

ENVIRONMENTAL PROTECTION FOR YOUR CONNECTIONS

Controlwell presents a range of Junction Boxes manufactured from Halogen-free ABS, which offers superior resistance to chemicals and atmospheric agents.

Available with Smooth Walls, Membranes and Nipples to allow wire entry, these junction boxes offer IP65 protection by means of the silicon rubber gasketing. They are available with press-on type, screw type and hinge type lids which may be grey in colour or transparent.

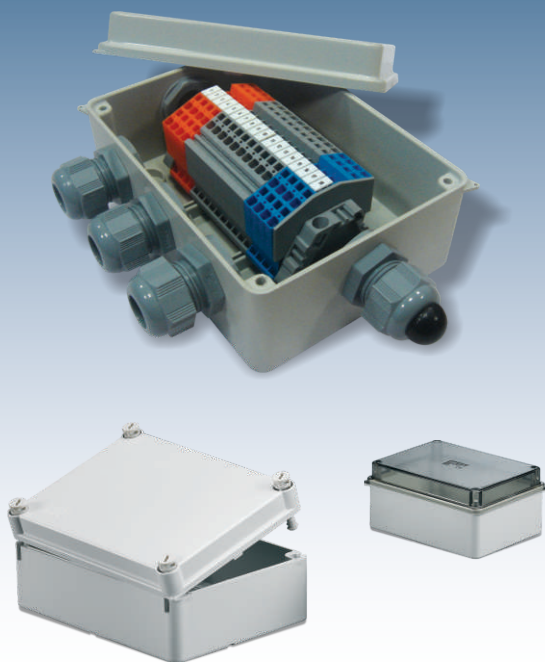
This range exemplifies the fact that we at Controlwell are dedicated to providing your connections with the right protection.



JUNCTION BOXES

HOUSINGS FOR ENVIRONMENTAL PROTECTION

www.controlwell.com


JUNCTION BOXES (WITH SMOOTH WALLS)


Junction Boxes are made of halogen-free thermoplastic, which has high resistance to chemicals and atmospheric agents. By virtue of the design they offer IP 65 protection with the help of silicon rubber gasket in EPDM. They are available with plain walls, knockouts, nipples and membrane. Junction-Boxes are offered with press-on lids, screw lids and hinged lids. Stainless steel screws are also available on request for lid fastening. Choice of grey colour lid or transparent lid is also available on request.

Technical Details :	
Material	Thermoplastic
Colour	Grey
Screw	Zinc Plated and Chromate passivated
Gasket	Silicon Rubber EPDM
Lid	Grey Colour / Transparent
Standard	IEC 670, CEI 23-48
Protection Class	IP 65
Temperature Range	-25°C to +60°C
Approvals	CE

Grey Screwed Lid

Cat. No.	Internal Dimension (mm) L x W x H
M003.PL *	80 x 80 x 40
M005.PL	100 x 100 x 50
M006.PL	100 x 100 x 70
M007.PL	120 x 75 x 50
M007.XPL	110 x 80 x 60
M008.PL	150 x 110 x 70
M009.PL	190 x 145 x 70
M010.PL	240 x 190 x 90
M011.PL	240 x 190 x 110
M011.XPL	240 x 180 x 100
M012.PL	310 x 230 x 115

Grey with Nylon Hinged Screw Lid

Cat. No.	Internal Dimension (mm) L x W x H
M009.A.PL	190 x 140 x 75
M010.A.PL	240 x 190 x 90
M012.A.PL	300 x 220 x 120
M014.A.PL	380 x 300 x 120
M015.A.PL	460 x 380 x 120

Grey with Nylon Hinged Screw High Top Lid

Cat. No.	Internal Dimension (mm) L x W x H
M008.CA.G	150 x 110 x 135
M009.CA.G	190 x 145 x 135
M010.CA.G	240 x 190 x 155
M011.CA.G	240 x 190 x 170
M012.CA.G	310 x 230 x 160
M014.CA.G	380 x 300 x 180
M015.CA.G	460 x 380 x 180

