



4500 not pictured

IS Series

Mid-Frequency Inverter Resistance Welding Control

- 300, 800, 1400, 2200, and 4500 Amp primary output current **resistance weld control**
- Six feedback modes for optimum feedback based on process and expected variability
- Built-in current, voltage, power, time and pulse monitor for precise process control
- Triple pulse weld profile: W1, W2, W3, up to 19 pulsations per weld segment
- Displacement and force monitoring Initial, Final and "Weld to" displacement
- Cascade option: 5 and 7 way cascade IS-800CR only
- RS232, RS485, Ethernet IP communications

KEY FEATURES

Wide Current Range

The IS-Series weld controls provide a wide range of current (.050 kA - 320 kA) to meet all your application needs. See specifications of individual controls on back.

Displacement Limits & Force Monitoring

Dial-in the weld process by utilizing the IS Series' displacement and force features including initial part thickness, weld-displacement, and final displacement limits. Monitor the force of each segment of the weld pulse.

Six Weld Control Modes

Six different weld control modes allow the user to select the best mode for the application: primary limit, primary and secondary RMS, power RMS, voltage control, or pulse percent.

Triple Pulse Weld Capability

Provides flexible weld profiles with up to three pulses in each weld cycle. Each weld segment can be programmed with upslope and downslope and may have up to 19 pulsations per segment. Users may change the control mode for each weld segment.

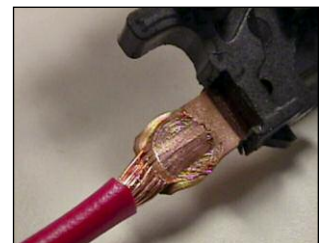
Factory Automation with Ethernet IP

Ethernet IP factory communications comes optional for the IS-family for integration into automation environments. It comes with built in Panel View screens for easy control of IS unit.

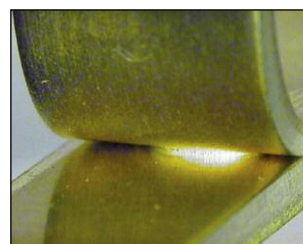
TYPICAL APPLICATIONS



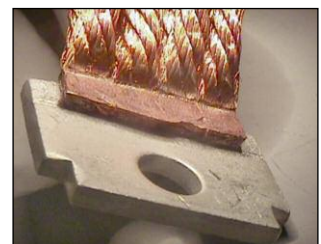
Commutator fusing



Wire termination



Sheet metal welding



Braided cable termination

TECHNICAL SPECIFICATIONS

	IS-300CR	IS-800CR	IS-1400CR	IS-2200CR	IS-4500CR
Maximum primary output current (peak)	300 amps @ 4.4%	800 amps @ 3%	1400 amps @ 3%	2200 amps @12%	4500 amps @12%
Settings					
– Constant current	0.05 - 20.00kA	0.05 - 40.0 kA	0.05 - 80.0 kA	2.00 - 160 kA	32.00 - 320 kA
– Constant power	0.05 - 20.0 kW	0.05 - 60.0 kW	0.05 - 120 kW	2.00 - 240 kW	32.00 - 480 kW
– Constant voltage	0.20 - 9.99 V	0.20 - 9.99 V	0.20 - 9.99 V	0.20 - 9.99 V	0.20 - 9.99 V
– Fixed pulse	10.0 - 99.9%	10.0 - 99.9%	10.0 - 99.9%	10.0 - 99.9%	10.0 - 99.9%
Weld monitors					
– Current	0.0 - 99.9kA	0.0 - 99.9 kA	0.0 - 99.9 kA	0.0 - 999.9 kA	0.0 - 999.9 kA
– Power	000.0 - 999.9 kW	000.0 - 999.9 kW	000.0 - 999.9 kW	000.0 - 999.9 kW	000.0 - 999.9 kW
– Voltage	0.00 - 9.99 V	0.00 - 9.99 V	0.00 - 9.99 V	0.00 - 9.99 V	0.00 - 9.99 V
– Pulse %	10.0 - 100%	10.0 - 100.0%	10.0 - 100.0%	10.0 - 100.0%	10.0 - 100.0%
Power source	380 - 480 VAC, Three Phase, 50/60 Hz, +-10%				
Output frequency	600 - 3000 Hz	600 - 3000 Hz	600-3000 Hz	600-3000 Hz	600-3000 Hz
Control modes*	Primary constant current control Primary limit control Secondary RMS control Power RMS control Voltage control Pulse % control				
Number of schedules	255 (Selectable by pendant or external I/O)				
Time settings	0000 - 9999 (ms) / 0000 - 9999 (CYC)				
Squeeze delay	0000 - 9999 (ms) / 0000 - 9999 (CYC)				
Squeeze	000 - 999 (ms) / 00 - 50 (CYC)				
Upslope 1, 2, 3	000 - 999 (ms) / 00 - 50 (CYC)				
Weld 1, 2, 3	0000 - 9999 (ms) / 0000 - 0999 (CYC)				
Cool 1, 2	000 - 999 (ms) / 00 - 50 (CYC)				
Down slope 1, 2, 3	00000 - 20000 (ms) / 00000 - 00999 (CYC)				
Hold	0 or 0010 - 9990 (ms) / 0000 - 0099 (CYC)				
Off time	01 - 19 (settable for WELD 1 to WELD 3, respectively)				
Pulsation setting					
Transformer turns ratio	1.0 - 199.9				
Valve setting	Up to 6 valves	Up to 6 valves	Up to 6 valves	Up to 6 valves	Up to 6 valves
Control gain (GAIN)	1 - 9				
Step-up/-down (STEPPER COUNT)	STEP Up (down) ratio (RATIO) Counter setting (COUNT)			1 - 9 (9 steps) 50 - 200% 0000 - 9999	
Weld count monitor (PRESET COUNT)	0000 - 9999				
External communication	RS-232 or RS485 (single or bi-directional), Ethernet IP				
Program protect	Programming protected when active				

