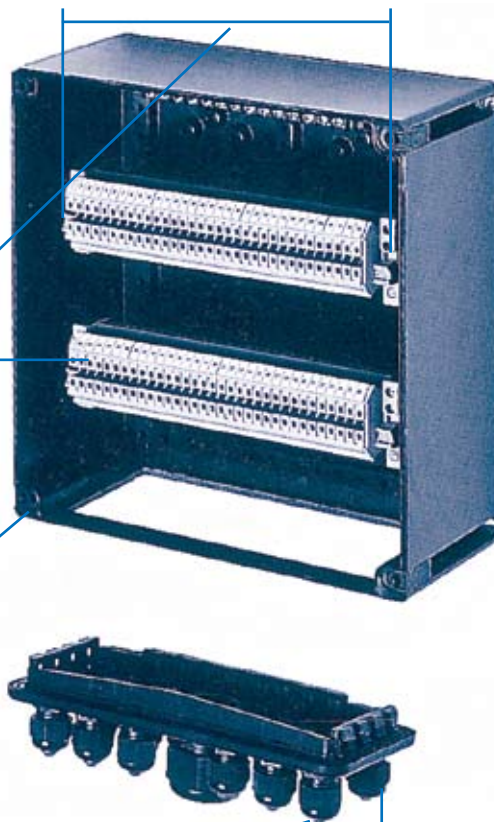
Maximum number of terminals acc. to certification								
Type	Terminal cross section in mm ²							
	2.5	4	6	10	16	25	35	
GHC 731 11	16	14	10	8	8	-	-	
GHC 731 12	24	24	18	18	14	-	-	
GHC 721 00	26	22	17	13	11	-	-	
GHC 721 10	48	40	30	24	20	-	-	
GHC 744 01	40	33	25	20	17	17	-	
GHC 745 02	2x41	2x34	2x26	2x20	17	17	14	
GHC 746 03	2x94	2x78	2x59	2x47	40	40	32	
GHC 749 04	2x148	2x124	2x94	2x75	63	63	51	

Terminal rails	
Type	Rail Length
GHC 731 11	107mm
GHC 731 12	169mm
GHC 721 00	140mm
GHC 721 10	262mm
GHC 744 01	230mm
GHC 745 02	2x235mm
GHC 746 03	2x510mm
GHC 749 04	2x795mm

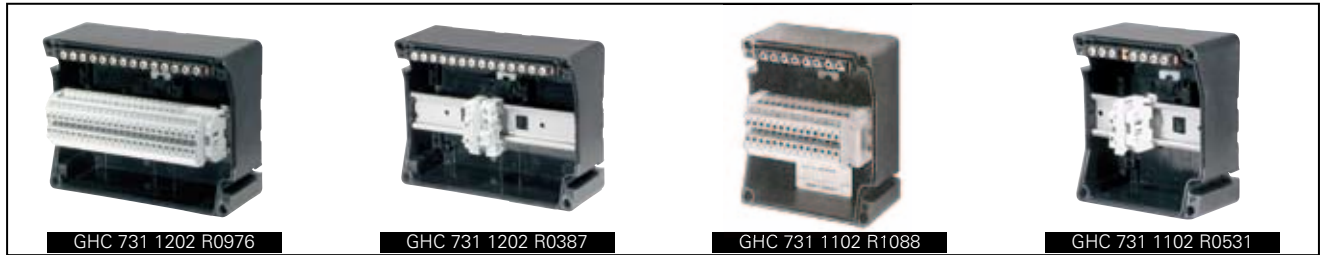
Dimensions			
Type	Width	x Length	x Height
GHC 731 11	120mm	x 140mm	x 95mm
GHC 731 12	182mm	x 140mm	x 95mm
GHC 721 00	165mm	x 165mm	x 131mm
GHC 721 10	285mm	x 165mm	x 143mm
GHC 744 01	271mm	x 134mm	x 136mm
GHC 745 02	271mm	x 271mm	x 136mm
GHC 746 03	544mm	x 271mm	x 136mm
GHC 749 04	817mm	x 271mm	x 136mm

