

DAS-CC-18-EU



## Wall mounted/ Electrical interlock Power unit range

### INTRODUCTION

The Cavotec Power Units are designed for fast and easy use in harsh conditions over many years with minimal downtime or service requirements. Only high quality components are used and equipped with a Cavotec Push & Pull socket that allows quick connect and disconnect of the plug by operating the Push & Pull handle. The external handle on the cabinet door provides mechanical interlocking that protects against accidentally touching or disconnecting a live socket. It also protects against power surges that can cause damage to valuable equipment placed upstream and downstream of the Power Unit.

The Power Unit is used for power supply applications in tough environments such as boomers and other equipment in mines or in tunnel construction, cranes in ports, or for various applications in power plants such as transformer oil filtration, etc.



*For mining applications*



*Wall mounted*



*General Industry applications*

### PRODUCT FEATURES

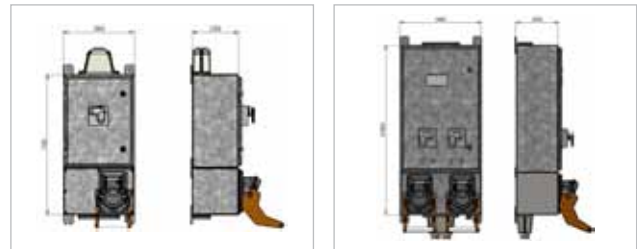
- Protection class for connected plug and socket, or plug or socket with cover closed: IP56
- Standard ambient temperature: -25°C to +70°C (-13°F to + 158°F)
- Socket with integrated cover operated by the push & pull arms
- Socket housing material: Marine grade aluminium ISO 3522
- Push & Pull arm material: Bronze ISO 1338:1977
- All contacts using Cavotec MWT system
- Separate cable terminals allowing fast and easy exchange of contacts
- Cable terminals for crimping with hexagonal crimping tool only
- Contacts and cable terminal material: silver plated brass
- Standard insulator material: injection molded PPO
- All hardware in stainless steel
- High quality gaskets and sealings with a minimum life span of 10 years
- External handle on the cabinet door to operate the mechanical interlock.
- Connection to terminal ground on mounting plate.
- Label with serial number placed by socket
- Wall mounted
- IP 56
- 690V Cabinet size: 750x380x250mm
- 1000V Cabinet size: 1000x480x250mm
- Cabinet material: 3 mm galvanized steel or 2mm stainless acid proof steel

## POWER UNIT DEFINED RANGE

| Nr of Pins (P&E-Pilot) | MCCB Size/ Internal cabling | Max Amp | Cabinet Material | 690V Female Socket | 690V Male Socket | 1000V Female Socket | 1000V Male Socket |
|------------------------|-----------------------------|---------|------------------|--------------------|------------------|---------------------|-------------------|
| 4+2                    | 160A/50mm <sup>2</sup>      | 160A    | 3mm Galvanized   | PC4-AX04-0560      | PC4-BX04-0560    | PC4-AX04-0590       | PC4-BX04-0590     |
|                        |                             |         | 2mm Stainless    | PC4-AX04-0562      | PC4-BX04-0562    | PC4-AX04-0592       | PC4-BX04-0592     |
| 4+2                    | 200A/70mm <sup>2</sup>      | 200A    | 3mm Galvanized   | PC4-AX04-0760      | PC4-BX04-0760    | PC4-AX04-0790       | PC4-BX04-0790     |
|                        |                             |         | 2mm Stainless    | PC4-AX04-0762      | PC4-BX04-0762    | PC4-AX04-0792       | PC4-BX04-0792     |
| 4+2                    | 250A/95mm <sup>2</sup>      | 250A    | 3mm Galvanized   | PC5-AX04-9562      | PC5-BX04-9560    | PC5-AX04-9590       | PC5-BX04-9590     |
|                        |                             |         | 2mm Stainless    | PC5-AX04-9562      | PC5-BX04-9562    | PC5-AX04-9592       | PC5-BX04-9592     |
| 4+2                    | 400A/120mm <sup>2</sup>     | 400A    | 3mm Galvanized   | PC5-AX04-1560      | PC5-BX04-1560    | PC5-AX04-1590       | PC5-BX04-1590     |
|                        |                             |         | 2mm Stainless    | PC5-AX04-1562      | PC5-BX04-1562    | PC5-AX04-1592       | PC5-BX04-1592     |
| 5+2                    | 125A/35mm <sup>2</sup>      | 125A    | 3mm Galvanized   | PC4-AX05-3560      | PC4-BX05-3560    | PC4-AX05-3590       | PC4-BX05-3590     |
|                        |                             |         | 2mm Stainless    | PC4-AX05-3562      | PC4-BX05-3562    | PC4-AX05-3592       | PC4-BX05-3592     |
| 5+2                    | 160A/50mm <sup>2</sup>      | 160A    | 3mm Galvanized   | PC4-AX05-0560      | PC4-BX05-0560    | PC4-AX05-0590       | PC4-BX05-0590     |
|                        |                             |         | 2mm Stainless    | PC4-AX05-0562      | PC4-BX05-0562    | PC4-AX05-0592       | PC4-BX05-0592     |
| 5+2                    | 200A/70mm <sup>2</sup>      | 200A    | 3mm Galvanized   | PC4-AX05-0760      | PC4-BX05-0760    | PC4-AX05-0790       | PC4-BX05-0790     |
|                        |                             |         | 2mm Stainless    | PC4-AX05-0762      | PC4-BX05-0762    | PC4-AX05-0792       | PC4-BX05-0792     |
| 5+2                    | 250A/95mm <sup>2</sup>      | 250A    | 3mm Galvanized   | PC5-AX05-9560      | PC5-BX05-9560    | PC5-AX05-9590       | PC5-BX05-9590     |
|                        |                             |         | 2mm Stainless    | PC5-AX05-9562      | PC5-BX05-9562    | PC5-AX05-9592       | PC5-BX05-9592     |
| 5+2                    | 400A/120mm <sup>2</sup>     | 320A    | 3mm Galvanized   | PC5-AX05-1560      | PC5-BX05-1560    | PC5-AX05-1590       | PC5-BX05-1590     |
|                        |                             |         | 2mm Stainless    | PC5-AX05-1562      | PC5-BX05-1562    | PC5-AX05-1592       | PC5-BX05-1592     |

