## DC Inverter Spot Welding / Fusing Power Supply NEW



**IS-300A** 

Compact and high power! High quality fusing!

#### Features

- Compact and 1.5 times higher output than that of the conventional model IS-120B.
- Detailed weld schedules can be set.
- Six control types

You can choose from; "Primary constant-current RMS," "Secondary constantcurrent RMS," "Secondary constant-power RMS," "Primary constant-current PEAK control," or "Constant-phase" to attain stable welding quality.

- Different setting can be set at each welding. Pulsation, Upslope, Downslope and Weld stop.
- Power supply voltage fluctuation compensation control (effective when PULSE LIMIT is set)

The pulse limit is corrected according to the fluctuation in the power-supply voltage on the primary side.

This function is valid only in the primary constant-current PEAK control mode (PLM).

• Transformer selecting function

Up to five transformers can be connected with IS-300A by an optional MA-650A the transformer selector.

This function contributes to the improvement in productivity.

• Interrupt feature Interrupt feature functions when a displacement amount reaches up to set level and





stops current to obtain more stable fusing. For this feature, it needs to be connected with a weld checker with a built-in displacement monitor and set a displacement amount of electrodes beforehand.

- Program unit MA-660A (Sold Separately) Employing an easily viewable color LCD. Current, voltage, or power can be monitored.
- Multilingual software

You can select the language from Japanese, English, Chinese, and Korean.

• Samples









▲Multiple wires and a terminal

▲Terminal and lead wire





## **Specifications**

| Model  |                     | IS-300A-00-00   | IS-300A-00-01                              |  |
|--|---------------------|---|--|--|
| Power requirements (Fixed at ex-<br>factory) |                     | 3-phase, 200–240<br>VAC<br>±10% (50/60 Hz)  | 3-phase, 380–480<br>VAC<br>±10% (50/60 Hz) |  |
| Max. output current                          |                     | 300A (Peak value)   |  |  |
| Number of schedules                          |                     | 255   |  |  |
| Output frequency                             |                     | 600Hz~3kHz (In 100 Hz increments)   |  |  |
| Control method                               |                     | Primary constant-current RMS<br>Secondary constant-current RMS<br>Secondary constant-power RMS<br>Primary constant-current PEAK (with<br>pulse width limit funcution)<br>Secondary constant-voltage RMS<br>Constant-phase control |  |  |
|  |                     | msec mode / cyc mode  |  |  |
|  | SQUEEZE<br>DELAY    | 0000~9999ms / 000~9999cyc   |  |  |
|  | SQUEEZE             | 0000~9999ms / 000~9999cyc   |  |  |
| Timer setting<br>range                       | UP SLOPE<br>1,2,3   | 000~9999ms / 00~50cyc   |  |  |
|  | WELD 1,2,3          | 000~999ms / 00~50cyc  |  |  |
|  | DOWN SLOPE<br>1,2,3 | 000~999ms / 00~50cyc  |  |  |
|  | COOL 1,2            | 000~999ms / 000~9999cyc   |  |  |
|  | HOLD                | 00000~20000ms / 000~9999cyc   |  |  |
|  | OFF *1              | 0 or 0010~9990ms / 00~99cyc   |  |  |
| Transformer turns ratio                      |                     | 1.0~199.9   |  |  |



| Pulsation setting  |                        | 01~19   |  |
|--|------------------------|---|--|
| Valve setting  |                        | 2   |  |
| Setting range<br>(1)Constant current *2<br>(2)Constant power<br>(3)Constant voltage (4)Constant<br>phase |                        | (1)0.1~20.0kA (2)0.1~20.0kW<br>(3)0.20~9.99V (4)10.0~99.9%                |  |
| Current monitor  |                        | 00.0~99.9kA / 0.00~9.99kA   |  |
| Power monitor  |                        | 000.0~999.9kW/00.00~99.99kW   |  |
| Voltage monitor  |                        | 0.00~9.99V  |  |
| Pulse width monitor  |                        | HIGH 10.0~100%  |  |
| Cooling method   |                        | Forced air-cooling  |  |
| Data communication   |                        | RS-232C (One-way communication) /<br>RS-485 (Bidirectional communication) |  |
| Operating<br>environment   | Ambient<br>temperature | +5 <b>~</b> +40°C   |  |
|  | Humidity               | 90% max. (no condensation)  |  |
|  | Altitude               | 1000m max.  |  |
| Weight   |                        | 16.5kg  |  |

\*1: No repetitive operation will be performed if "0" is selected for OFF (off time).
\*2: Primary current can be set up to 300 A.

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#### **External view**





# Corresponding transformer

| Model                        | ITH-651C6W | ITI-875A6W | SIT-F241-HC |
|------------------------------|------------|------------|-------------|
| Rated capacity               | 26.8kVA    | 37.1kVA    | 75kVA (50%) |
| Rated primary voltage        | 300V/600V  |            | 300V        |
| No-load secondary<br>voltage | 9.3V       | 12.5V      | 11.7V       |
| Transformer turns ratio      | 32:1/64:1  | 24:1/48:1  | 24:1        |
| Input frequency              | 1kHz       |            |             |
| Maximum welding<br>current   | 7000A      | 7000A      | 14400A      |
| Duty cycle                   | 8.5%       | 9%         | 10%         |



| Fan voltage                  | DC24V                       | -                           |                             |
|------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Cooling method               | Forced air-cooled           |                             |                             |
| Weight                       | 16kg                        | 19kg                        | 35kg                        |
| Outline dimensions<br>(mm) * | 168(W) x 398(D)<br>x 199(H) | 168(W) x 446(D)<br>x 199(H) | 180(W) x 481(D)<br>x 240(H) |

\* Include projections