Space required for wire and cable entries		
Type	Interference Plastic	Diameter Metal
M12	Ø19mm	Ø21mm
M16	Ø25mm	Ø21mm
M20	Ø31mm	Ø26.5mm
M25	Ø37mm	Ø33mm
M32	Ø46mm	Ø45.1mm
M40	Ø56mm	Ø53mm
M50	Ø68mm	Ø60.5mm
M63	Ø84mm	Ø80mm

max. drill surface			
Type	Width	x	Height
GHC 731 11	95mm	x	75mm
GHC 731 12	144mm	x	75mm
GHC 721 00	132mm	x	91mm
GHC 721 10	252mm	x	95mm
GHC 744 01	238mm	x	134mm
GHC 745 02	238mm	x	134mm
GHC 746 03	(2x)238mm	x	134mm
GHC 749 04	(3x)238mm	x	134mm
Flange 1	70.5mm	x	48.5mm
Flange 2	204mm	x	72.5mm



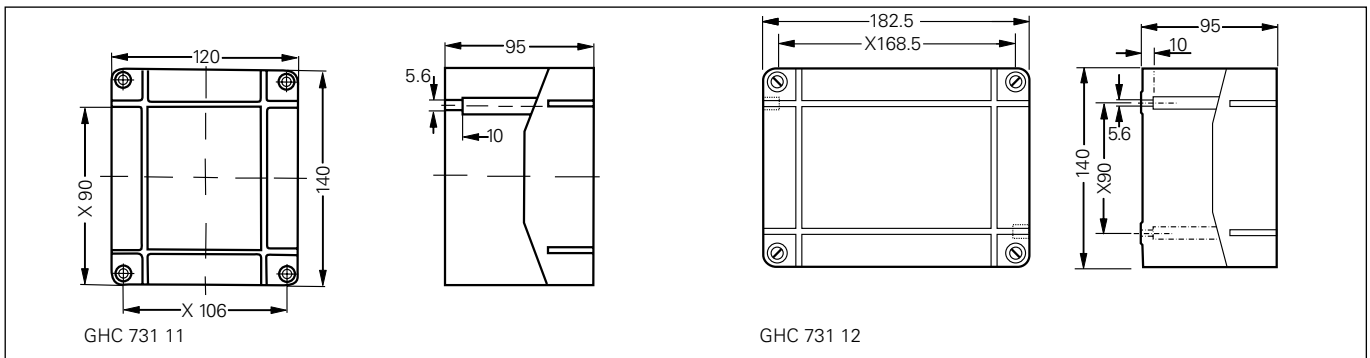
GHC731 11, GHC731 12 Series



Technical Data

Item	Value
GHC 731 11 up to 16 terminals GHC 731 12 up to 24 terminals	
Marking accd. to IECEx	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb Ex tb IIIC T80°C Db
Marking accd. to GB	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb DIP A21 TA T80°C / T95°C
Permissible ambient temperature	-20°C to +40°C -55°C to +55°C (option)
Rated voltage	690 V
Rated current	Depends on terminal mounting
Insulation class	I
Degree of protection	IP66 accd. to EN 60529
Enclosure material	Glass-fibre reinforced polyester
Enclosure colour	black
GHC 731 11 up to 16 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	140 x 120 x 95 mm
Weight	approx. 0.8 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50
Max. number up/down	15 8 6 4 2 2 1
Terminal mounting space on the terminal rail	107 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 16 14 10 8 8
GHC 731 12 up to 24 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	140 x 182.5 x 95 mm
Weight	approx. 1.1 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50
Max. number up/down	24 17 10 6 3 3 2
Length of assembling of the terminal rail	169 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 24 24 18 18 14