## CABLE GLAND CODE

| Cable Gland               |                            |
|---------------------------|----------------------------|
| Bottom mounted            | Top mounted                |
| /G (Garo 28-60mm cable Ø) | /GT (Garo 28-60mm cable Ø) |
| /M5 (M50 28-38mm cable Ø) | /M5T (M50 28-38mm cable Ø) |
| /M6 (M63 37-44mm cable Ø) | /M6T (M63 37-44mm cable Ø) |
| /M7 (M75 40-58mm cable Ø) | /M7T (M75 40-58mm cable Ø) |



## OPTIONAL FEATURES

- Self regulating heating cable
- Control lamps in red, green, yellow or blue to indicate power on, power off, MCCB trip or other events
- Pressure valve and handle protection for mine blasts
- IP 66 with special rotary handle




















## POWER UNIT EXAMPLE

- 690V
  - 400A
  - 3mm Galvanized Steel
  - Cabinet size 1000x380x250mm
  - X5 Female socket Push&Pull
  - Cable Gland: Garo, Single Bottom
  - IP56
- Article nr. PC5-AX04-1560/G  
Please contact your local Cavotec sales office for quotation



## POWER CONNECTORS PRODUCT RANGE

| Size | Connection type | Model name | Keying position  | Accessories   | Certifications  | 1-pole                             | 3-pole                            | 4-pole  |  |                                    | 5-pole                              | 8-pole                              | 13-pole                             | 18-pole                             | 25-pole                        | 24, 30 & 37-pole                | 50-pole                         |  |   |
|------|-----------------|------------|--|---|---|------------------------------------|-----------------------------------|---|--|------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------|---------------------------------|---------------------------------|--|---|
| PC1  | Screw Ring      | S1         | 12   |   |   |                                    |                                   |   |  |                                    | 40A<br>690V<br>4mm <sup>2</sup>     | 20A<br>415V<br>2,5mm <sup>2</sup>   | 10A<br>230V<br>1,5mm <sup>2</sup>   | 10A<br>230V<br>1,5mm <sup>2</sup>   |                                |                                 |                                 |  |    |
|      | Screw Ring      | S1         | 2, 4, 6, 8, 10, 12                                       |   | ATEX & IECEx<br> |                                    |                                   |   |  |                                    | 30A<br>690V<br>4mm <sup>2</sup>     | 20A*<br>415V*<br>2,5mm <sup>2</sup> | 10A*<br>230V*<br>1,5mm <sup>2</sup> | 10A*<br>230V*<br>1,5mm <sup>2</sup> |                                |                                 |                                 |  |   |
| PC2  | Push&Pull       | X2         | 2, 3, 4, 5, 6, 7, 8, 9, 10, 12<br>Insulator keying: 1-11 | Low interlocking (PC2-VL)<br>Wall bracket<br>Screw terminals                                  |   | 660A<br>690V<br>300mm <sup>2</sup> | 250A<br>690V<br>70mm <sup>2</sup> | 200A<br>690V<br>50mm <sup>2</sup>                           |  |                                    | 200A<br>415V<br>50mm <sup>2</sup>   |                                     |                                     | 40A<br>500V<br>4mm <sup>2</sup>     | 40A<br>50V<br>4mm <sup>2</sup> |                                 |                                 |  |    |
|      | Bayonet         | B2         | Double keying 1-11<br>55 options                         |   | ATEX & IECEx<br> | 660A<br>690V<br>300mm <sup>2</sup> | 250A<br>690V<br>70mm <sup>2</sup> | 200A<br>690V<br>50mm <sup>2</sup>                           |  |                                    | 200A<br>415V<br>50mm <sup>2</sup>   |                                     |                                     | 40A<br>500V<br>4mm <sup>2</sup>     | 40A<br>50V<br>4mm <sup>2</sup> |                                 |                                 |  |   |
| PC3  | Eye Bolt        | K3         |  |   |   |                                    |                                   | 170A<br>1,1kV<br>50mm <sup>2</sup>                          |  |                                    |                                     |                                     |                                     |                                     |                                |                                 |                                 |  |    |
| PC4  | Push&Pull       | X4         | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12                    | External FO 6ch<br>Screw terminals  |   |                                    |                                   | 250A<br>1,1kV<br>70mm <sup>2</sup>                          |  |                                    | 200A<br>1,1kV<br>70mm <sup>2</sup>  |                                     |                                     |                                     |                                | 40A<br>500V<br>4mm <sup>2</sup> |                                 |  |    |
