

## **Enersine Active Power Filter**

**ESD34 400V 100A/150A  
Power Module**



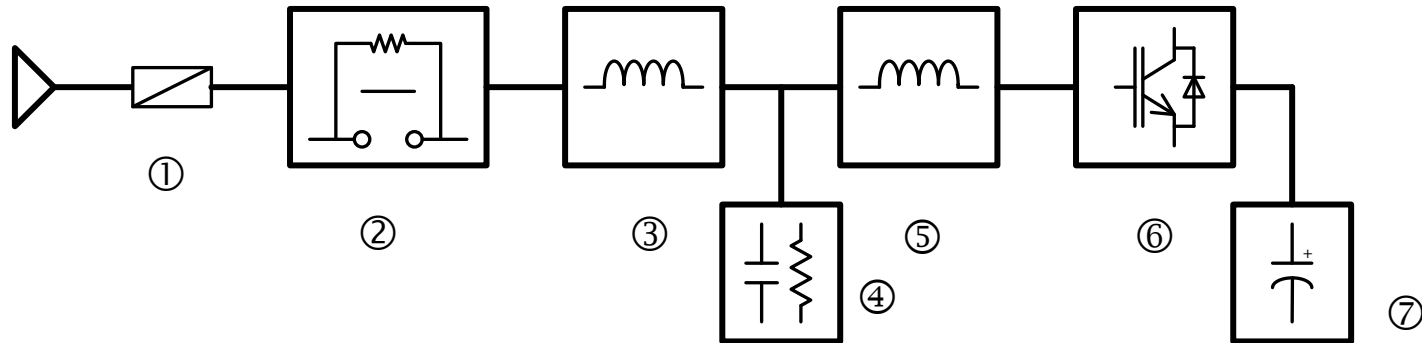
## ***Feature***

- 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***

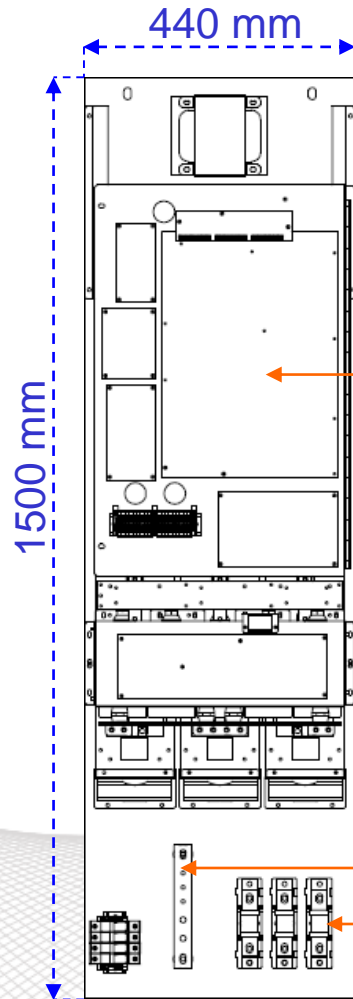
- Two power rating 400V 100A & 150A
- IP00 Design
- Compact size design
- Easy to install to smaller cabinet.
- 7" Colorful LCD Touch Screen
- One LCD Display Monitor and Control up to 8 Modules in parallel