Dimension Drawing



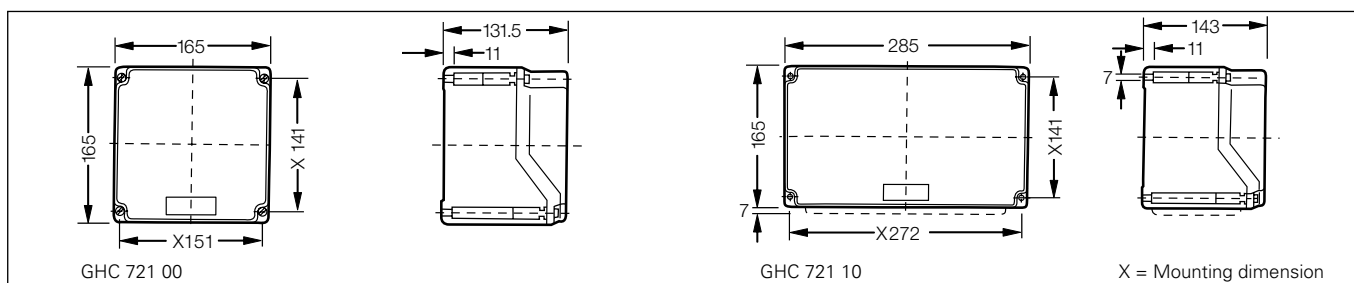
GHC721 0, GHC721 1 Series



Technical Data

Item	Value
GHC 721 00 up to 26 terminals GHC 721 10 up to 48 terminals	
Marking accd. to IECEx	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb Ex tb IIIC T80°C Db
Marking accd. to GB	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb DIP A21 TA T80°C / T95°C
Permissible ambient temperature	-20 °C to +40 °C -55 °C to +55 °C (option)
Rated voltage	690 V
Rated current	Depends on terminal mounting
Insulation class	I
Degree of protection	IP66 accd. to EN 60529
Enclosure material	Glass-fibre reinforced polyester
Enclosure colour	black
GHC 721 00 up to 26 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	165 x 165 x 131.5 mm
Weight	approx. 1.1 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	35 20 12 11 6 4 2 2
Max. number flange plastic	11 6 4 3 2 1 1 -
Max. number flange metal	- - 3 2 1 - - -
Terminal mounting space on the terminal rail	140 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 26 22 17 13 11
GHC 721 10 up to 48 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	165 x 285 x 143 mm
Weight	approx. 1.7 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	75 42 32 21 11 8 4 3
Max. number flange plastic	46 25 20 11 8 4 3 2
Max. number flange metal	- - 12 9 5 3 3 2
Terminal mounting space on the terminal rail	262 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 48 40 30 24 20

