

**PSP**

*Electro-permanent  
magnetic chuck*



**BRISC<sup>®</sup>**

PSP-04-EN

# Limited offer

Choose from our

## 16 PROMOTIONAL SIZES

These sixteen promotional kits come as a complete solution for the handling and clamping of various sized and shaped parts for nearly all machining processes at a great price. Magnetically clamped parts allow for safer and faster machining in an easy and energy saving fashion.



### 10 Reasons "WHY BRISC magnetic work holding?"

- 1 Brisc creates a constant unchanging force
- 2 5 sided access to the part in a single set-up
- 3 The ability to drill through without damage to the magnet surface using optional pole extensions
- 4 No moving parts to wear out in the magnet itself
- 5 The vibration reduction associated with clamping the entire part surface instead of just a few small areas as with mechanical clamping methods
- 6 The automatic shimming optional set-up will give improved production immediately
- 7 3 seconds to clamp even the largest parts accurately and easily
- 8 With the electro-permanent design the electrical power is only required for just a few seconds to activate and deactivate the magnet. This means loss of power does not change the holding force
- 9 The electro-permanent design eliminates residual magnetism and allows up to 130 metric tons of force / SQ meter
- 10 With the square pole design the magnetic field is just 25 mm from the surface keeping the chips from sticking to the part

With mild steel part 25 mm thick  
305 mm X 305 mm and 102 mm face mill  
6 mm deep max feedrate is 381 mm per  
minute with 2X safety factor and no  
stops. With stops 1.5m per minute can  
be reached.

### • PSP-Series productcombination



PSP Magnetic Chuck



Control Unit  
(Optional)



Pole-extension sets  
(Optional)

### • Square pole electro-permanent magnetic chuck with standard density

#### Use:

Clamping for heavy machining of medium size workpiece

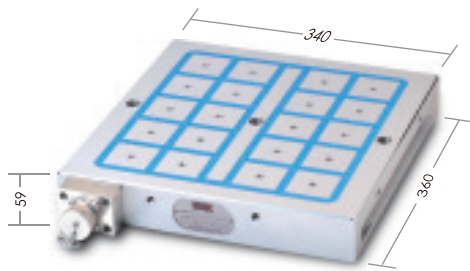
#### Features:

- > Square pole size 50 x 50 mm
- > Magnetic force higher than 350 kg per pole
- > Electro-permanent technology with no deformation owing to the rise of the temperature
- > Minimum mechanical deformation with solid one-piece housing
- > Distortion free clamping with auto-shim pole extensions, no residual magnetism, controlled flux prevents magnetization of the tool
- > Workpiece larger than the table size are machinable

# ELECTRO-PERMANENT MAGNETIC CHUCK

## PSP SERIES

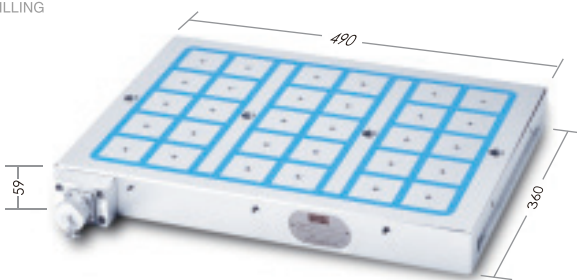
PSP - 3634



Parameter

Length	340 mm
Width	360 mm
Height	59 mm
Pole number	20
Net weight	53 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	70 kN

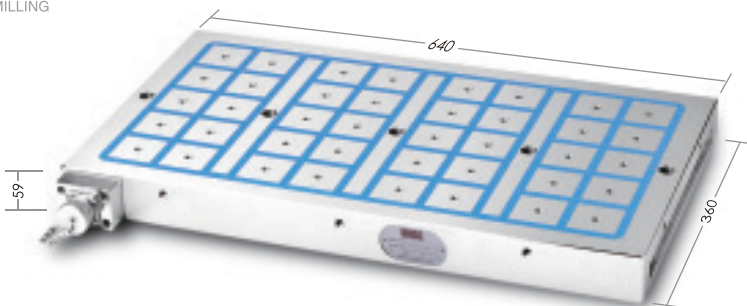
PSP - 3649



Parameter

Length	490 mm
Width	360 mm
Height	59 mm
Pole number	30
Net weight	78 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	105 kN