## 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

## IP00 Design



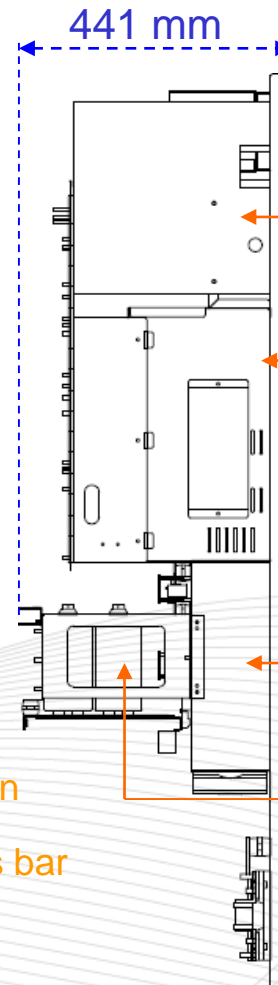
Front View

Control Unit

Cooling Fan

Neutral bus bar

Input Fuse



Lateral View

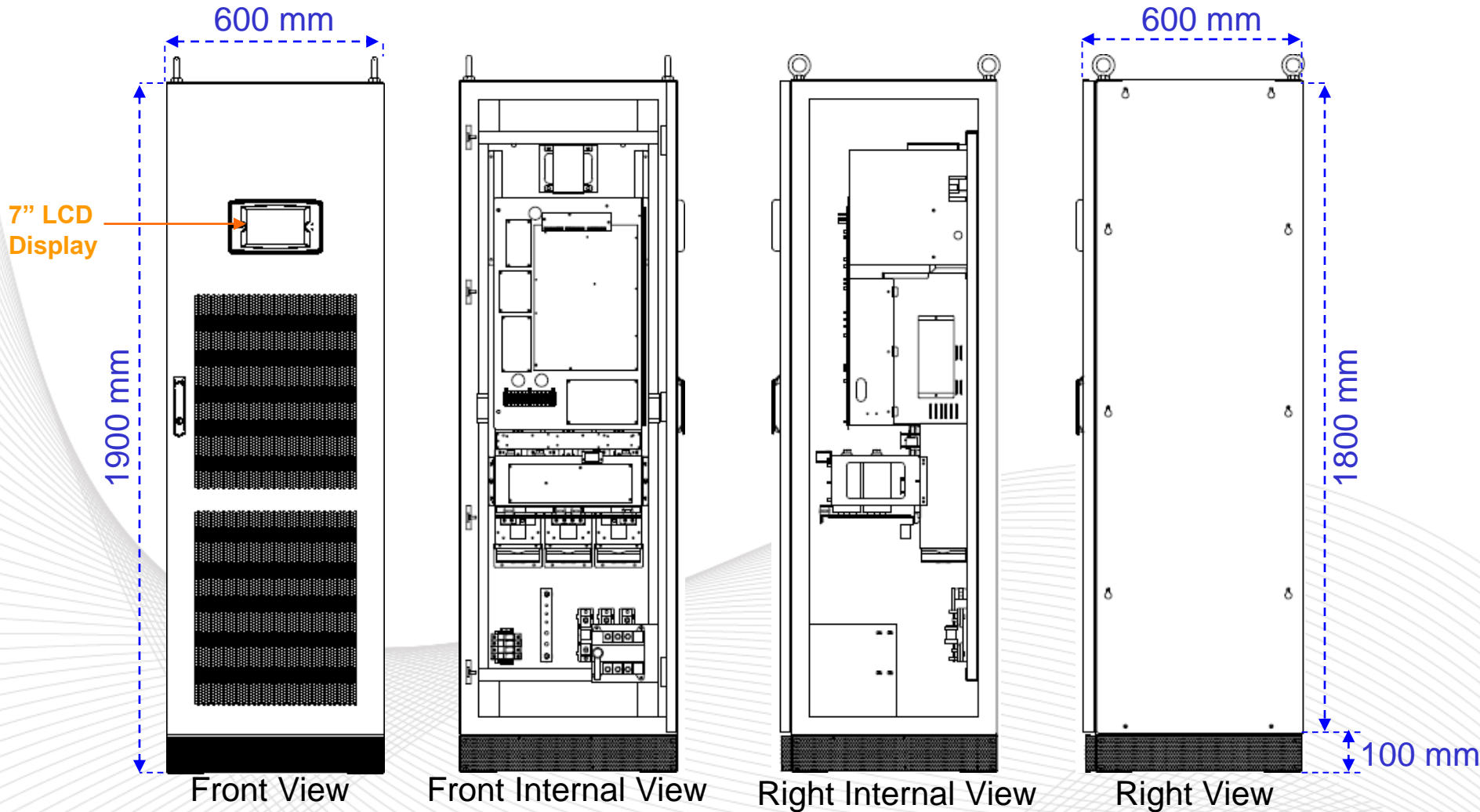
Ripple Current Filter Module

Inductor

IGBT & Heat Sink

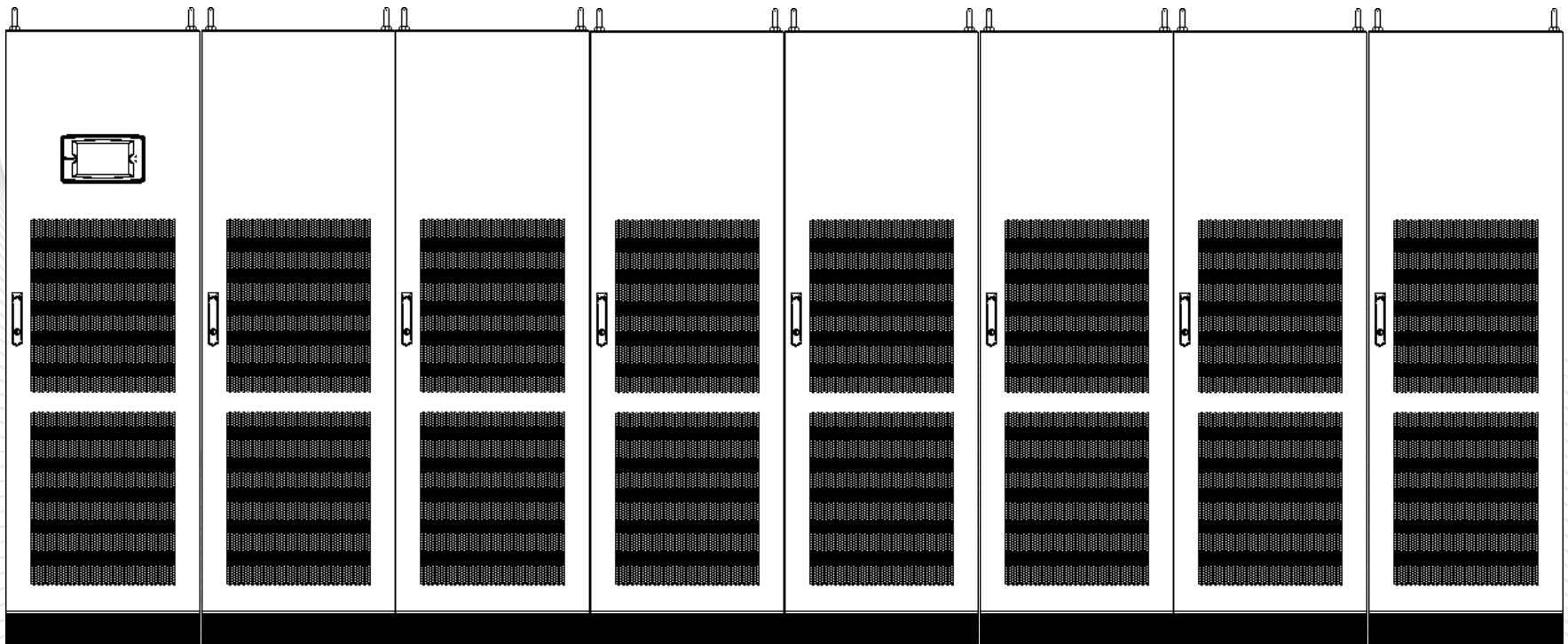
DC Capacitor Module

## *IP20 Cabinet*

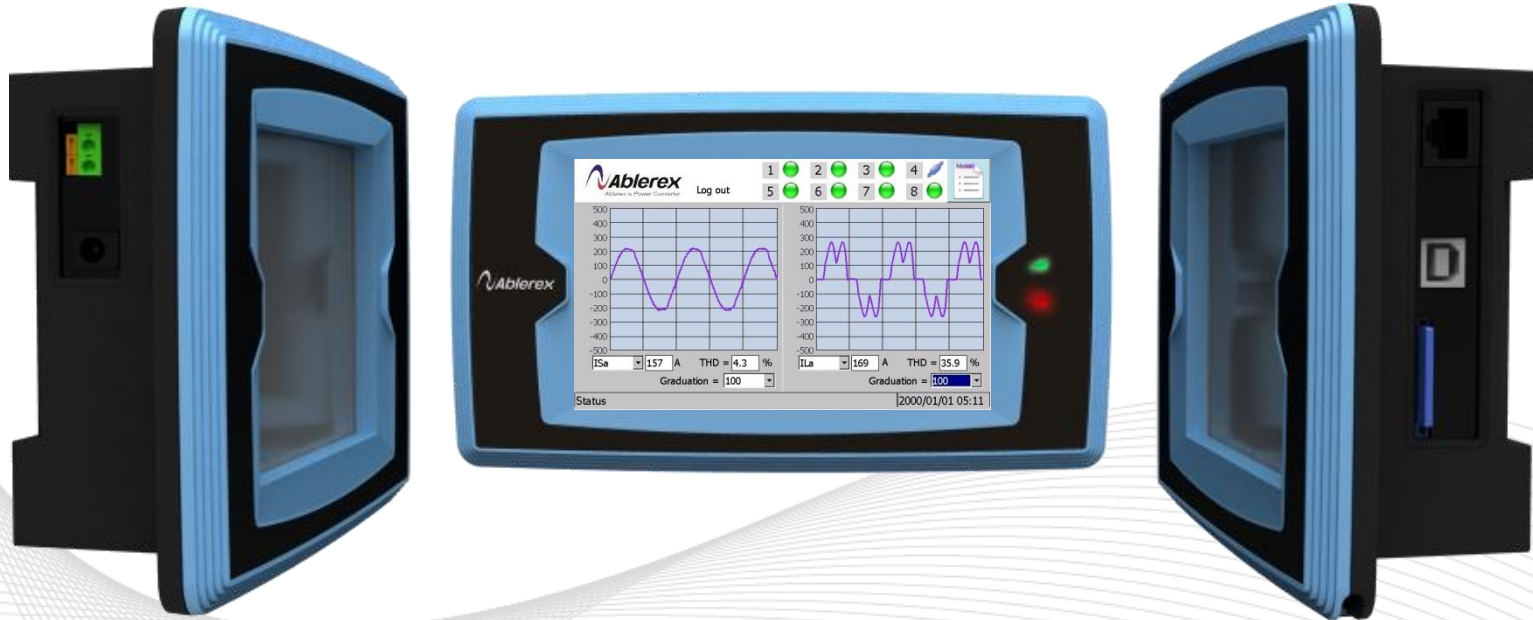


## *Parallel*

- Up to 8 Modules in Parallel.
- The Maximum Capacity Up to 1200A.