Dimension Drawing



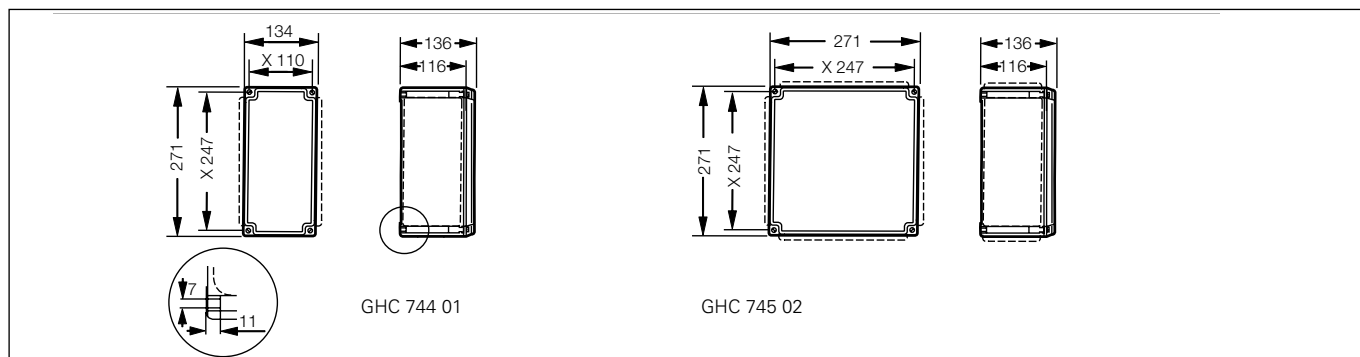
GHC744 01, GHC745 02 Series



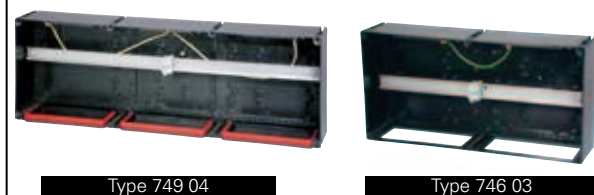
Technical Data

Item	Value
GHC 744 01 up to 40 terminals GHC 745 02 up to 82 terminals	
Marking accd. to IECEx	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb Ex tb IIIC T80°C Db
Marking accd. to GB	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb DIP A21 TA T80°C / T95°C
Permissible ambient temperature	-20 °C to +40 °C -55 °C to +55 °C (option)
Rated voltage	690 V
Rated current	Depends on terminal mounting
Insulation class	I
Degree of protection	IP66 accd. to EN 60529
Enclosure material	Glass-fibre reinforced polyester
Enclosure colour	black
GHC 744 01 up to 40 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	271 x 134 x 136 mm
Weight	approx. 1.5 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	60 36 26 18 10 7 4 3
Max. number flange plastic	46 25 20 11 8 4 3 2
Max. number flange metal	- - 11 9 5 3 3 2
Terminal mounting space on the terminal rail	230 mm 2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 25 mm ² 35 mm ²
Max. number of terminals acc. to certification	40 33 25 20 17 15 -
GHC 745 02 up to 82 terminals	
Connecting terminals	up to 16 mm ²
Dimensions (L x W x H)	271 x 271 x 136 mm
Weight	approx. 2.5 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	60 36 26 18 10 7 4 3
Max. number flange plastic	46 25 20 11 8 4 3 2
Max. number flange metal	- - 11 9 5 3 3 2
Terminal mounting space on the terminal rail	262 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 25 mm ² 35 mm ² 2 x 41 2 x 34 2 x 26 2 x 20 17 17 14

Dimension Drawing



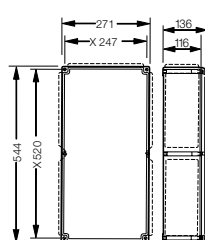
GHC746 03, GHC749 04 Series



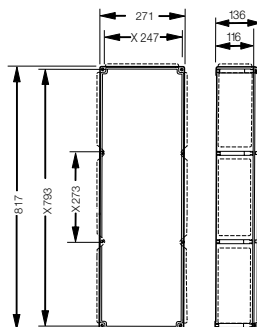
Technical Data

Item	Value
GHC 746 03 up to 188 terminals GHC 749 04 up to 296 terminals	
Marking accd. to IECEx	Ex II2 GEXe IIC T6/T5 Gb/Ex ia IIC T6/T5 Gb/Ex e [ia] IIC T6/T5 Gb Ex II2 DEx tb IIIC T80°C Db
Marking accd. to GB	Ex e IIC T6/T5 Gb / Ex ia IIC T6/T5 Gb / Ex e[ia] IIC T6/T5 Gb DIP A21 TA T80°C / T95°C
Permissible ambient temperature	-20 °C to +40 °C -55 °C to +55 °C (option)
Rated voltage	690 V
Rated current	Depends on terminal mounting
Insulation class	I
Degree of protection	IP66 accd. to EN 60529
Enclosure material	Glass-fibre reinforced polyester
Enclosure colour	black
GHC 746 03 up to 188 terminals	
Connecting terminals	240 mm ²
Dimensions (L x W x H)	544 x 271 x 136 mm
Weight	approx. 4.2 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	120 72 52 36 20 14 8 6
Max. number flange plastic	46 25 20 11 8 4 3 2
Max. number flange metal	- - 11 9 5 3 3 2
Terminal mounting space on the terminal rail horiz.	2 x 510 mm / vert. 4 x 230 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 25 mm ² 35 mm ² 2 x 94 2 x 78 2 x 59 2 x 47 40 40 32
GHC 749 04 up to 296 terminals	
Connecting terminals	up to 240 mm ²
Dimensions (L x W x H)	817 x 271 x 136 mm
Weight	approx. 5.8 kg
Drillings/cable glands	M12 M16 M20 M25 M32 M40 M50 M63
Max. number down	180 108 78 54 30 21 12 9
Max. number flange plastic	46 25 20 11 8 4 3 2
Max. number flange metal	- - 11 9 5 3 3 2
Terminal mounting space on the terminal rail horiz.	2 x 795 mm / vert. 6 x 230 mm
Max. number of terminals acc. to certification	2.5 mm ² 4 mm ² 6 mm ² 10 mm ² 16 mm ² 25 mm ² 35 mm ² 2 x 148 2 x 124 2 x 94 2 x 75 63 63 51