Transparent Screwed Lid

Cat. No.	Internal Dimension (mm) L x W x H
M008.PK	150 x 110 x 70
M009.PK	190 x 145 x 70
M010.PK	240 x 190 x 90
M011.PK	240 x 190 x 110
M011.XPK	240 x 180 x 105
M012.PK	310 x 230 x 115

Transparent with Nylon Hinged Screw Lid

Cat. No.	Internal Dimension (mm) L x W x H
M009.A.PK	190 x 140 x 75
M010.A.PK	240 x 190 x 90
M012.A.PK	300 x 220 x 120
M014.A.PK	380 x 300 x 120
M015.A.PK	460 x 380 x 120

Transparent with Nylon Hinged Screw High Top Lid

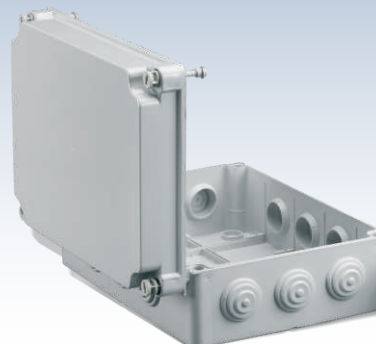
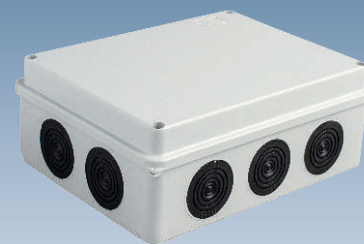
Cat. No.	Internal Dimension (mm) L x W x H
M008.CA.K	150 x 110 x 135
M009.CA.K	190 x 145 x 135
M010.CA.K	240 x 190 x 155
M011.CA.K	240 x 190 x 170
M012.CA.K	310 x 230 x 160
M014.CA.K	380 x 300 x 180
M015.CA.K	460 x 380 x 180

* Press-on Lid with IP 44 protection



Specially designed and moulded Membranes in these Junction Boxes, act as a Cable Glands offering IP 65 protection. After piercing the membrane with a sharp instrument, the cable / flexible conduit has to be inserted and slightly pulled out (withdrawn) to achieve a tight wrap around the cable / conduit resulting in positive clamping. Junction Boxes are also available with specially designed Nipples which act as Cable Glands offering IP65 protection.

JUNCTION BOXES (WITH MEMBRANES & NIPPLES)



Technical Details :	
Material	Thermoplastic
Colour	Grey
Screw	Zinc Plated and Chromate Passivated
Gasket	Silicon Rubber EPDM
Lid	Grey Colour / Transparent
Standard	IEC 670, CEI 23-48
Protection Class	IP 65
Approvals	CE

Junction Boxes with Membrane - Grey Screwed Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Membranes
M003CS*	80 x 80 x 40	6 + 2
M005CV#	100 x 100 x 50	10 + 2
M008PG	150 x 110 x 70	10
M009PG	190 x 145 x 70	10
M010PG	240 x 190 x 90	12
M011PG	240 x 190 x 110	12

* Press-on Lid with IP 44 protection # With IP 66 protection

Junction Boxes with Nipples - Grey Screwed Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Nipples
M003 *	80 x 80 x 45	6
M005	100 x 100 x 50	6
M006	100 x 100 x 70	6
M007	120 x 75 x 50	6
M008	150 x 110 x 70	10
M009	190 x 145 x 70	10
M010	240 x 190 x 90	12
M011	240 x 190 x 110	12
M012	310 x 230 x 115	12
M015	460 x 380 x 120	14

* Press-on Lid with IP 44 protection

Junction Boxes with Nipples - Grey Hinged Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Nipples
M009.A	190 x 140 x 75	10
M010.A	240 x 190 x 90	12
M012.A	300 x 220 x 120	12
M014.A	380 x 300 x 120	12
M015.A	460 x 380 x 120	14


JUNCTION BOXES (WITH KNOCKOUTS)


Junction Boxes with knockouts are made of ABS, which has high resistance to chemicals and atmospheric agents. These knockouts can be easily cut out in a wide range of diameters allowing for a selection of cable gland size as per cable diameter. By virtue of the design they offer IP 67 protection with the help of silicon rubber gasket in EPDM.

