

Specification of the MACC 2 ^{plus}

Accuracy makes the difference



Main characteristics

Rated input current (I_{PN})	± 600 A (± 850 A peak)
Output transfer ratio	0.6 A at I_{PN}
Output load	0 ... 7 Ω (Burden resistor at I_{PN})
Output max.	± 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 μA_{pp}
Induced voltage into a 1-turn primary busbar	< 300 μV_{pp}

General data

Supply voltage	± 14 V ... ± 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.
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Material

Housing	Aluminium
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Primary isolator	POM-C
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Weight	< 700 gram
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Safety

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

Terminals	IP20 (Test finger, EN 60 529)
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Housing	IP40 (Test finger, EN 60 529)
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Flammability class acc. UL94	V-0
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Isolation characteristics

Creepage distance	12 mm (between primary busbar and housing)
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Clearance distance	12 mm (between primary busbar and housing)
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CTI	600 (primary isolator)
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Isolation test voltage

Prim.busbar to output	5 kV / 50 Hz, 1 min (IEC61010-1)
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Electronics to housing	500 Vdc
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Impuls voltage (surge)

Prim.busbar to output	5kV 1.2/50 µs
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