Dimension Drawing



GHC 746 03



GHC 749 04

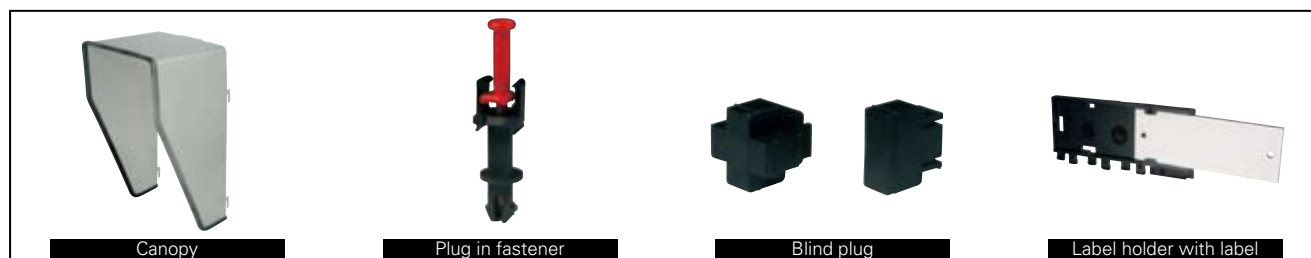
X = Mounting dimension

Accessories



Mounting Plate			
Type	application	order No.	For Enclosure Type
1	Wall Mounting	GHG 610 1953 R0101	
1	Trellis Mounting	GHG 610 1953 R0103	
1	Pipe Mounting	GHG 610 1953 R0102	
2	Wall Mounting	GHG 610 1953 R0104	73111
2	Trellis Mounting	GHG 610 1953 R0106	73111
2	Pipe Mounting	GHG 610 1953 R0105	73111
2A	Wall Mounting	GHG 610 1953 R0107	73112/72100
2A	Trellis Mounting	GHG 610 1953 R0109	73112/72100
2A	Pipe Mounting	GHG 610 1953 R0108	73112/72100
3	Wall Mounting	GHG 610 1953 R0118	72100/74401/74502
3	Trellis Mounting	GHG 610 1953 R0118	72100/74401/74502
3	Pipe Mounting	GHG 610 1953 R0110	72100/74401/74502
4	Wall Mounting	GHG 610 1953 R0126	74603
4	Trellis Mounting	GHG 610 1953 R0126	74603
4	Pipe Mounting	GHG 610 1953 R0130	74603
5	Wall Mounting	GHG 610 1953 R0128	74904
5	Trellis Mounting	GHG 610 1953 R0128	74904
5	Pipe Mounting	GHG 610 1953 R0132	74904

Accessories



For Mounting Plate

Type	OU	Order No.
Label holder with type label (blank) for mounting plates size 1, 2, 2A and 3	10	GHG 610 1953 R0057
Type label for label holder and mounting plates size 4 and size 5	10	GHG 610 1953 R0011
Blind plug for unused fixing points of mounting plates size 4 and size 5	10	GHG 610 1953 R0134
Plug-in fastener for CEAG modules with 5.5 mm and 11 mm fixing elements	10	GHG 610 1953 R0041
Mounting set for pipes 1" (Ø 27-30mm) for mounting plates with pipe fixing	10	GHG 610 1953 R0020

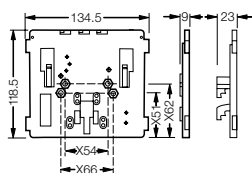
The order No. will show 1 pcs.

