Enersine Active Power Filter

ESD34 400V 100A/150A
Power Module
Feature

- Apply to 3 Phase 3 Wires/4 Wires System
- Advanced DSP technology, programmable
- Close/Open Loop Control
- Compensate up to 51st harmonics
- Compensate up to 12 different harmonics simultaneously
- Power Factor Correction
- Correct unbalance three phase utility
- No problem of overload
- Shunt connection, easy for maintenance
Feature

- Two power rating 400V 100A & 150A
- IP00 Design
- Compact size design
- Easy to install to smaller cabinet.
- 7” Colorful LCD Touch Screen
- One LCD Display Monitor and Control up to 8 Modules in parallel
Configuration

1. Main Fuse
2. Soft-start Electromagnetic Contactor Module
3. Link Inductor
4. Ripple Current Filter Module
5. High Frequency Inductor
6. IGBT Power Converter Module
7. DC Capacitor Module
Ablerex is Power Converter

**IP00 Design**

- Control Unit
- Inductor
- IGBT & Heat Sink
- DC Capacitor Module
- Ripple Current Filter Module
- Neutral bus bar
- Input Fuse
- Cooling Fan

Front View

Lateral View

Dimensions:
- Front View: 440 mm
- Side View: 441 mm

1500 mm
IP20 Cabinet

Front View

Front Internal View

Right Internal View

Right View

Ablere is Power Converter

600 mm

600 mm

1900 mm

1800 mm

7” LCD Display

100 mm
• Up to 8 Modules in Parallel.
• The Maximum Capacity Up to 1200A.
• Only One LCD Display is needed.
Ablerex is Power Converter

7” Colorful LCD Touch Screen
# Specification

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equipment Storage Temperature</td>
<td>-20°C to + 70°C</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>+0°C to +40°C</td>
</tr>
<tr>
<td>Relative Humidity</td>
<td>&lt;95%</td>
</tr>
<tr>
<td>Operating Altitude</td>
<td>&lt;1000 m</td>
</tr>
<tr>
<td>Reference Harmonic Standard</td>
<td>EN61000-3-4, IEEE 519-1992</td>
</tr>
<tr>
<td>Reference Design Standard</td>
<td>EN60146</td>
</tr>
<tr>
<td>Safety Standard</td>
<td>EN50178</td>
</tr>
<tr>
<td>Electromagnetic Compatibility</td>
<td>IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-6</td>
</tr>
</tbody>
</table>
## Specification

<table>
<thead>
<tr>
<th>Model</th>
<th>ESD34-100</th>
<th>ESD34-150</th>
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</thead>
<tbody>
<tr>
<td>Input Voltage</td>
<td>400V +15%,-20%</td>
<td></td>
</tr>
<tr>
<td>Phase/Wires</td>
<td>3 phase 4 wires/3wires</td>
<td></td>
</tr>
<tr>
<td>Frequency</td>
<td>50/60±3 Hz (Auto Sensing)</td>
<td></td>
</tr>
<tr>
<td>Maximum Compensation Current/Phase</td>
<td>100 Arms</td>
<td>150 Arms</td>
</tr>
<tr>
<td>Maximum Compensation Current of Neutral</td>
<td>300 Arms</td>
<td>450 Arms</td>
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</table>

- **Compensated Harmonic Orders**: From 2nd to 51st order. Up to 12 orders actives simultaneously (2nd ~31st). Higher Order Compensation (32nd~51st) Disable/Enable operation.

- **Power Factor Correction**: Compensate both lagging and leading reactive power. Power factor can be programmed from 0.7 lagging to 0.7 leading.

- **CT Ratio**: Can be set. Primary Current: 100A~10000A, Secondary Current: 1A(Standard)/5A (Optional)

- **CT Location**: Source Side: Close Loop Control, Load Side: Open Loop Control

- **Response Time**: < 20 ms

- **Inrush Current**: Less than rated current

- **Current Limitation**: Yes, at full correcting

- **Parallel**: Up to 8 Units

- **Maximum Heat losses**: 3200 Watt

### Dimensions (WxDxH)

<table>
<thead>
<tr>
<th></th>
<th>IP00</th>
<th>IP20</th>
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<tbody>
<tr>
<td></td>
<td>440 x 441 x 1500 mm</td>
<td>600 x 600 x 1900 mm</td>
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### Weight

<table>
<thead>
<tr>
<th></th>
<th>IP00</th>
<th>IP20</th>
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<tbody>
<tr>
<td></td>
<td>110 Kgs</td>
<td>120 Kgs</td>
</tr>
<tr>
<td></td>
<td>195 Kgs</td>
<td>205 Kgs</td>
</tr>
</tbody>
</table>
Let’s Create a Powerful Future