Flame Retardant Junction Boxes available on request

Technical Details :	
Material	Thermoplastic
Colour	Grey
Screw	Stainless Steel
Gasket	PU (Polyurethane)
Lid	Grey Colour / Transparent
Standard	IEC 670, CEI 23-48
Protection Class	IP 67
Approvals	CE

Grey Screwed Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Knockouts
T2056M*	90 x 90 x 50	4
T2066M*	100 x 100 x 50	8
T2136M	110 x 110 x 65	8
T1505M	110 x 150 x 70	10
T2146M	110 x 210 x 70	12
T2176M	140 x 210 x 90	12
T5005M	210 x 210 x 90	12
T8005M	190 x 240 x 90	12
T2156M	210 x 290 x 90	14
T7005M	290 x 290 x 90	16

* IP44 Presslid / Without Knockouts

Grey Screwed High Top Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Knockouts
T2136MH	110 x 110 x 100	8
T1605M	110 x 150 x 120	10
T2205M	110 x 210 x 120	12
T2186M	140 x 210 x 140	12
T5205M	210 x 210 x 140	12
T8205M	190 x 240 x 160	12
T2226M	210 x 290 x 140	14
T7205M	290 x 290 x 140	16

Transparent Screwed Lid

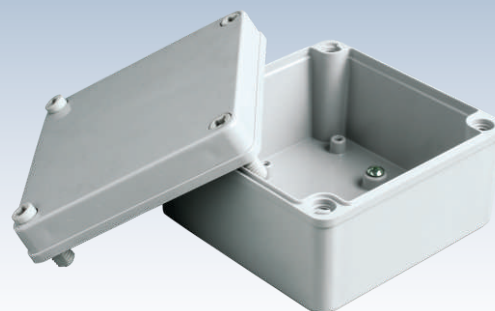
Cat. No.	Internal Dimension (mm) L x W x H	No. of Knockouts
T1507M	110 x 150 x 70	10
T2141M	110 x 210 x 70	12
T2171M	140 x 210 x 90	12
T5007M	210 x 210 x 90	12
T8007M	190 x 240 x 90	12
T2151M	210 x 290 x 90	14
T7007M	290 x 290 x 90	16

Transparent High Top Lid

Cat. No.	Internal Dimension (mm) L x W x H	No. of Knockouts
T1207M	110 x 110 x 100	8
T1607M	110 x 150 x 120	10
T2207M	110 x 210 x 120	12
T2181M	140 x 210 x 140	12
T5207M	210 x 210 x 140	12
T8207M	190 x 240 x 160	12
T2221M	210 x 290 x 140	14
T7207M	290 x 290 x 140	16



These industrial grade Polycarbonate boxes are suited for outside applications. Made of UV resistant plastic, these enclosures can be an excellent solution for making collector boxes for PV (Solar) applications.