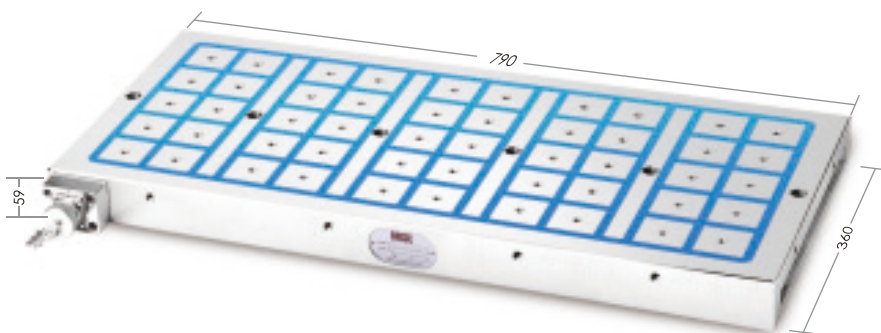
PSP - 3664



Parameter

Length	640 mm
Width	360 mm
Height	59 mm
Pole number	40
Net weight	101 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	140 kN

PSP - 3679



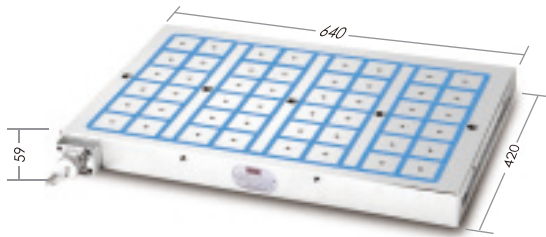
Parameter

Length	790 mm
Width	360 mm
Height	59 mm
Pole number	50
Net weight	125 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	175 kN

# ELECTRO-PERMANENT MAGNETIC CHUCK

## PSP SERIES

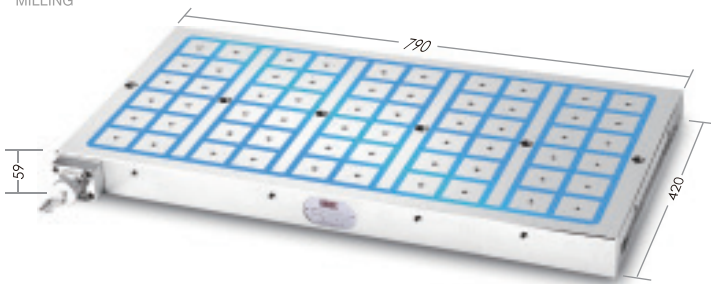
PSP - 4264



Parameter

Length	640 mm
Width	420 mm
Height	59 mm
Pole number	48
Net weight	118 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	168 kN

PSP - 4279



Parameter

Length	790 mm
Width	420 mm
Height	59 mm
Pole number	60
Net weight	146 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	210 kN

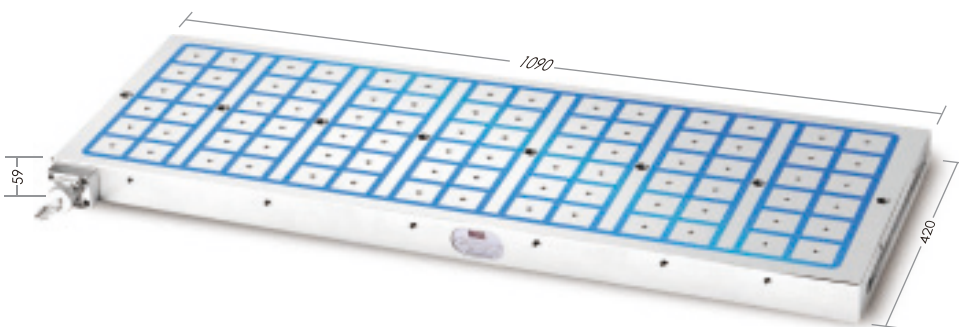
PSP - 4294



Parameter

Length	940 mm
Width	420 mm
Height	59 mm
Pole number	72
Net weight	174 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	252 kN

