

## Power distribution blocks

| Incoming cables | Outgoing cables | Part No. |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Qty | Size $\left(\mathrm{mm}^{2}\right)$ | Qty | Size $\left(\mathrm{mm}^{2}\right)$ |  |

A space saving and cost saving alternative to DIN-Rail mount terminals.
Panel or DIN-Rail mounting
IP20 finger proof terminals
Plated brass block accepts aluminium or copper cables

| Plated brass block accepts aluminium or copper cables |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 3 | $2.5-16$ | 4 | $2.5-6$ | FTG-1/080 |
| 1 | $10-35$ | 6 | $2.5-16$ |  |
| 1 | $6-16$ |  |  | FTG-1/125 |
| 1 |  | 5 | $2.5-16$ |  |
|  | $35-120$ | 4 | $2.5-10$ | FTG-1/250 |

## Power distribution block 500 $\mathrm{mm}^{2}$ - $\mathbf{2 \times 3 0 0} \mathrm{mm}^{2}$ Cross section

|  | $\mathrm{Cu} / \mathrm{Al}$ |  | Rated |
| :---: | :---: | :---: | :---: | :---: | Part No.

Sector shaped Al-conductors $90 \mathrm{~mm}^{2}-300 \mathrm{~mm}^{2}$ have to be pre-rounded with a crimping-tool.

Compact Power Distribution Block $1 \mathrm{xCu} / \mathrm{Al}$ input $500 \mathrm{~mm}^{2}$ max $2 \mathrm{xCu} / \mathrm{Al}$ outputs $300 \mathrm{~mm}^{2}$ max


## MiniClic System



Busbar mount and connection

| Connection | No. of outputs | Current rating total \& per output | Part No. |
| :--- | :---: | :---: | :---: |
| Busbar | 10 | $250 / 50 \mathrm{~A}$ | MC22001 |

Panel mount with incoming terminal

| Connection | No. of outputs | Current rating total \& per output | Part No. |
| :--- | :---: | :---: | :---: |
| $25-120 \mathrm{~mm}^{2}$ | 10 | $250 / 50$ A | MC22002 |
| $25-120 \mathrm{~mm}^{2}$ | 50 | $250 / 50 \mathrm{~A}$ | MC120021 |

MiniClic cube

| Connection | No. of outputs | Current rating total \& per output | Part No. |
| :--- | :---: | :---: | :---: |
| $1.5-10 \mathrm{~mm}^{2}$ | Grey | 50 A | MC00001 |
| $1.5-10 \mathrm{~mm}^{2}$ | Blue | 50 A | MC00001N |
| $1.5-10 \mathrm{~mm}^{2}$ | Green | 50 A | MC00001PE |
| $1.5-10 \mathrm{~mm}^{2}$ | Red | 50 A | MC00001R |

## TECHNICAL INFORMATION

## Current transformers

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

## Standoff insulators

| Type |  | DB25 | DB34 | DB50 | DB65 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Operating Temperature |  | $-40^{\circ} \mathrm{C}$ to $+130^{\circ} \mathrm{C}$ |  |  |  |
| 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/AI |  | 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 |  | $1 \times 2.5-16 \mathrm{~mm}^{2}$ | $1 \times 10-35 \mathrm{~mm}^{2}$ | $1 \times 35-120 \mathrm{~mm}^{2}$ |
|  | Tool |  | Pozi or flat screwdriver | 4 mm Allen Key | 6 mm AllenKey |
|  | Torque | Nm | 1.5 | 3.5 | 19 |
| Output connections without ferrules | Qty / Size |  | $\begin{aligned} & 2 \times 2.5-16 \mathrm{~mm}^{2} \\ & 4 \times 2.5-6 \mathrm{~mm}^{2} \end{aligned}$ | $\begin{gathered} 1 \times 6-16 \mathrm{~mm}^{2} \\ 6 \times 2.5-16 \mathrm{~mm}^{2} \end{gathered}$ | $\begin{gathered} 4 \times 2.5-10 \mathrm{~mm}^{2} \\ 5 \times 2.5-16 \mathrm{~mm}^{2} \\ 2 \times 6.35 \mathrm{~mm}^{2} \end{gathered}$ |
|  | 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 $2 \times \mathrm{M} 5$ screws |  |  |
| Protection |  |  | IP20 | IP20 | IP20 |
| Dimensions ( LxWxH ) mm |  |  | $66 \times 27 \times 47$ | $74 \times 27 \times 47$ | $96 \times 45 \times 49$ |

