



# MCS series

72 to 144 watts

## Features

- Nominal Inputs from 12 to 110 VDC
- 1500 VAC Input to Output Isolation
- High efficiency

## Ideally Suited For:

- Telecommunications
- Computing
- Instrumentation



## Input Characteristics

Input Voltage:	Nominal Voltage	Input Voltage Range	Degraded Operation Range
	12VDC	9 to 18 VDC	5 to 9 VDC
	24 VDC	16 to 36 VDC	9 to 16 VDC
	48 VDC	36 to 72 VDC	20 to 36 VDC
	72 VDC	50 to 96 VDC	30 to 50 VDC
	110 VDC	90 to 133 VDC	60 to 90 VDC

Efficiency:	75% to 95%
Voltage Surge Protection:	MOV
Inverse Polarity Protection:	Internal reverse diode
Overload Protection:	via external fuse

## Output Characteristics

Output Voltage Accuracy:	0 to 2%
Line and Load Regulation:	< 1%
Ripple and Noise:	<20 mV plus 1% pk-pk of Vout (0-30 MHz)
Transient Response/Recovery Time:	+/-3% within 1 mSec
Temperature Coefficient:	<0.02%/degree C
Current Limiting:	>120% maximum output
Short Circuit Protection:	Continuous
Overvoltage Protection:	via transient suppressor diode

## Environmental Characteristics

Operating Temperature Range:	-20°C to +70°C ambient
Storage Temperature Range:	-40°C to +85°C ambient
Maximum Baseplate Temperature:	+85°C
Derating without heatsink:	Derate 2% per °C beyond +45°C case temperature
Derating with heatsink:	Derate 2% per °C beyond +55°C case temperature
Humidity:	95% RH
Reliability (MTBF per Mil-HDBK-217):	>300,000 hours, +25°C, Ground Benign





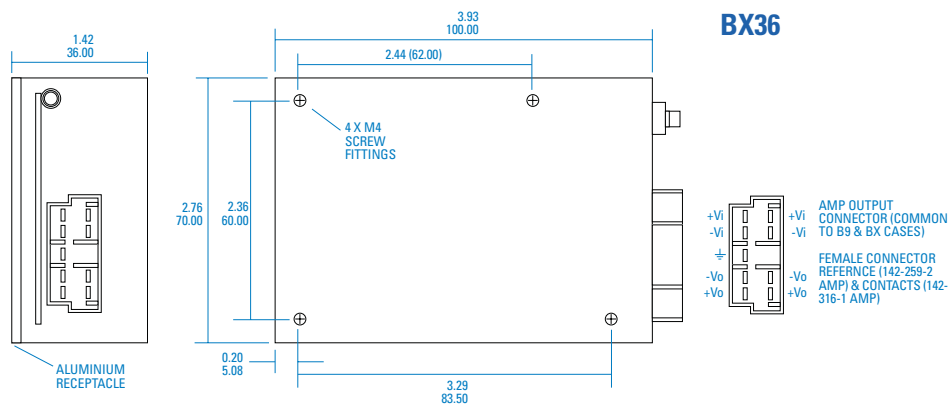
## General Characteristics

Isolation (Input to Output):	1000 VAC input to output
Insulation Resistance:	>100 megohms measured at 500 VDC
Switching Frequency:	25 kHz
Case Material:	Encapsulated
Agency Approvals:	CE Mark

## EMC Characteristics

Conducted emissions:	EN55022
Radiated emissions:	EN55022
ESD:	EN61000-4-2
Radiated immunity:	EN61000-4-3
Fast Transients:	EN61000-4-4
Surge:	EN61000-4-5

## Outline Drawing



## Available Models

Model	Input Voltage (VDC)	Output Voltage (VDC)	Output Current (A)	Case Code
MCSXX126000	12,24,48,72,110	12	6	BX36
MCSXX1210000	12,24,48,72,110	12	10	BX36
MCSXX243000	12,24,48,72,110	24	3	BX36
MCSXX246000	12,24,48,72,110	24	6	BX36

XX Specify nominal input voltage

To order please specify model number, desired input voltage, and preferred case configuration i.e. MCS 24 12 6000 BX36

All specifications are typical at 25 degrees C with nominal input voltage and full output unless otherwise noted. Specifications are subject to change without notice. All dimensions are typical.