

Advanced-PS™ Data Hiway System Azbil Robust Output Card (AROC)

1. Description

The Azbil Robust Output Card (AROC) is a common card file output card. The AROC can be used in both primary and reserve controllers of the Basic (CB), Extended (EC) and Multifunction (MC) controllers. The original analog output cards used in these controllers have well known design and component availability issues. The new AROC is a current technologies based re-design of the original output card. By replacing older, limited life technology with today's state of the art technologies, users of these products are assured of long term support and a more robust control system.

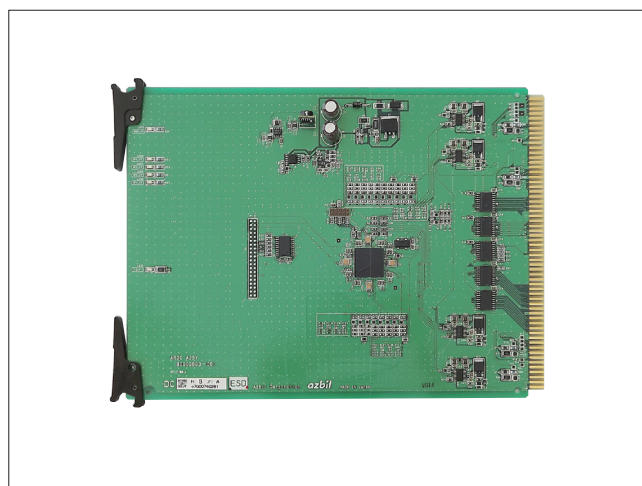
The AROC provides four output circuits that are equivalent to the original design and is compatible with other board types used within these controllers (see note concerning UCIO).

The AROC supports Data Hiway user requirements for economical continuation of process controls and process interface functions which are crucial for safe and stable process plant operations. The AROC provides the following specific benefits:

- Plug and play replacement for the original analog output cards
- Enhanced product reliability due to new technology design and improved internal diagnostics
- Open output detection with status indication via onboard LEDs
- Low Battery Voltage (BBU/UPS) detection and response prevents outputs from going full scale when battery supply voltage is critically low (versus the full scale output of the original design)
- Longer product support lifespan via new build capability and state of the art technology
- Power consumption reduced 4X

2. Ordering Information

Model No.	Part No.	Description
J-CAC10	80603883-001	Azbil Robust Output Card
J-CAC10-1	80604099-001	Azbil Robust Output Card w/ Documentation CD



3. Product Application

The AROC (80603883-001) replaces the following part numbers and is mounted in the identified controller slots:

CB/EC Primary and Reserve Controller

Slot No.	Part No.	Description
10	30731811-501	Output PWA
11	30731811-501	Output PWA

MC Primary and Reserve Controller

Slot No.	Part No.	Description
11	30731811-501	Output PWA
12	30731811-501	Output PWA

Note: When used in CB/EC controllers that have UCIO installed in slots 9 through 11, the AROC may only be placed in slot 11.

CB/EC Primary and Reserve Controller - UCIO

Slot No.	Part No.	Description
9	51305437-100	Jumper card
	51195339-101	Jumper cable
10	51305406-100	UCIO
11	51305406-100	UCIO => AROC

In the MC the UCIO is placed in slots 10 through 12, therefore the AROC may only be placed in slot 12.

MC Primary and Reserve Controller - UCIO

Slot No.	Part No.	Description
10	51305437-100	Jumper card
	51195339-101	Jumper cable
11	51305406-100	UCIO
12	51305406-100	UCIO => AROC

4. General Specifications

4.1 Functional Specifications

Item	Specification
Number of points per board	4
Output range	4 to 20 mA DC (0 to 100 %)
Output allowance	2.9 to 21.1 mA (-6.9 to 106.9 %)
Output accuracy	±0.35 %F S
Resolution	±0.0015 FS(16-bit D/Aconversion)
Effects of temperature variation	±0.01 %FS/ Deg C.
Effects of supply voltage variation	±0.05 FS/V.
Maximum load	800 ohm (at 21.5 V DC)
Safety	Power on loop back test. Low power supply voltage (16 V) detection cutoff output current to 0 mA.
D/A conversion cycle (all points)	30 ms
Other feature	Anlog Display I/F support

4.2 Environmental Conditions

Item		Specification			
		Reference Condition	Operating Condition	Operating Limit	Transportation & Storage Condition
Ambient Temperature	Range (deg c)	25 ± 2	0 to +40	0 to +50	-40 to +70
	Change Rate (deg c/min)	0	0.25	1	5
Relative Humidity	(%RH)	45 ± 5	10 to 90 %	5 to 90 %	5 to 95 %
Vibration	Frequency	0	0 to 60	0 to 60	0 to 60
	Acceleration	0	0.1	0.2	0.5
	Amplitude mmp-p	0	0.75	0.75	—
Impact	Acceleration (g)	0	1	5	25
	Impact time (msec)	0	30	30	30
Corrosive Environment		Conformal Coated			
EMI		EN55011 compliant			
RFI		EN61000 compliant			

5. Complied Regulatory Requirements

UL 61010-1
RoHS Directive

6. Dimension

Fully compatible with all Common Card Files of the CB/EC/MC
Hiway Boxes

- Advanced-PS is a registered trademark of Azbil Corporation in Japan.
- Other product names, model nos., and company names may be trademarks of the respective company.

Specifications are subject to change without notice.



Azbil Corporation
Advanced Automation Company

1-12-2 Kawana, Fujisawa
Kanagawa 251-8522 Japan
URL: <http://www.azbil.com/>

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