



PDB-500

Compact Power Distribution Block  
1x Cu/Al input 500mm<sup>2</sup> max  
2x Cu/Al outputs 300mm<sup>2</sup> max

## Power distribution blocks

| Incoming cables                                                                                                                                                                               |                         | Outgoing cables |                         | Part No.  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|-------------------------|-----------|
| Qty                                                                                                                                                                                           | Size (mm <sup>2</sup> ) | Qty             | Size (mm <sup>2</sup> ) |           |
| A space saving and cost saving alternative to DIN-Rail mount terminals.<br>Panel or DIN-Rail mounting<br>IP20 finger proof terminals<br>Plated brass block accepts aluminium or copper cables |                         |                 |                         |           |
| 3                                                                                                                                                                                             | 2.5 - 16                | 4               | 2.5 - 6                 | FTG-1/080 |
| 1                                                                                                                                                                                             | 10 - 35                 | 6               | 2.5 - 16                | FTG-1/125 |
| 1                                                                                                                                                                                             | 6 - 16                  |                 |                         |           |
| 1                                                                                                                                                                                             | 35 - 120                | 5               | 2.5 - 16                | FTG-1/250 |
|                                                                                                                                                                                               |                         | 4               | 2.5 - 10                |           |
|                                                                                                                                                                                               |                         | 2               | 6 - 35                  |           |

## Power distribution block 500mm<sup>2</sup> - 2x300mm<sup>2</sup> Cross section

|             | Cu/Al                          |                                   | Rated torque (Nm) | Part No. |
|-------------|--------------------------------|-----------------------------------|-------------------|----------|
|             | Round solid (mm <sup>2</sup> ) | Round stranded (mm <sup>2</sup> ) |                   |          |
| Input       | 95-500                         | 95-500                            | 30-60             | PDB 500  |
| Output (x2) | 50-300                         | 50-300                            | 25-35             |          |

Sector shaped Al-conductors 90mm<sup>2</sup>-300mm<sup>2</sup> have to be pre-rounded with a crimping-tool.



MC22001

## MiniClic System

Busbar mount and connection

| Connection | No. of outputs | Current rating total & per output | Part No. |
|------------|----------------|-----------------------------------|----------|
| Busbar     | 10             | 250/50A                           | MC22001  |

Panel mount with incoming terminal

| Connection            | No. of outputs | Current rating total & per output | Part No. |
|-----------------------|----------------|-----------------------------------|----------|
| 25-120mm <sup>2</sup> | 10             | 250/50A                           | MC22002  |
| 25-120mm <sup>2</sup> | 50             | 250/50A                           | MC120021 |

MiniClic cube

| Connection            | No. of outputs | Current rating total & per output | Part No.  |
|-----------------------|----------------|-----------------------------------|-----------|
| 1.5-10mm <sup>2</sup> | Grey           | 50A                               | MC00001   |
| 1.5-10mm <sup>2</sup> | Blue           | 50A                               | MC00001N  |
| 1.5-10mm <sup>2</sup> | Green          | 50A                               | MC00001PE |
| 1.5-10mm <sup>2</sup> | Red            | 50A                               | MC00001R  |



MC00001



## TECHNICAL INFORMATION

### Current transformers

| Type                               | ASK**                                      |
|------------------------------------|--------------------------------------------|
| Standards                          | VDO 414 Part 1; DIN42600; VBG4; IEC60044-1 |
| Construction                       |                                            |
| Case                               | Ultrasonically welded Polycarbonate        |
| Flammability                       | Self-extinguishing to UL94Vo               |
| Terminals                          | Nickel Plated Brass                        |
| Environment                        | For dry indoor use.                        |
| Temperature                        | -5 °C to +40 °C                            |
| Ratings                            |                                            |
| Voltage maximum                    | 0.72 kV                                    |
| Frequency                          | 50/60Hz                                    |
| Nominal Thermal Short Time Current | 60 x In                                    |
| Insulation                         | Class E                                    |
| Supply                             |                                            |
| Foot Mountings                     | 2                                          |
| Bar Mount Screws                   | 2 (12 with ASK128)                         |

### Standoff insulators

| Type                          |        | DB25              | DB34 | DB50 | DB65 |
|-------------------------------|--------|-------------------|------|------|------|
| Operating Temperature         |        | -40 °C to +130 °C |      |      |      |
| Flammability                  |        | to UL94VO         |      |      |      |
| AC Internal Flashover Voltage | kV     | 20                | 30   | 40   | 40   |
| AC Surface Flashover Voltage  | kV     | 7                 | 10   | 12   | 15   |
| Twisting Stress               | DN X m | 3                 | 5    | 6    | 6    |
| Compressive Stress            | DN     | 2100              | 6500 | 6800 | 8300 |
| Cantilever Stress             | DN     | 180               | 450  | 450  | 700  |
| Tensile Stress                | DN     | 300               | 800  | 850  | 1500 |