PSP - 42109



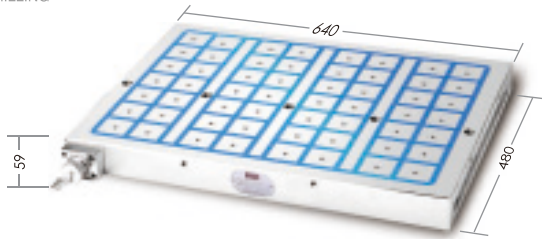
Parameter

Length	1090 mm
Width	420 mm
Height	59 mm
Pole number	84
Net weight	201 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	294 kN

# ELECTRO-PERMANENT MAGNETIC CHUCK

## PSP SERIES

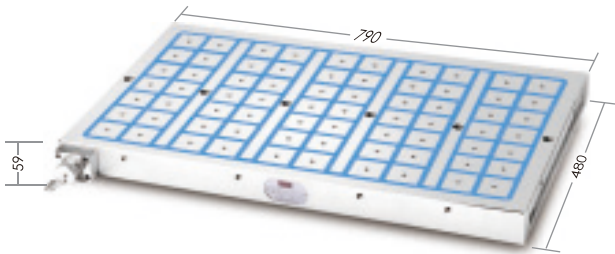
PSP - 4864



Parameter

Length	640 mm
Width	480 mm
Height	59 mm
Pole number	56
Net weight	135 kgs
Controller(400/480V)	CUA
Controller(220V)	CUA
Clamping force	196 kN

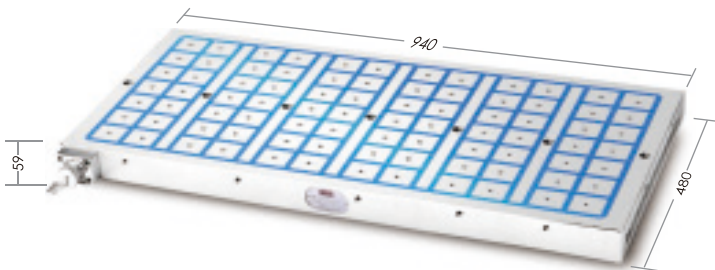
PSP - 4879



Parameter

Length	790 mm
Width	480 mm
Height	59 mm
Pole number	70
Net weight	167 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	245 kN

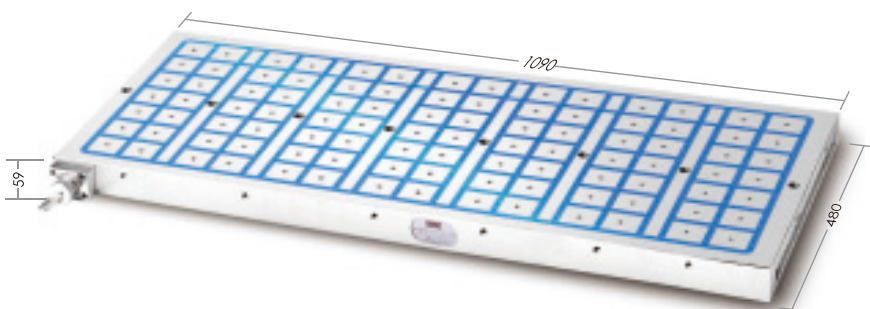
PSP - 4894



Parameter

Length	940 mm
Width	480 mm
Height	59 mm
Pole number	84
Net weight	199 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	294 kN

PSP - 48109



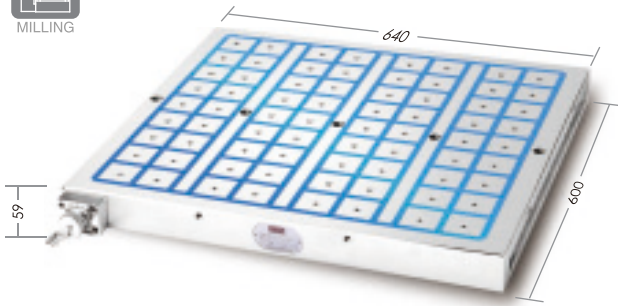
Parameter

Length	1090 mm
Width	480 mm
Height	59 mm
Pole number	98
Net weight	230 kgs
Controller(400/480V)	CUD
Controller(220V)	CUD
Clamping force	343 kN

