

ARTESYN AIQ02R300-L

65 Watts



The AIQ02R series high voltage quarter-brick DC-DC converters accept a wide range 250 to 420 Vdc input and are designed for use with power factor correction (PFC) modules. Rated at 65 watts, the AIQ02R series can deliver full continuous power at operating baseplate temperatures from -40 to 100°C. The converters have a typical efficiency of 90% and produce a 28 Vdc output that can deliver up to 2.32 amps; the output voltage can be adjusted from 25.2 to 29.4 V with an external trim resistor.

SPECIAL FEATURES

- 65 W Continuous power at 100°C baseplate temperature
- High efficiency: up to 90%
- Low output ripple and noise
- Positive Enable function
- Excellent transient response
- Safety isolated low voltage control and monitoring
- High reliability
- Wide input voltage range
- Adjustable output voltage
- Regulation to zero load
- EU Directive2002/95/EC compliant for RoHS

SAFETY

- UL cUL 60950 Recognized
- TUV EN60950 Licensed
- CE CE Mark





DATA SHEET

Total Power:

65 Watts (28 V @ 2.32 A)

Input Voltage:

390 V

of Outputs:

Single



ELECTRICAL SPECIFICATIONS

Input			
Input Range:	250 - 420 VDC		
Input Surge:	500 V / 100 ms		
Efficiency:	90% @ 28.0 V 65 W (typical)		
Isolation Voltage:	2500 VDC		
Output			
Line Regulation:	0.2 % typical		
Load Regulation:	0.2 % typical		
Noise / ripple:	3% Vo,		
Transient response:	5% Vo deviation with 100% to 80% full load @ 0.1 A / uS		
Overvoltage protection:	30 - 31.5 V		
Current limit:	130% lo maximum		
Control			
Output Voltage Adjust:	90% - 105% (via external trim resistor)		
Enable:	TTL compatible (positive enable logic)		

ENVIRONMENTAL SPECIFICATIONS

Operating ambient temperature range:	-40 °C to +100 °C (baseplate temperature)	
Storage temperature:	-55 °C to +125 °C (environment temperature)	
Overtemperature protection:	120 °C max	
Demonstrated MTTF (Telcordia SR-332)	4.15Mhrs	

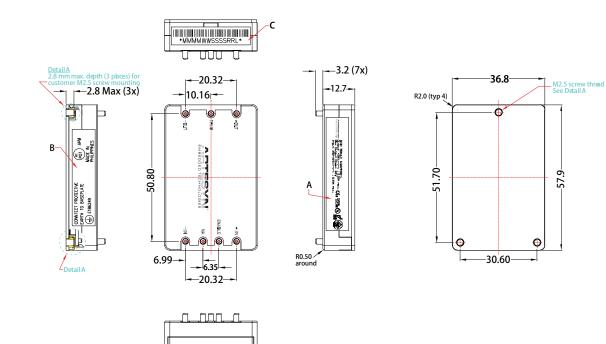




ORDERING INFORMATION

Input Voltage	Output Voltage	Efficiency	Model Number
390 V	28 V @ 2.32 A	89% typ	AIQ02R300-L

MECHANICAL DRAWINGS



CONVERTER PINS

No.	Label
1	+In
2	Enable
3	NA
4	-In
5	-Out
6	Trim
7	+Out





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Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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For international contact information, visit advancedenergy.com.

powersales@aei.com (Sales Support) productsupport.ep@aei.com (Technical Support) +1 888 412 7832