



## CS-02, 04, 06, 07 DC to DC Converters

The CS 02 to 07 series of DC-DC converters are ideal for DC conversion in mid to large-sized communications applications.

**Low cost expansion solution** CS converters expand your load capabilities without the accompanying costs of adding a new DC power system. These converters provide an excellent source of power for loads requiring an alternative voltage input, polarity reversal or ground isolation.

**Field-proven operation** CS converters utilize the same durable monolithic design and advanced switched mode technology as the Argus RST rectifier series. Years of field experience have enabled Argus engineers to create a reliable, highly efficient, low noise converter.

**Comprehensive features** CS converters offer a wide range of standard and optional features, including alternate polarities for input or output grounding, output breaker protection, 19/ 23" rack mounting and combination voltmeter/ammeter. The converters are designed to operate in parallel (with option) to provide load sharing and redundancy for critical applications.

**High quality products backed by a solid warranty** In addition to being ISO 9000 registered, Argus's manufacturing center employs a rigorous quality control program to ensure all CS units meet the highest quality standards. Each product is designed with premium grade electronic components and is backed by a comprehensive factory parts and service warranty.

Available in 24 and 48 VDC inputs and 12, 24 and 48 VDC outputs

Maximum output of 1.2kW

Isolated input and output

Comes with input and output circuit breakers

Features efficient, natural convection cooled design

**Complete protection** Each converter is supplied with comprehensive features that protect the load and the unit from deficiencies in the input supply and environment. The input voltage shutdown protects the unit from voltages outside the operating range, while the output current is limited to 105% of the rated current. Should the load attempt to draw additional current, the converter automatically decreases the output voltage to keep the current at 105%. In the unlikely event that the unit is not able to properly power the load, the front panel converter fail lamp will illuminate and the remote alarm relay will be extended. These units have temperature protection in case of high ambient temperature or interruption of the convection cooling air path. This protection feature automatically decreases the output current to keep the unit from exceeding its operating temperature limit.



## CS Series DC-DC Converters

Model #	Input volts (DC)	Output volts (DC)	Max. output current (A)	Part #
CS02	20-30	44-52	22.5	012-002-20
CS04	40-60	22-26	40.0	012-004-20
CS06	21-30	11-14	40.0	012-006-20
CS07	42-60	11-14	40.0	012-007-20

**Indicators/Alarms:** Power on LED  
Over voltage protection LED  
Voltage test points  
Analog output ammeter/voltmeter (optional)  
Current test points (optional)  
Converter fail alarm†

**Adjustments:** Output voltage  
Output slope (load sharing)

**Cooling:** Natural convection (front to top)

† Form C contacts

### Specifications

#### Electrical

**Efficiency:** >90% for 48 and 24 volt output units  
>85% for 12 volt output units (Slightly lower with paralleling diode)

**Output regulation:** ±0.1% line and load (static)  
<1% deviation for 50 to 100% load step (dynamic)

**Response time:** 2ms to 0.1% of output

**Temperature coefficient:** <100ppm/°C

**Noise:**  
Voiceband: <22 dBnC  
Wideband: <10mV RMS (10kHz to 10MHz)  
<150mV pk to pk (10kHz to 100MHz)

**Acoustic noise:** 45dBA at 1m (3 ft)

**Soft start:** 33% per second

#### Mechanical

**Mounting:** All units are equipped with reversible rack brackets for 19" or 23" center or flush rack mounting. Consult factory for wall mount brackets.

**Dimensions:** 133 H x 432 W x 381 D (5.25" H x 17" W x 15" D)

**Weight:** 13.6 kg (30 lb.)

**Connections:** 1/4" studs  
**Alarms:** Terminal block  
0.55mm<sup>2</sup> to 1.5 mm<sup>2</sup> (#20 to #16 AWG)

#### Environmental

**Temperature:** 0° to 50°C (32° to 122°F)

**Humidity:** 0 to 90% R.H. non-condensing

**Elevation:** -500 to 2800m (-1640 to 9186 ft)

#### Features

**Protection:** Input/output breakers  
Over temperature protection  
Input high and low voltage shutdown  
Output over voltage protection  
Output current limit

### Ordering Information

To order, please specify the part number and list options required.

#### List Option Description

0*	Basic unit
19/23*	19" or 23" rack mounting (1 3/4" spacing)
20/24	19" or 23" rack mounting (1" spacing)
50*	Gray finish
81	Positive ground input
82	Negative ground input
83	Paralleling diode for positive output (not available on CS-02)
84	Paralleling diode for negative output
85	Output breaker on negative
86	Output breaker on positive (not available on CS-02)
87	Voltmeter/ammeter
88	Current test points

\* Default Options

Due to continuing product improvements, Argus reserves the right to change specifications without notice.

