

# Specification of the MACC 2 plus

Accuracy makes the difference



## Main characteristics

Rated input current ( $I_{PN}$ )	$\pm 600$ A
Output transfer ratio	0.6 A at $I_{PN}$
Output load	0 ... 7 $\Omega$ (Burden resistor at $I_{PN}$ )
Output max.	$\pm 1.0$ A
Small signal bandwidth (5% of $I_{PN}$ )	800 kHz (-3 dB)
Output offset error at 23°C (related to $I_{PN}$ )	< 5 ppm (delivery figure, adjustable at site)
Offset drift (TC)	< 0.15 ppm/K
Offset error versus time	< 0.3 ppm/month
Offset error versus supply voltage	< 0.15 ppm/V
Linearity error (related to actual $I_{OUT}$ )	< 3.3 ppm
Output error versus ext.magn. Field (< 5mT)	< 5 ppm/mT (AC and DC field)
Output noise (BW= 10kHz)	< 0.8 $\mu A_{pp}$
Induced voltage into a 1-turn primary busbar	< 300 $\mu V_{pp}$

## General data

Supply voltage	$\pm 14$ V ... $\pm 15.5$ V
Power consumption at $I_{PN}$	9.5 W ( $R_b = 0 \Omega$ )
Polarity protection	No
Output Valid indicator (lit at normal operation)	LED (pure green)
Output Valid contact (closed at normal operation)	PhotoMOS relais, $R_{ON} = 0.8 \Omega$ , $I_{MAX} = 200$ mA, $V_{MAX} = 40$ Vp
Ambient operating temperature	0 ... +40 °C
Relative Humidity	20 ... 80 % (Non condensing)
Ambient storage temperature	-40 ... +75 °C
Relative Humidity	20 ... 80 % (Non condensing)
Pollution degree	2



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## Housing

Dimensions (H x W x D) 110 x 82 x 43 mm, incl. isolator 67 mm.

### Material

Housing Aluminium

Primary isolator POM-C

Weight < 700 gram

## Safety

Protection Class III (IEC 60 950-1, Supplied by external SELV power source)

### Protection degree

Terminals IP20 (Test finger, EN 60 529)

Housing IP40 (Test finger, EN 60 529)

Flammability class acc. UL94 V-0

### Isolation characteristics

Creepage distance 12 mm (between primary busbar and housing)

Clearance distance 12 mm (between primary busbar and housing)

CTI 600 (primary isolator)

### Isolation test voltage

Prim.busbar to output 5 kV / 50 Hz, 1 min (IEC61010-1)

Electronics to housing 500 Vdc

### Impuls voltage (surge)

Prim.busbar to output 5kV 1.2/50  $\mu$ s



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