QC-450 High Performance Welding Monitor

Highly Reliable welding by “Visualizing” welding process

Measure 255 Condition Setting Easy Setting

- Max. sampling frequency: 50kHz (Min. resolution: 0.02ms)
- Max. welding time: 3 sec
- Simultaneous measurement of 2 stage welding by one unit
- Measurement Items: Voltage, Current, Power, Resistance, Conduction angle, Displacement, Pressure, Weld time, 2 external analog input (Thermocouple, Radiometer, etc.)

Visualize 5.7” Color Touch Panel Rich Information

- Display Max. 10 items (Measured/Calculated/Counted)
- Run Chart display visualizes the transition
- Analog Measurement Item 11 Types (Unit: 22 kinds)

- Visualization of the transition helps to estimate and comprehend;
  ◎ Timing of electrode exchange  ◎ Timing of switching welding parameter
  ◎ Degradation of equipment ➔ ➔ ➔ Maintain quality by timely maintenance

Data Transfer Via Ethernet IoT

- Analysis and comparison of accumulated transition data help to comprehend;
  ◎ Variation among batches ➔ ➔ ➔ Feedback to pre-process for improvement
  ◎ Variation among facilities ➔ ➔ ➔ Common quality control worldwide

- 10 I/O output (Any 7 points), 6 process control output (Any 6 points)
  ◎ Feedbacks support standardized quality by weldi stop by displacement control, etc.

Record Integrated Printer Easy data saving

- Thermal printer
- CF card

Nippon Avionics Co., Ltd.
### QC-450 High Performance Welding Monitor

<table>
<thead>
<tr>
<th>Item</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measurement</strong></td>
<td>Current (RMS/PEAK), Voltage (RMS/PEAK), Weld time (Weld cycle), Displacement, Pressure, Conduction angle, External analog X2</td>
</tr>
<tr>
<td><strong>Monitor Display</strong></td>
<td>Current (RMS/PEAK), Voltage (RMS/PEAK), Weld time (Weld cycle), Displacement, External analog X2</td>
</tr>
<tr>
<td><strong>Waveform Display</strong></td>
<td>REAL Current, AVE Current, REAL Current, AVE Current, Power, Resistance, Displacement, Pressure, External analog X2</td>
</tr>
<tr>
<td><strong>Run Chart Display</strong></td>
<td>PEAK Current, RMS Current, PEAK Voltage, RMS Voltage, Power, Resistance, Displacement, Pressure, External analog x2, Calculated value, Time</td>
</tr>
</tbody>
</table>

**Current Measurement Range**: 50 ~ 2,000A, 100 ~ 20,000A, 1,000 ~ 100,000A

**Time Measurement Range**: 0.00 ~ 3000.00ms, 0.0 ~ 300.0CYC

**Display**: 5.7" color LCD touch panel

**Number of Conditions**: 255

**Printer**: Thermal printer

<table>
<thead>
<tr>
<th>Interface</th>
<th>I/O</th>
<th>DC24V NPN, PNP, and external power</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Judgment output : 10 lines</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Process control output : 6 lines</td>
</tr>
</tbody>
</table>

**Communication**: Ethernet

**Memory Card**: CF Card

**Input Power**: AC100 to 240V ±10% 50/60Hz

**Weight**: 5.6kg

**Dimension**: W170 x H256 x D338mm

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**Option**

Optional board is required for measurement of displacement • pressure. Also, sensors are separately sold.

- **Toroidal Coil**
- **Toroidal Coil (x10)**
- **AC Cable**

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The appearance and specification are subject to change without notice.

**Contact Information**

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