



# 300W ATG SERIES

DC/DC CONVERTER



## Description

The ATG series is a range of cost effective, medium power single output converters that comply fully with the latest rail specifications and norms for protection and EMC. Although simple in construction the mounting arrangement ensures compliance with vibration and shock requirements of EN 50155.

Special features include:

- Wide choice of input and output voltages
- High output current capability
- High Efficiency
- Fully compliant with rail standards, including EN 50155 & EN50121.3.2
- BRB RIA version also available upon request

## Input Specifications

The following input voltage versions are available as standard:

110V (66.0 - 137.5V) dc	(suffix A)	36V (25.0 - 45.0V) dc	(suffix F)
72V (43.2 - 90.0V) dc	(suffix D)	24V (16.8 - 33.6V) dc	(suffix B)
52V (31.2 - 65.0V) dc	(suffix C)	<b>Other ranges are available to order</b>	

Product reference	All references
Input Range	70% - 125% of nominal (60% 100ms)
Input Ripple	EN50155
Input Protection	Reverse polarity protection (some input versions require external fuse or circuit breaker) Surges and transients to EN50155 (Direct and Indirect) Protection to BRB RIA 12 upon request (option R)
Inrush Current	6 x nominal current (after 0.1ms)
Efficiency	90% typical

## Output Specifications

Product reference	All references
Maximum Output Power	300W (dependant on output voltage)
Output Voltage	Fixed output can be specified in the range 12V to 110V
Setting Tolerance	±1.0% at 50% load, 15°C to 25°C
Output Current	According to rated power and output voltage
Line Regulation	±0.5%
Load Regulation	±0.5%
Temperature Coefficient	<0.02% / °C
Output Ripple	<1% Pk-Pk of output voltage
Output Noise	<75mV superimposed (up to 20 MHz)
Response Time	0.5ms to within 1% (for a 10% - 100% load change)
Holdup Time	10ms (EN50155 Class S2) for 110Vdc input only
Primary Power Limit	Operates at approximately 110% of rated output power
Thermal Protection	Output shuts off when safe operating temperature is exceeded
Isolation	Input to Output 1.0kV ac (Tested at 1.4kV dc) Input to Case 1.0kV ac (Tested at 1.4kV dc) Output to Case 1.0kV ac (Tested at 1.4kV dc)

## Environmental Details

Product reference	All references
Operating Temperature	-25°C to +70°C (base plate is suitable for 'cold wall' mounting and must not exceed 85°C for full power operation)
Storage Temperature	-40°C to +80°C
Relative Humidity	95% maximum
Vibration	EN50155



### Applicable Norms

Item	Reference
EMC	EN50155, EN50121-3-2
Other	EN50155 (BRB RIA specs also available upon request – option R)

### Mechanical Characteristics

Product reference	All references
Construction	Simple aluminum chassis
Mounting	Flush mounting with six Ø7mm fixing holes on base plate
Dimensions	Depth = 238mm Width = 130mm Height = 60mm
Weight	<1.0kg
Connections	Wago 236-501 terminal blocks and an M4 earth stud
Cooling	By convection

### Technical Drawing

