

**ESR H SERIES - THREE PHASE - T2F & T3F - 450 to 3125 kVA**

**STATIC DIGITAL VOLTAGE REGULATION**  
highly efficient with exceptionally ultra fast speed of response – ideal for highly sensitive / mission critical loads and applications.

**FEATURES**

- **Automatic Voltage Regulation**  
Digitally controlled voltage stabilisation
- **Wide Range of Power Ratings**  
Three Phase 450 to 3125 kVA
- **Choice of Input Voltage Swing Ranges**  
Input Swing -  $\pm 15\%$  (S15),  $\pm 20\%$  (S20),  $\pm 25\%$  (S25),  $\pm 30\%$  (S30),  $\pm 35\%$  (S35),  $\pm 40\%$  (S40),  $\pm 45\%$  (S45),  $\pm 0$  or  $\pm 50\%$  (S50) - customer to specify.
- **Precise Output Voltage Regulation**  
Output Voltage Accuracy  $\pm 1\%$  to  $\pm 5\%$
- **Transient Voltage Surge Suppression**  
TVSS - Protects loads against harmful high-energy surges, transients and spikes.
- **Solid State Design**  
Highly reliable and durable electronic static design with no moving parts, delivering a virtually 'Maintenance Free' voltage regulation solution.

## STATIC ELECTRONIC DIGITAL DESIGN AC VOLTAGE STABILISERS & REGULATORS

### AC THREE PHASE - 450 TO 3125 kVA

380/220V - 400/230V - 415/240V - 50 or 60Hz

X4680 MODELS: 440/256V - 460/265V - 480/277V - 600/346V - 50 or 60Hz

# ESR

H SERIES  
**THREE PHASE**  
4 WIRE - WITH NEUTRAL

### ENSURING AN EXTREMELY STABLE AC MAINS SUPPLY VOLTAGE

Suitable for most types of electrical and electronic equipment, the feature rich VSi's ESR Static Electronic Digital AC Voltage Stabilisers continuously monitor the incoming supply. Should the incoming voltage rise or drop, the Stabilisers will automatically control the output to ensure the voltage reaching the load equipment always remains constant at the requisite voltage.

Inbuilt spike protection ensures the load is continuously protected against harmful mains born high energy spikes and surges.

#### ESR Series Static Electronic Digital AC Voltage Stabilisers offer -

- **Ultra Fast Speed of Response**  
Compact in size and quiet in operation, ESR Series AC Voltage Stabilisers deliver an unsurpassable speed of response making them ideal for highly sensitive loads.
- **Static / Solid State Design**  
ESR Series AC Voltage Stabilisers use solid state devices (SCRs) to select transformer taps to regulate the output. Unlike other similar solutions, ESR Stabilisers by nature of their design do not require the SCRs to carry the full load, just a fraction - thereby delivering far superior reliability to similar systems found on the market. With no moving parts, they are virtually 'Maintenance Free' solutions.
- **Automatic Electronic Bypass**  
Inbuilt as standard on all models, the automatic bypass maintains power to the load and unit functionality, except regulation, in the event of a problem.
- **All Digital Controls**  
All digital microprocessor control and operation ensures ESR AC Voltage Stabilisers provide the highest level of performance. The standard LCD display provides information on the operational status and loading on the stabilizer, and enables the configuration of a number system parameters for more demanding applications where customization is required.

- **Independent Phase Control** Independent phase voltage sensing and control to ensure the individual phase voltages remain stable - regardless of load unbalance .
- **Inbuilt High Overload Capability** Ideal for loads with an inherent initial high current draw on start up.
- **Over / Low Voltage Protection** Ability to automatically shutdown the Voltage Stabiliser in the event of the input supply voltage going outside pre-set input voltage parameters.
- **Phase Failure Protection** Protection of the load in the event of phase failure.
- **SPD Class II Surge Arrestors** Protection against extremely high voltage surges and transients caused by lightning induced strikes on the utility supply line.
- **Automatic Bypass Protection** Transfer to internal bypass operation in the event of a problem.
- **Input & Output Protection with Manual Bypass** Input Switch / Breaker with Output Isolation and Manual Bypass facility, including integrated mechanical / electronic interlocking to prevent inadvertent mis-operation..
- **Digital LCD Monitoring Panel & RS/485 Interface** Displaying real time operational status, key system readings and alarm events with RS/485 Interface ability for remote monitoring.
- **Optional Accessories** Input Isolation Transformer, IP54 / NEMA 3 Style Outdoor Enclosures & alternative Switching Arrangements.
- **Compliance with International Standards** Designed, manufactured and supplied to comply with leading international standards. Fully CE compliant and labelled.

