

### 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. Panel or DIN-Rail mounting IP20 finger proof terminals 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	



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 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.

### 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



MC22001



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> 4x 2.5-6mm <sup>2</sup>	1x 6-16mm <sup>2</sup> 6x 2.5-16mm <sup>2</sup>	4x 2.5-10mm <sup>2</sup> 5x 2.5-16mm <sup>2</sup> 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 (mm <sup>2</sup> )	Round stranded (mm <sup>2</sup> )	
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		
		$I_e$ A	I $I_e$	U $U_e$	cos $\Phi$	$I_c$ $I_e$	$U_r$ $U_e$	cos $\Phi$	$I_e$ A	I $I_e$	U $U_e$	cos $\Phi$	$I_c$ $I_e$	$U_r$ $U_e$	cos $\Phi$
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		
		$I_e$ A	I $I_e$	U $U_e$	L/R ms	$I_c$ $I_e$	$U_r$ $U_e$	L/R ms	$I_e$ A	I $I_e$	U $U_e$	L/R ms	$I_c$ $I_e$	$U_r$ $U_e$	L/R 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
- $I_c$  Breaking current
- $I_e$  Rated operational current
- U Voltage
- $U_e$  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)  $I_e \leq 100A$
- 5)  $I_e > 100A$