# ELECTRO-PERMANENT MAGNETIC CHUCK

## PSP SERIES

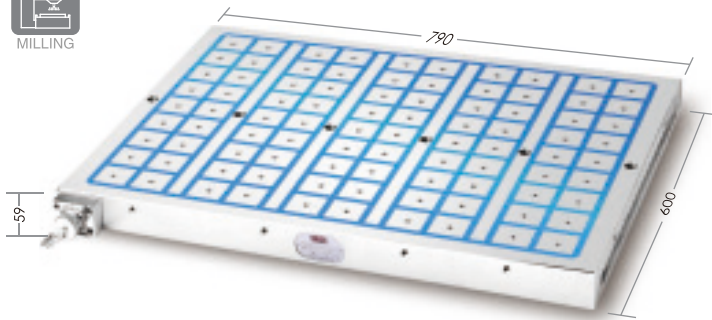
PSP - 6064



Parameter

Length	640 mm
Width	600 mm
Height	59 mm
Pole number	72
Net weight	169 kgs
Controller(400/480V)	CUA
Controller(220V)	CUD
Clamping force	252 kN

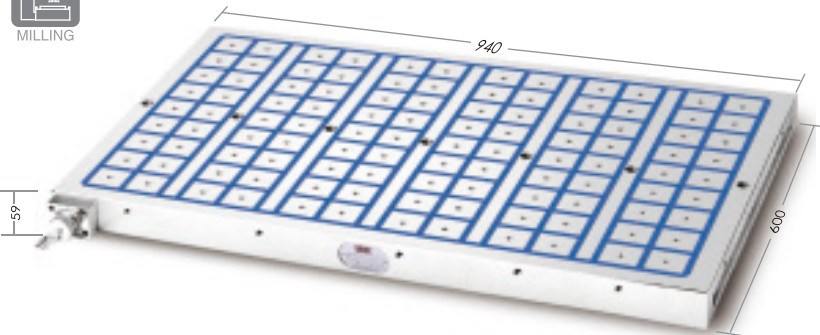
PSP - 6079



Parameter

Length	790 mm
Width	600 mm
Height	59 mm
Pole number	90
Net weight	209 kgs
Controller(400/480V)	CUD
Controller(220V)	CUD
Clamping force	315 kN

PSP - 6094



Parameter

Length	940 mm
Width	600 mm
Height	59 mm
Pole number	108
Net weight	248 kgs
Controller(400/480V)	CUD
Controller(220V)	CUD
Clamping force	378 kN

PSP - 60109



Parameter

Length	1090 mm
Width	600 mm
Height	59 mm
Pole number	126
Net weight	288 kgs
Controller(400/480V)	CUD
Clamping force	441 kN

# POLE EXTENSION SETS

## PSP SERIES

### FIX POLE EXTENSION SET



Model	Size	EV-5020	EW-5020	EX-5020
FPS	3634	10 pcs	1 pc	1 pc
FPS	3649	15 pcs	1 pc	1 pc
FPS	3664	20 pcs	1 pc	1 pc
FPS	3679	25 pcs	1 pc	1 pc
FPS	4264	24 pcs	1 pc	1 pc
FPS	4279	30 pcs	1 pc	1 pc
FPS	4294	36 pcs	1 pc	1 pc
FPS	42109	42 pcs	1 pc	1 pc
FPS	4864	28 pcs	1 pc	1 pc
FPS	4879	35 pcs	1 pc	1 pc
FPS	4894	42 pcs	1 pc	1 pc
FPS	48109	49 pcs	1 pc	1 pc
FPS	6064	36 pcs	1 pc	1 pc
FPS	6079	45 pcs	1 pc	1 pc
FPS	6094	54 pcs	1 pc	1 pc
FPS	60109	63 pcs	1 pc	1 pc

### AUTO-SHIM POLE EXTENSION SET



Model	Size	ET-5052	ES-5052
MPE	3634	17 pcs	3 pc
MPE	3649	27 pcs	3 pc
MPE	3664	37 pcs	3 pc
MPE	3679	47 pcs	3 pc
MPE	4264	45 pcs	3 pc
MPE	4279	57 pcs	3 pc
MPE	4294	69 pcs	3 pc
MPE	42109	81 pcs	3 pc
MPE	4864	53 pcs	3 pc
MPE	4879	67 pcs	3 pc
MPE	4894	81 pcs	3 pc
MPE	48109	95 pcs	3 pc
MPE	6064	69 pcs	3 pc
MPE	6079	87 pcs	3 pc
MPE	6094	105 pcs	3 pc
MPE	60109	123 pcs	3 pc



Because of the built in threaded pin, the ES fix pole extension and ET mobile pole extension can be fixed onto the chuck quickly with simple rotations, no need any tools, saving a lot of time for deploying the pole extensions.



