ARTESYN AGQ200 SERIES

132 Watts



Advanced Energy's Artesyn AGQ200 series of quarter-brick isolated DC-DC converters comprises four single output models offering fully regulated voltages of 1.2 V, 1.5 V, 1.8 V or 3.3 V. All four converters can deliver up to 40 amps and are rated at up to 132 watts, depending on the particular model. They have a wide 2:1 input range of 36 to 75 Vdc and are designed primarily for use with standard 48 V telecommunications equipment supplies.

DATA SHEET

Total Power:

132 Watts

Input Voltage:

36 - 75 V

# of Outputs:

Single

RoHS 6/6 COMPLIANT

SPECIAL FEATURES

- 2:1 wide input range
- Optimised for high density, small space applications
- Low ripple and noise
- Fixed switching frequency
- High efficiency
- High capacitive load capability
- Basic insulation system
- Openframe structure with baseplate option

SAFETY

- TUV/CE 60950-1
- UL/cUL 60950-1

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ELECTRICAL SPECIFICATIONS

Input	
Input range	36 - 75 VDC
Efficiency[2]	92% @ 3.3 Vo
Output	
Voltage tolerance	+/-1.6%
Line regulation	5 mV
Load regulation	Single output: 10 mV
Noise/ripple	3.3 Vo: 100 mV
Overvoltage protection	Hiccup
Overtemperature protection	Auto-restart
Switching frequency	280 KHz
Temperature co-efficient	±0.02 / °C
Isolation	
I/O isolation:	2000 VDC min.

ENVIRONMENTAL SPECIFICATIONS

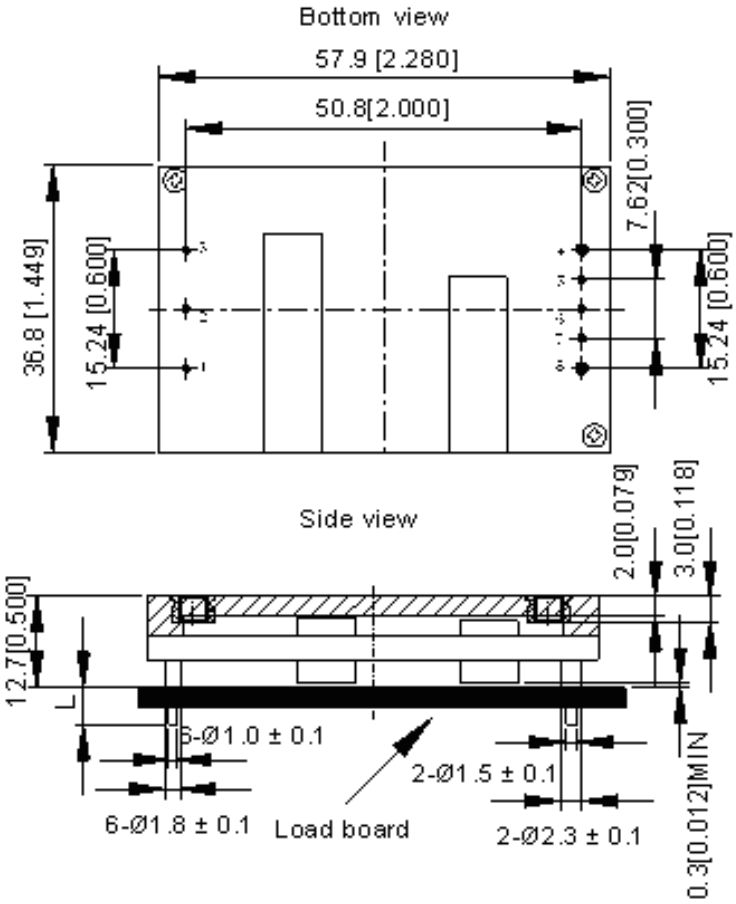
Operating ambient temperature range:	-40°C to +85 °C
Storage temperature:	-55 °C to +125 °C
Humidity:	5% to 95% (non-condensing)
MTBF:	2 Million hours
RoHS Compliant	

ORDERING INFORMATION

Model number	Input voltage	Output voltage	Power
AGQ200-48S1V2-4L	36 - 75 Vin	1.2 V @ 40 A	48 W
AGQ200-48S1V2B-4L	36 - 75 Vin	1.2 V @ 40 A	48 W
AGQ200-48S1V2P-4L	36 - 75 Vin	1.2 V @ 40 A	48 W
AGQ200-48S1V2PB-4L	36 - 75 Vin	1.2 V @ 40 A	48 W
AGQ200-48S1V5-4L	36 - 75 Vin	1.5 V @ 40 A	60 W
AGQ200-48S1V5-6L	36 - 75 Vin	1.5 V @ 40 A	60 W
AGQ200-48S1V5B-4L	36 - 75 Vin	1.5 V @ 40 A	60 W
AGQ200-48S1V5P-4L	36 - 75 Vin	1.5 V @ 40 A	60 W
AGQ200-48S1V5PB-4L	36 - 75 Vin	1.5 V @ 40 A	60 W
AGQ200-48S1V8-4L	36 - 75 Vin	1.8 V @ 40 A	72 W
AGQ200-48S1V8B-4L	36 - 75 Vin	1.8 V @ 40 A	72 W
AGQ200-48S1V8P-4L	36 - 75 Vin	1.8 V @ 40 A	72 W
AGQ200-48S1V8PB-4L	36 - 75 Vin	1.8 V @ 40 A	72 W
AGQ200B-48S2V5-4L	36 - 75 Vin	2.5 V @ 40 A	100 W
AGQ200B-48S2V5B-4L	36 - 75 Vin	2.5 V @ 40 A	100 W
AGQ200B-48S2V5P-4L	36 - 75 Vin	2.5 V @ 40 A	100 W
AGQ200B-48S2V5PB-4L	36 - 75 Vin	2.5 V @ 40 A	100 W
AGQ200B-48S3V3-4L	36 - 75 Vin	3.3 V @ 40 A	132 W
AGQ200B-48S3V3-6L	36 - 75 Vin	3.3 V @ 40 A	132 W
AGQ200B-48S3V3B-4L	36 - 75 Vin	3.3 V @ 40 A	132 W
AGQ200B-48S3V3B-6L	36 - 75 Vin	3.3 V @ 40 A	132 W
AGQ200B-48S3V3P-4L	36 - 75 Vin	3.3 V @ 40 A	132 W
AGQ200B-48S3V3PB-4L	36 - 75 Vin	3.3 V @ 40 A	132 W

- Standard version is negative enable
- "-6" = 3.8 mm pin length
- "-4" = 4.8 mm pin length
- "-L" = RoHS 6/6 compliance
- "-P" = Positive enable
- "-B" = Baseplate

MECHANICAL DRAWINGS



Unit: mm [inch]

Bottom view: pin on upside

Tolerance: X.Xmm ± 0.5mm [X.X in. ± 0.02in.]

X.XXmm ± 0.25mm [X.XX in. ± 0.01in.]

PIN ASSIGNMENTS

Pin #	Function
1	+V in
2	Enable
3	-V in
4	-V out
5	-Sense
6	Trim
7	+Sense
8	+V out

Notes:
1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

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.

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