*Model dependent

WEIGHT & DIMENSIONS

	IS-300CR	IS-800CR	IS-1400CR	IS-2200CR	IS-4500CR
Dimensions L x W x H	11 in x 7 in x 23 in (269 mm x 172 mm x 573 mm)	13 in x 30 in x 39 in (330 mm x 772 mm x 991 mm)	13 in x 31 in x 52 in (330 mm x 796 mm x 1321 mm)	15 in x 31 in x 55 in 380 mm x 787 mm x 1396 mm	20 in x 47 in x 79 in 500 mm x 1200 mm x 2005 mm
Weight	36 lb (16.5 kg)	240 lb (109 kg)	350 lb (159 kg)	320 lb (145 kg)	500 lb (227 kg)

Options & accessories	Ethernet IP, RS-485 communications (RS-232 standard) CE Filter Isolation contactors Programming pendant MA-660A	24 VDC valve option(115 VAC standard) • 2 amp • 5 amp 250 VA valve transformer (150 VA standard)
----------------------------------	--	---



1820 S. Myrtle Ave. • Monrovia, CA 91016 US
T: (626) 303-5676 • F: (626) 358-8048
info@amadamiyachi.com • www.amadamiyachi.com

AMADA MIYACHI AMERICA, INC. ISO 9001 Certified Company • 24/7 Repair Service: 1-866-751-7378

AMERICAS
AMADA MIYACHI
AMERICA (Midwest Office)
Detroit, Michigan
T: (248) 313-3078
midwestsales@amadamiyachi.com

AMADA MIYACHI DO
BRASIL LTDA.
Sao Paulo, Brasil
T: +55-11-4193-3607
antonio.ruiz@amadamiyachi.com

EUROPE
AMADA MIYACHI
EUROPE GmbH
Munich, Germany
T: +49-89-839403-0
infode@amadamiyachi.eu

ASIA
AMADA MIYACHI CO., LTD.
Isehara, Japan
T: +81-47-125-6177
sales@miyachi.com

AMADA MIYACHI
KOREA CO., LTD.
Seoul, Korea
T: +82-4-7125-6177
dykim@mkc.miyachi.com

AMADA
(THAILAND) CO., LTD.
Bangkok, Thailand
T: +66-2-170-5977
info@mtl.miyachi.com

AMADA MIYACHI
INDIA PVT., LTD.
Bangalore, Karnataka
T: +91-80-4092-1749
or +91-80-4092-3549
info@miyachiindia.com

AMADA MIYACHI
AMERICA (Mexico Office)
El Paso, Texas
T: (915) 881-8765
mxsales@amadamiyachi.com

AMADA MIYACHI
SHANGHAI CO., LTD.
Shanghai, China
T: +86-21-6448-6000
jwu@msc.miyachi.com

AMADA MIYACHI
TAIWAN CO., LTD.
Taipei, Taiwan R.O.C.
T: +886-2-2585-0161

AMADA
VIETNAM CO., LTD.
Ha Noi, Vietnam
T: +84-4-6261-4583

follow us on:



Specifications subject to change without notice. Copyright© 2018 AMADA MIYACHI AMERICA, INC. The material contained herein cannot be reproduced or used in any other way without the express written permission of AMADA MIYACHI AMERICA, INC. All rights reserved.