Please note that only pack quantities (OU) can be ordered.

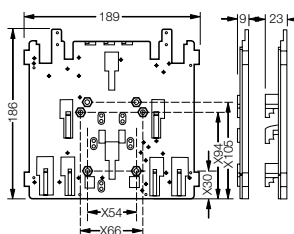
Protective Canopy for Mounting Plate

Type	Application	Order No.
1	for mounting plate size 1	GHG 610 1955 R0101
2	for mounting plate size 2	GHG 610 1955 R0102
2A	for mounting plate size 2A	GHG 610 1955 R0103
3	for mounting plates pipe fixing size 3 vertically	GHG 610 1955 R0104
3A	for mounting plates wall/trellis fixing size 3 vertically	GHG 610 1955 R0105
3B	for mounting plates pipe fixing size 3 horizontal	GHG 610 1955 R0106
4	for mounting plate size 4	GHG 610 1955 R0107
5	for mounting plate size 5	GHG 610 1955 R0108

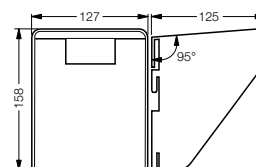
Mounting Plate Dimentions



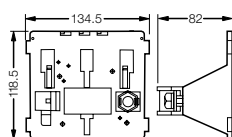
Size 1 for wall and trellis mounting



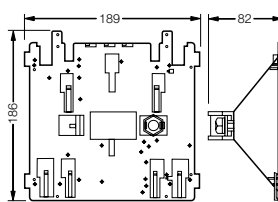
Size 2A for wall and trellis mounting



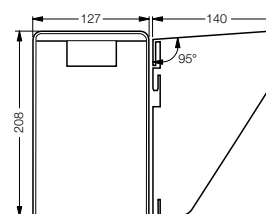
Canopy Size 1



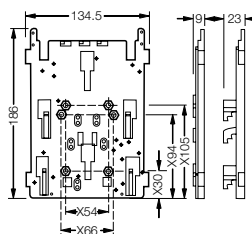
Size 1 for pipe mounting



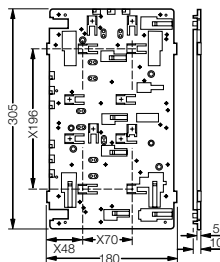
Size 2A for pipe mounting



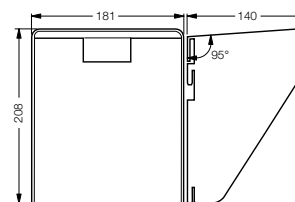
Canopy Size 2



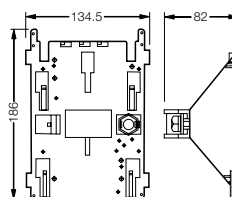
Size 2 for wall and trellis mounting



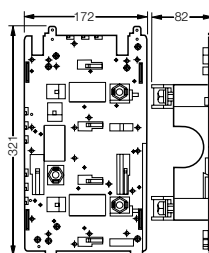
Size 3 for wall and trellis mounting



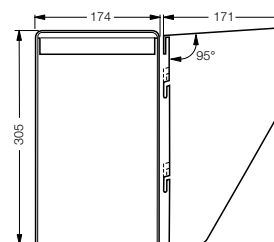
Canopy Size 2A



Size 2 for wall and trellis mounting



Size 3 for pipe mounting



Canopy Size 3B

Mounting Plate Dimentions