- Only One LCD Display is needed.



## **7" Colorful LCD Touch Screen**





## **Specification**

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

## Specification

Model	ESD34-100	ESD34-150	
Input Voltage	400V +15%,-20%		
Phase/Wires	3 phase 4 wires/3wires		
Frequency	50/60±3 Hz (Auto Sensing)		
Maximum Compensation Current/Phase	<b>100 Arms</b>	<b>150 Arms</b>	
Maximum Compensation Current of Neutral	<b>300 Arms</b>	<b>450 Arms</b>	
Compensated Harmonic Orders	From 2 <sup>nd</sup> to 51 <sup>st</sup> order. Up to 12 orders actives simultaneously (2 <sup>nd</sup> ~31 <sup>st</sup> ). Higher Order Compensation (32 <sup>nd</sup> ~51 <sup>st</sup> ) 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	Primary Current: 100A~10000A	Can be set. 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)	<b>IP00</b>	<b>440 x 441 x 1500 mm</b>	
	<b>IP20</b>	<b>600 x 600 x 1900 mm</b>	
Weight	<b>IP00</b>	<b>110 Kgs</b>	<b>120 Kgs</b>
	<b>IP20</b>	<b>195 Kgs</b>	<b>205 Kgs</b>



*Ablerex is Power Converter*

*Let's Create a Powerful Future*