The ET mobile pole extension can increase up to 20% the magnetic clamping force comparing the conventional mobile pole extension and the vertical adjustment is up to 6 mm.



# CONTROL UNIT

## PSP SERIES

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### CUA-H (one coil)



#### Parameter

Length	250 mm
Width	150 mm
Height	100 mm
Net weight	1.6 kg

#### Max. pole No. each channel can drive

Voltage	Max. pole No.	Pole Size
220 V	56	50 x 50 mm
400/480 V	84	50 x 50 mm

### CUD-H (two coils)



#### Parameter

Length	250 mm
Width	150 mm
Height	100 mm
Net weight	1.6 kg

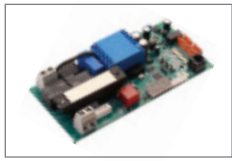
#### Max. pole No. each channel can drive

Voltage	Max. pole No.	Pole Size
220 V	56	50 x 50 mm
400/480 V	84	50 x 50 mm

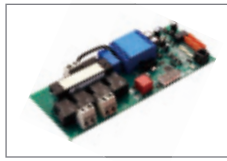


# CONTROL UNIT PSP SERIES

## Spare parts list



**CUA-PCB**      **CUA**  
electro board of CUA



**CUD-PCB**  
electro board of CUD



**CB-1**  
Connection box  
Φ26 mm



**JMT-1**  
control cable  
thread connector



**JMT-2**  
adaptor for metal  
protection hose



**JMT-3**  
power cable  
plastic connector



**QCS-4MS**      **CUA**  
quick control cable  
connector cable end



**QCS-5MS**      **CUD**  
quick control cable  
connector cable end



**QCS-5FP**      **CUD**  
quick connector chuck  
end



**QCS-4FP**      **CUA**  
quick connector chuck  
end



**MPH 1/2**  
5 meters metal  
protection hose



**MPH 1/2-MT**  
1 meter metal  
protection hose



**CCX 1/2 -425**      **CUD**  
5 meters cable with  
metal protection hose



**CBL-325**

5 meters power/control  
cable 3 x 2.5

**CBL-325-MT**

1 meter power/control  
cable 3 x 2.5



**CCX 1/2 -325**      **CUA**

5 meters cable with  
metal protection hose

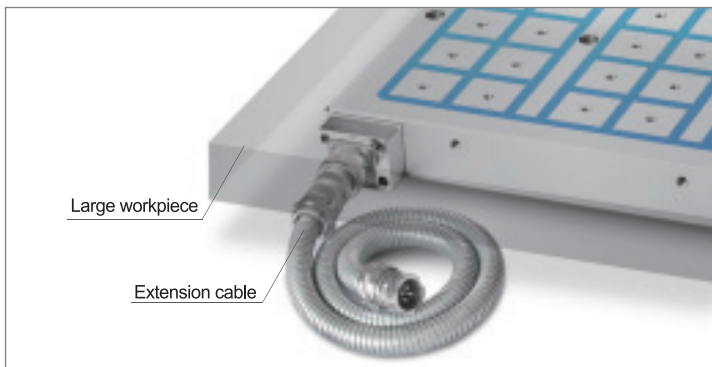


**CBL-425**      **CUD**

5 meters control cable  
4x2.5

**CBL-425-MT**      **CUD**

1 meter control cable  
4x2.5



**DXF-1**      **CUA**

1 meter extension cable  
3x2.5

**DXG-1**      **CUD**

1 meter extension cable  
4x2.5

# CONTROL UNIT PSP SERIES

CUF / CUS / CUE (multi-channels)



**Use:**  
Electro-permanent magnetics modules

- Features:**
- > Good for both 50 Hz and 60 Hz
  - > Selftesting and magnetizing detection
  - > PLC connection built in
  - > With channel selection function
  - > Can be used jointly

Parameter

Model	Length	Width	Height	Net weight	Description
CUF	383 mm	289 mm	129 mm	8 kg	4 channels
CUS	383 mm	289 mm	129 mm	8 kg	6 channels
CUE	383 mm	289 mm	129 mm	8 kg	8 channels

Max. pole No. each channel can drive

Voltage	Max. pole No.	Pole Size
220 V	56	50 x 50 mm
400/480 V	84	50 x 50 mm



Multi control units can be used jointly if necessary.