|      | Screw Ring      | S4         | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12                    | Short bell  |   |                                    |                                   | 250A<br>1,1kV<br>70mm <sup>2</sup>                          |  |                                    | 200A<br>1,1kV<br>70mm <sup>2</sup>  |                                     |                                     |                                     |                                |                                 |                                 |  |   |
|      | Eye Bolt        | K4         |  |   |   |                                    |                                   | 250A<br>1,1kV<br>70mm <sup>2</sup>                          |  |                                    |                                     |                                     |                                     |                                     |                                |                                 |                                 |  |  |
| PC5  | Push&Pull       | X5         | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12                    | External FO 12ch<br>Internal FO 8ch<br>Screw terminals<br>Kirk Key interlock<br>Wall bracket  |                |                                    |                                   | 420A<br>1,1kV<br>185mm <sup>2</sup><br>Internal fiber optic | 350A<br>7,2kV<br>150mm <sup>2</sup><br> |                                    |                                     |                                     |                                     |                                     |                                |                                 | 40A<br>500V<br>4mm <sup>2</sup> |  |  |
|      | Screw Ring      | S5         | 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12                    | Internal FO 8ch<br>Screw terminals  |   |                                    |                                   | 420A<br>1,1kV<br>185mm <sup>2</sup><br>Internal fiber optic | 350A<br>7,2kV<br>150mm <sup>2</sup>  |                                    | 350A<br>1,1kV<br>185mm <sup>2</sup> |                                     |                                     |                                     |                                |                                 |                                 |  |  |
| PC6  | Push&Pull       | X6         | 6.12   | External FO 18ch<br>Internal FO 12ch<br>Screw terminals<br>Kirk Key interlock<br>Wall bracket |   |                                    |                                   | 660A<br>1,1kV<br>300mm <sup>2</sup><br>Internal fiber optic | 480A<br>7,2kV<br>240mm <sup>2</sup><br>Internal fiber optic  | 500A<br>12kV<br>185mm <sup>2</sup> | 480A<br>1,1kV<br>300mm <sup>2</sup> |                                     |                                     |                                     |                                |                                 |                                 |  |  |
|      | Screw Ring      | S6         | 6.12   |   |   |                                    |                                   | 660A<br>1,1kV<br>300mm <sup>2</sup>                         |  |                                    | 660A<br>1,1kV<br>300mm <sup>2</sup> |                                     |                                     |                                     |                                |                                 |                                 |  |  |
| PC7  | Eye Bolt        | K7         |  |   |   |                                    |                                   | 400A<br>8kV<br>185mm <sup>2</sup>                           |  |                                    |                                     |                                     |                                     |                                     |                                |                                 |                                 |  |  |
| PC8  | Eye Bolt        | K8         |  |   |   |                                    |                                   | 440A<br>15kV<br>120mm <sup>2</sup>                          |  |                                    |                                     |                                     |                                     |                                     |                                |                                 |                                 |  |  |
| PC9  | Eye Bolt        | K9         |  |   |   |                                    |                                   | 440A<br>25kV<br>150mm <sup>2</sup>                          |  |                                    |                                     |                                     |                                     |                                     |                                |                                 |                                 |  |  |

\*Available Q2 2015