### Power distribution blocks

|                                     |            |     | FTG-1/080                                           | FTG-1/125                                          | FTG-1/250                                                                      |
|-------------------------------------|------------|-----|-----------------------------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------|
| Operational Voltage                 |            | VAC | 600                                                 | 600                                                | 600                                                                            |
| Current Rating Cu/Al                |            | A   | 85 / 66                                             | 130 / 103                                          | 300 / 260                                                                      |
| Short Cct Peak - Ipk                |            | kA  | 2.7                                                 | 30                                                 | 51                                                                             |
| Short Cct 1 second - Icw            |            | kA  | 1.9                                                 | 4.4                                                | 21                                                                             |
| Input connections                   | Qty / Size |     | 1x 2.5-16mm <sup>2</sup>                            | 1x 10-35mm <sup>2</sup>                            | 1x 35-120mm <sup>2</sup>                                                       |
|                                     | Tool       |     | Pozi or flat screwdriver                            | 4mm Allen Key                                      | 6mm AllenKey                                                                   |
|                                     | Torque     | Nm  | 1.5                                                 | 3.5                                                | 19                                                                             |
| Output connections without ferrules | Qty / Size |     | 2x 2.5-16mm <sup>2</sup><br>4x 2.5-6mm <sup>2</sup> | 1x 6-16mm <sup>2</sup><br>6x 2.5-16mm <sup>2</sup> | 4x 2.5-10mm <sup>2</sup><br>5x 2.5-16mm <sup>2</sup><br>2x 6-35mm <sup>2</sup> |
|                                     | Tool       |     | Pozi or flat screwdriver                            | Pozi or flat screwdriver                           | Flat screwdriver                                                               |
|                                     | Torque     | Nm  | 1.5 / 0.8                                           | 3.5 / 2.0                                          | 18 / 18 / 31                                                                   |
| Mounting                            |            |     | DIN-Rail or base mounting with 2x M5 screws         |                                                    |                                                                                |
| Protection                          |            |     | IP20                                                | IP20                                               | IP20                                                                           |
| Dimensions (LxWxH) mm               |            |     | 66 x 27 x 47                                        | 74 x 27 x 47                                       | 96 x 45 x 49                                                                   |

## Power distribution block 500mm<sup>2</sup> - 2x300mm<sup>2</sup>

### Technical data

| Material                    |                   |                      |                   |
|-----------------------------|-------------------|----------------------|-------------------|
| Clamping body               | Aluminium         | Plated               |                   |
| Housing                     | PA66-VO           | Grey RAL 7035        |                   |
| Screw                       | Steel             | Nickle plated        |                   |
| General data                |                   |                      |                   |
| Heat deflection temperature |                   | 130°C - UL94-VO      |                   |
| CTI value of isolation      |                   | 600                  |                   |
| Regulations                 |                   | IEC 60947-7-1        |                   |
| Electrical data             |                   |                      |                   |
| Nominal operating current   |                   | 950A                 |                   |
| Nominal voltage             |                   | AC 1000V/DC1500V     |                   |
| Cross section               |                   |                      |                   |
|                             | Cu/Al             |                      | Rated torque (Nm) |
|                             | Round solid (mm²) | Round stranded (mm²) |                   |
| Input                       | 95-500            | 95-500               | 30-60             |
| Output (x2)                 | 50-300            | 50-300               | 25-35             |

Sector shaped Al-conductors 90mm<sup>2</sup>-300mm<sup>2</sup> have to be pre-rounded with a crimping-tool.  
Article numbers on request.

## IP rating

### Degrees of protection provided by enclosures (IP-Code) according to IEC/EN 60529:2000-09 (extract)

| 1st digit | Protection against contact                                            | Protection against ingress of objects               | 2nd digit | Protection against harmful ingress of water            |
|-----------|-----------------------------------------------------------------------|-----------------------------------------------------|-----------|--------------------------------------------------------|
| 0         | No protection                                                         | No protection                                       | 0         | No protection                                          |
| 1         | Protected against access to dangerous parts with the back of the hand | Protected against solid foreign object size >50mm   | 1         | Protected against dripping water                       |
| 2         | Protected against access to dangerous parts with a finger             | Protected against solid foreign object size >12.5mm | 2         | Protected against dripping water when tilted up to 15° |
| 3         | Protected against access to dangerous parts with a tool               | Protected against solid foreign object size >2.5mm  | 3         | Protected against spraying water                       |
| 4         | Protected against access to dangerous parts with a wire               | Protected against solid foreign object size >1mm    | 4         | Protected against splashing water                      |
| 5         | Protected against access to dangerous parts with a wire               | Protected against dust                              | 5         | Protected against water jets                           |
| 6         | Protected against access to dangerous parts with a wire               | Dust tight                                          | 6         | Protected against powerful water jets                  |
| -         | -                                                                     | -                                                   | 7         | Protected against temporary immersion in water         |
| -         | -                                                                     | -                                                   | 8         | Protected against continuous immersion in water        |