RMC-1 / RMC-2 / RMC-3 (Wire remote control box)



Parameter

Model	Length	Width	Height	Strength adjustable
RMC-1	136 mm	66 mm	41 mm	Yes
RMC-2	136 mm	68 mm	55 mm	Yes
RMC-3	136 mm	66 mm	41 mm	No

**Use:**  
For wire remote control

- Features:**
- > Small and compact
  - > With magnetic plate on the rear for ease of attachment

# JUNCTION BOX PSP SERIES

JB-1 (Four channels junction box)



**Use:**  
Fast connections between chucks and control unit

- Features:**
- > Die cast aluminium box
  - > IP65 water resistant
  - > 7 pins quick connectors makes connection and disconnection much easier

**Sizes**

Length	Width	Height	Weight
200 (7.87)	160 (6.30)	100 (3.94)	2.3 kg/5.1 lbs

unit: mm(in)

JB-2 (Eight channels junction box)



**Use:**  
Fast connections between chucks and control unit

- Features:**
- > Die cast aluminium box
  - > IP65 water resistant
  - > 7 pins quick connectors makes connection and disconnection much easier
  - > HARTING connector available on request

**Sizes**

Length	Width	Height	Weight
280 (11.02)	230 (9.06)	110 (4.33)	4.5 kg/9.9 lbs

unit: mm(in)

JB-8 (Four channels junction box)



**Use:**  
Fast connections between chucks and control unit

- Features:**
- > Die cast aluminium box
  - > IP65 water resistant
  - > 7 pins quick connectors makes connection and disconnection much easier

**Sizes**

Length	Width	Height	Weight
270 (10.62)	150 (5.90)	90 (3.54)	2.5 kg/5.5 lbs

unit: mm(in)

JB-9 (Eight channels junction box)



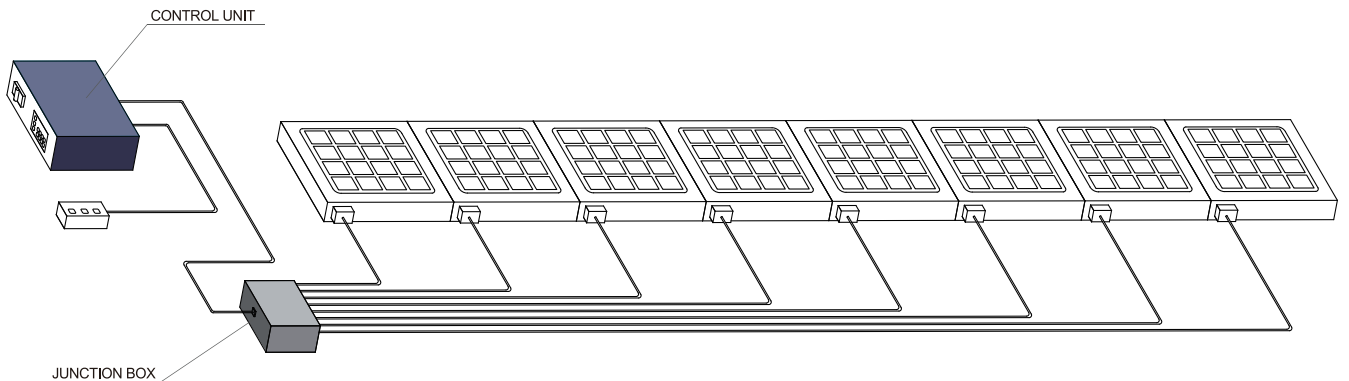
**Use:**  
Fast connections between chucks and control unit

- Features:**
- > Die cast aluminium box
  - > IP65 water resistant
  - > 7 pins quick connectors makes connection and disconnection much easier
  - > HARTING connector available on request

**Sizes**

Length	Width	Height	Weight
330 (11.81)	230 (9.05)	180 (7.08)	6.2 kg/13.7 lbs

unit: mm(in)





# BRISC®

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