WEATHER PROOF ENCLOSURES


Technical Details :	
Material	Polycarbonate
Colour	Grey
Screw	Zinc Plated and Chromate Passivated
Gasket	Silicon Rubber EPDM
Lid	Grey Colour / Transparent
Standard	IEC 670, CEI 23-48
Protection Class	IP 65
Approvals	CE

Grey Screwed / Hinged Lid *

Cat. No.	Internal Dimension (mm) L x W x H
BC-CGS-080806	80 x 80 x 60
BC-CGS-081107	80 x 110 x 70
BC-CGS-101007	100 x 100 x 75
BC-CGS-151507	150 x 150 x 75
BC-CGS-202010	200 x 200 x 100
BC-CGS-192813	190 x 280 x 130
BC-CGS-282813	280 x 280 x 130
BC-CGS-283413	280 x 340 x 130
BC-CGS-285613	280 x 560 x 130
T 2256	250 x 360 x 150
T 2356(H) *	250 x 360 x 150

Transparent Screwed Lid / Hinged Lid *

Cat. No.	Internal Dimension (mm) L x W x H
BC-CTS-080806	80 x 80 x 60
BC-CTS-081107	80 x 110 x 70
BC-CTS-101007	100 x 100 x 75
BC-CTS-151507	150 x 150 x 75
BC-CTS-202010	200 x 200 x 100
BC-CTS-192813	190 x 280 x 130
BC-CTS-282813	280 x 280 x 130
BC-CTS-283413	280 x 340 x 130
BC-CTS-285613	280 x 560 x 130
T 2266	250 x 360 x 150
T 2366(H) *	250 x 360 x 150

DIN RAIL MOUNTED SWITCHES, SOCKETS & SCHUKO SOCKETS


Cat. No.	Descriptions
TSSEB16	16A Schuko Socket for Europe
T 31260	Din Rail Mounted Schuko Socket for Europe
T 31261	Din Rail Mounted Schuko Socket with LED for Europe
CDINS6	6 A Din Rail Mounted Socket
CDINS16	16 A Din Rail Mounted Socket
CDINSUK	16 A Din Rail Mounted Socket for UK
CDINSF	16 A Din Rail Mounted Socket for FRANCE
CDINSW1	16 A Single Pole Din Rail Mounted Switch
CDINSW2	16 A Double Pole Din Rail Mounted Switch

EMPTY COMBINATION BOXES FOR INDUSTRIAL PLUG & SOCKETS

These combination boxes are an ideal choice for combining Industrial Plugs & Sockets (CEE Connectors) & miniature circuit breakers. Various multi pin sockets can be mounted on the front of the box. This in conjunction with the circuit breakers provide an easy solution for mobile power outlet boxes typically required on off site locations as well as factory shop floors.



Cat. No.	Internal Dimension (mm) H x W	Ingress Protection	Type of Modules
T3318M	210 x 140	IP 66	6 MCB/ Fuses
T3320M	220 x 300	IP 66	11 MCB/ Fuses
M.960.10111	360 x 260	IP 65	12 MCB
M.960.10121	440 x 340	IP 65	14 MCB

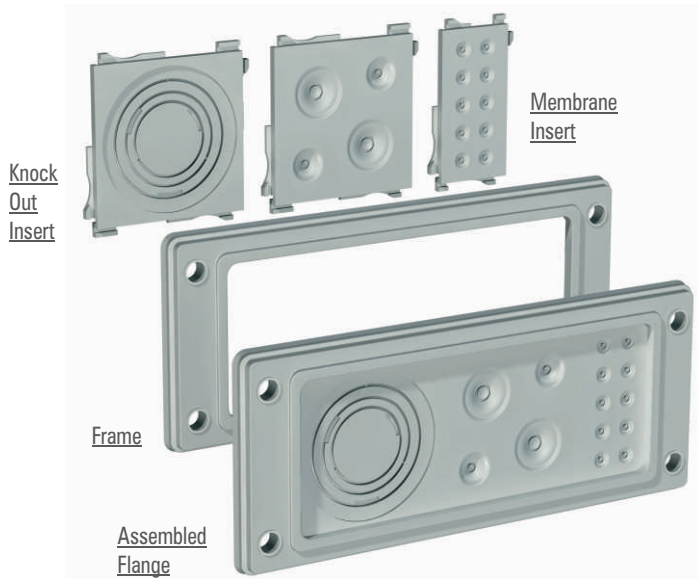
DISTRIBUTION BOARDS & ENCLOSURES

These enclosures are used for creating power distribution circuits. Various options are available based on the number of miniature circuit breakers (MCBs), that can be installed inside in an array. Most of these enclosures have hinged lids for easy access to the MCBs installed inside.