**Utilization categories for fuse combination units in accordance with IEC/EN 60947-3:2010-02, VDE 0660 Part 107**  
**AC**

| Utilization category    | Typical applications                                                         | Verification of electrical endurance |                |                |      |                |                |      | Verification of making and breaking capacities |                |                |      |                |                |      |
|-------------------------|------------------------------------------------------------------------------|--------------------------------------|----------------|----------------|------|----------------|----------------|------|------------------------------------------------|----------------|----------------|------|----------------|----------------|------|
|                         |                                                                              | Make                                 |                |                |      | Break          |                |      | Make                                           |                |                |      | Break          |                |      |
|                         |                                                                              | I <sub>e</sub>                       | I              | U              | cos  | I <sub>c</sub> | U <sub>r</sub> | cos  | I <sub>e</sub>                                 | I              | U              | cos  | I <sub>c</sub> | U <sub>r</sub> | cos  |
|                         |                                                                              | A                                    | I <sub>e</sub> | U <sub>e</sub> | Φ    | I <sub>e</sub> | U <sub>e</sub> | Φ    | A                                              | I <sub>e</sub> | U <sub>e</sub> | Φ    | I <sub>e</sub> | U <sub>e</sub> | Φ    |
| AC-20A(B) <sup>1)</sup> | Connecting and disconnecting under no-load conditions                        | 3)                                   | 2)             | 2)             | 2)   | 2)             | 2)             | 2)   | 3)                                             | 2)             | 1.05           | 2)   | 2)             | 1.05           | 2)   |
| AC-21A(B) <sup>1)</sup> | Switching of resistive loads, including slight overloads                     | 3)                                   | 1              | 1              | 0.95 | 1              | 1              | 0.95 | 3)                                             | 1.5            | 1.05           | 0.95 | 1.5            | 1.05           | 0.95 |
| AC-22A(B) <sup>1)</sup> | Switching of mixed resistive and inductive loads, including slight overloads | 3)                                   | 1              | 1              | 0.8  | 1              | 1              | 0.8  | 3)                                             | 3              | 1.05           | 0.65 | 3              | 1.05           | 0.65 |
| AC-23A(B) <sup>1)</sup> | Switching of motor loads and other highly inductive loads                    | 3)                                   | 1              | 1              | 0.65 | 1              | 1              | 0.65 | 4)                                             | 10             | 1.05           | 0.45 | 8              | 1.05           | 0.45 |
|                         |                                                                              |                                      |                |                |      |                |                |      | 5)                                             | 10             | 1.05           | 0.35 | 8              | 1.05           | 0.35 |

**DC**

| Utilization category    | Typical applications                                                                      | Verification of electrical endurance |                |                |      |                |                |      | Verification of making and breaking capacities |                |                |     |                |                |     |
|-------------------------|-------------------------------------------------------------------------------------------|--------------------------------------|----------------|----------------|------|----------------|----------------|------|------------------------------------------------|----------------|----------------|-----|----------------|----------------|-----|
|                         |                                                                                           | Make                                 |                |                |      | Break          |                |      | Make                                           |                |                |     | Break          |                |     |
|                         |                                                                                           | I <sub>e</sub>                       | I              | U              | L/R  | I <sub>c</sub> | U <sub>r</sub> | L/R  | I <sub>e</sub>                                 | I              | U              | L/R | I <sub>c</sub> | U <sub>r</sub> | L/R |
|                         |                                                                                           | A                                    | I <sub>e</sub> | U <sub>e</sub> | ms   | I <sub>e</sub> | U <sub>e</sub> | ms   | A                                              | I <sub>e</sub> | U <sub>e</sub> | ms  | I <sub>e</sub> | U <sub>e</sub> | ms  |
| DC-20A(B) <sup>1)</sup> | Connecting and disconnecting under no-load conditions                                     | 3)                                   | 2)             | 2)             | 2)   | 2)             | 2)             | 2)   | 3)                                             | 2)             | 1.05           | 2)  | 2)             | 1.05           | 2)  |
| DC-21A(B) <sup>1)</sup> | Switching of resistive loads, including slight overloads                                  | 3)                                   | 1              | 1              | 1    | 1              | 1              | 1    | 3)                                             | 1.5            | 1.05           | 1   | 1.5            | 1.05           | 1   |
| DC-22A(B) <sup>1)</sup> | Switching of mixed resistive and inductive loads, including overloads (e.g. shunt motors) | 3)                                   | 1              | 1              | 2    | 1              | 1              | 2    | 3)                                             | 4              | 1.05           | 2.5 | 4              | 1.05           | 2.5 |
| DC-23A(B) <sup>1)</sup> | Switching of highly inductive loads (e.g. series motors)                                  | 3)                                   | 1              | 1              | 0.75 | 1              | 1              | 0.75 | 3)                                             | 4              | 1.05           | 15  | 4              | 1.05           | 15  |

I Making current  
I<sub>c</sub> Breaking current  
I<sub>e</sub> Rated operational current  
U Voltage  
U<sub>e</sub> Rated operational voltage

- 1) A: Frequent actuation, B: Occasional actuation  
2) If the switching device has a making and/or breaking capacity, the values for the current and the power factor (time constants) must be stated by the manufacturer.  
3) All values  
4) I<sub>e</sub> ≤ 100A  
5) I<sub>e</sub> > 100A