## Power distribution block 500mm ${ }^{2}$ - $2 \times 300 \mathrm{~mm}^{2}$

Technical data


Sector shaped Al-conductors $90 \mathrm{~mm}^{2}-300 \mathrm{~mm}^{2}$ 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 $>50 \mathrm{~mm}$ | 1 | Protected against dripping water |
| 2 | Protected against access to dangerous parts with a finger | Protected against solid foreign object size $>12.5 \mathrm{~mm}$ | 2 | Protected against dripping water when tilted up to $15^{\circ}$ |
| 3 | Protected against access to dangerous parts with a tool | Protected against solid foreign object size $>2.5 \mathrm{~mm}$ | 3 | Protected against spraying water |
| 4 | Protected against access to dangerous parts with a wire | Protected against solid foreign object size $>1 \mathrm{~mm}$ | 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 |  |  |
|  |  | $\begin{aligned} & \mathrm{I}_{\mathrm{e}} \\ & \mathrm{~A} \end{aligned}$ | 1 | U | $\begin{gathered} \cos \\ \phi \end{gathered}$ | $I_{c}$ | $\mathrm{U}_{\mathrm{r}}$ | $\begin{gathered} \cos \\ \varnothing \end{gathered}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{e}} \\ & \mathrm{~A} \end{aligned}$ | 1 | U | $\stackrel{\cos }{\phi}$ | $I_{c}$ | $\mathrm{U}_{\mathrm{r}}$ | $\begin{gathered} \cos \\ \Phi \end{gathered}$ |
|  |  |  | le | $U_{\text {e }}$ |  | 1 e | $U_{\text {e }}$ |  |  | l | $\mathrm{U}_{\mathrm{e}}$ |  | $\mathrm{l}_{\mathrm{e}}$ | $\mathrm{U}_{\mathrm{e}}$ |  |
| $A C-20 A(B){ }^{1)}$ | Connecting and disconnecting under no-load conditions | 3) | 2) | 2) | 2) | 2) | 2) | 2) | 3) | 2) | 1.05 | 2) | 2) | 1.05 | 2) |
| $A C-21 A(B){ }^{1)}$ | 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 |
| $A C-22 A(B){ }^{1)}$ | 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 |
| $A C-23 A(B){ }^{1)}$ | 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 |  |  |
|  |  | $\mathrm{I}_{\mathrm{e}}$ | I | U | $\begin{aligned} & \mathrm{L} / \mathrm{R} \\ & \mathrm{~ms} \end{aligned}$ | $I_{C}$ | $\mathrm{U}_{\mathrm{r}}$ | $\begin{aligned} & \mathrm{L} / \mathrm{R} \\ & \mathrm{~ms} \end{aligned}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{e}} \\ & \mathrm{~A} \end{aligned}$ | I | U | $\begin{aligned} & \mathrm{L} / \mathrm{R} \\ & \mathrm{~ms} \end{aligned}$ | $I_{c}$ | $U_{r}$ | $\begin{gathered} \mathrm{L} / \mathrm{R} \\ \mathrm{~ms} \end{gathered}$ |
|  |  | A | le | $\mathrm{U}_{\mathrm{e}}$ |  | le | $U_{\text {e }}$ |  |  | le | $U_{\text {e }}$ |  | $\mathrm{l}_{\mathrm{e}}$ | $U_{\text {e }}$ |  |
| DC-20A(B) ${ }^{1)}$ | 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) ${ }^{1)}$ | 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) ${ }^{1)}$ | Switching of mixed resistive and inductive loads, including overloads <br> (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) ${ }^{1)}$ | 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
$I_{c} \quad$ Breaking current
$l_{\mathrm{e}}$ Rated operational current
U Voltage
$\mathrm{U}_{\mathrm{e}}$ 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) $I_{e} \leq 100 \mathrm{~A}$
5) $I_{e}>100 \mathrm{~A}$