Cat. No.	Internal Dimension (mm) L x W x H	Ingress Protection	Type of Modules	Description
M91.04	100 x 135 x 85	IP 40	2/4 Module	Without Hinged Lid
M91.08	200 x 155 x 90	IP 40	4/8 Module	Without Hinged Lid
M92.04	120 x 160 x 90	IP 65	3/5 Module	With Smoked Hinged Lid
M92.08	200 x 160 x 90	IP 65	4/8 Module	With Smoked Hinged Lid
M92.12	250 x 200 x 110	IP 65	6/12 Module	With Smoked Hinged Lid
M920.48	500 x 355 x 140	IP 65	24/48 Module	With Clear Hinged Lid

DESIGN-A-FLANGE



The Design – A – Flange system is a new and unique concept in which you can have the ease of choosing from a combination of frames and modular inserts to create your very own customized flange for control panels and junction boxes.

The Fiberglass re-enforced Polypropylene Inserts are very rigid and carry soft TPE, push-out membrane seals of various sizes good enough to accommodate wire sizes ranging from 4 mm to 50 mm dia. The push out membranes ensure that an IP65 grade protection level is achieved.

Frames are available in two sizes FL21 and FL13 which can accommodate a combination of inserts. Once the inserts are assembled together and inserted into the frame they lock on to the frame and to each other ensuring that a very rigid patented Flange system is created with IP65 grade protection.

In case kink-protection is required for cables so that the weight of the cables to do stress the connections (inside the panel) the membranes can be easily cut out and replaced with either high protection class grommets (page no. 3) or with cable glands (page no. 2)

Material	Fiberglass re-inforced Polypropylene and TPE - Halogen Free UL approved materials
Colour	RAL 7035 (Light Grey)
Protection Class	IP 65
Temperature Range	-20°C to +125°C
Test Standards	EN 60529:1991+A1, EN 60670-1:2005

INSERTS FOR FL21 FRAME

Inserts 68 x 68			
FL21/68/M25/M16	FL21/68/KO	FL21/68/714	FL21/68/2030/1020
2 x M25 8-17 mm 2 x M16 5-10 mm	KNOCK OUT M32 M40 M50	9 x 7-14 mm	2 x 20-30 mm 2 x 10-20 mm

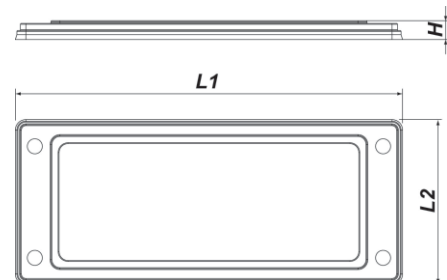
Inserts 68 x 68		Inserts 68 x 34	
FL21/68/3050	FL21/34/817	FL21/34/M20	FL21/34/410
30-50 mm	2 x 8-17 mm	2 x M20 6-13 mm	10 x 4-10 mm

INSERTS FOR FL13 FRAME

Inserts 34 x 68			Inserts 34 x 34	
FL13/68/817	FL13/68/M20	FL13/68/410	FL13/34/M20	
2 x 8-17 mm	2 x M20 6-13 mm	10 x 4-10 mm	1 x M20	6-13 mm



Frame Cat. No. & Dimensions



Cat. No.	L1	L2	H
FL 21	214	90	9
FL 13	134	52	6.5

Combination of Inserts that can be used with Frames

Combinations		A	B	C	Representative Drawing
FL 21	68 x 68	2	1	-	
	68 x 34	1	3	5	
FL 13	34 x 68	1	-	-	
	34 x 34	1	3	-	