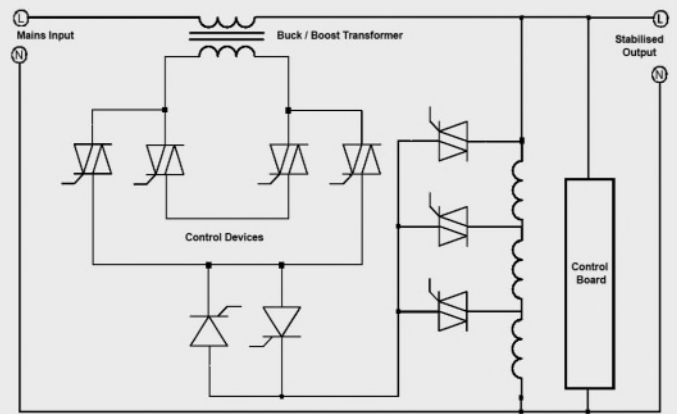


## DIGITAL BUCK BOOST SCR DESIGN TOPOLOGY

Based on the extremely well proven Buck Boost design topology which underlines our Servo Electronic AC Voltage Stabilisers, ESR Static Voltage Regulators utilise SCRs (Silicon Controlled Rectifiers) to select transformer taps to deliver a highly stable output voltage with an extremely fast correction time.

Unlike traditional Electronic SCR based solutions, the underlying Buck Boost topology ensures that the SCRs are not required to handle the full load current, but merely a fraction of the load current. By suitably sizing the ratings of the SCRs, ESR Stabilisers are able to deliver impressive over-load capabilities and considerable enhanced reliability.

The utilisation of the latest in microprocessor control and the inclusion as standard on all models input and output protection, ensures that the SCRs are fully protected against over-current conditions and other malfunctions, which historically have been viewed as the primary weakness of Electronic based SCR solutions.



## VOLTAGE CHOICES AVAILABLE

Also available as 3 Wire Solutions (No Neutral)  
- ESR-HD-3P & ESR-LD-3P SERIES

### 4 WIRE SOLUTIONS

THREE PHASE WITH NEUTRAL (+ GROUND / EARTH)

#### H SERIES

450 to 3125 kVA



#### High Voltage Models:

380/220V, 400/230V or 415/240V

X4680 Models - 440/254V, 460/265V, 480/277V or 600/346V

Other voltages available on individual request / quotation.

#### LY SERIES

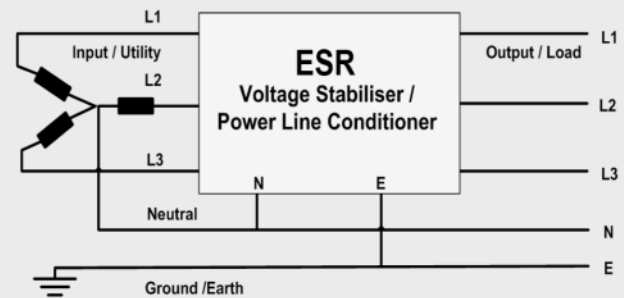
450 to 500 kVA



#### Low Voltage Models:

190/110V, 200/115V, 208/120V or 220/127V

Other voltages available on individual request / quotation.



## INPUT VOLTAGE WINDOW OPTIONS

### H SERIES - ESR-H-3P-T2F/T3F-S\* Input Voltage Windows Options

Other Swings available to special order / request

Nominal Three Phase Voltage	INPUT VOLTAGE SWINGS / SWING MODEL NO S* VARIANTS							
	S15		S20		S25		S30	
	450 to 3125 kVA		450 to 3125 kVA		450 to 2500 kVA		450 to 2000 kVA	
	L-L	L-N	L-L	L-N	L-L	L-N	L-L	L-N
<b>380V</b> L-N: 220V	323 to 437V (± 15%)	187 to 253V	304 to 456V (± 20%)	176 to 264V	285 to 475V (± 25%)	165 to 275V	266 to 494V (± 30%)	154 to 286V
<b>400V</b> L-N: 230V	340 to 460V (± 15%)	196 to 265V	320 to 480V (± 20%)	184 to 276V	300 to 500V (± 25%)	173 to 288V	280 to 520V (± 30%)	161 to 299V
<b>415V</b> L-N: 240V	353 to 477V (± 15%)	204 to 276V	332 to 498V (± 20%)	192 to 288V	311 to 519V (± 25%)	180 to 300V	291 to 540V (± 30%)	168 to 312V

Nominal Three Phase Voltage	INPUT VOLTAGE SWINGS / SWING MODEL NO S* VARIANTS							
	S35		S40		S45		S50	
	250 to 1200 kVA		250 to 1200 kVA		250 to 1200 kVA		250 to 1000 kVA	
	L-L	L-N	L-L	L-N	L-L	L-N	L-L	L-N
<b>380V</b> L-N: 220V	247 to 513V (± 35%)	143 to 297V	228 to 532V (± 40%)	132 to 308V	209 to 551V (± 45%)	121 to 319V	190 to 570V (± 50%)	110 to 330V
<b>400V</b> L-N: 230V	260 to 540V (± 35%)	150 to 311V	240 to 560V (± 40%)	138 to 322V	220 to 580V (± 45%)	127 to 333V	200 to 600V (± 50%)	115 to 345V
<b>415V</b> L-N: 240V	270 to 560V (± 35%)	156 to 324V	249 to 581V (± 40%)	144 to 336V	229 to 601V (± 45%)	132 to 348V	208 to 622V (± 50%)	120 to 360V

Also available with Similar Input Voltage Swings for X440 (440V), X460 (460V), X480 (480V) & X600 (600V) Models.



## DESIGNED SPECIFICALLY FOR TODAY'S MODERN NEEDS

Voltage Regulators are designed to stabilize the voltage when it fluctuates, up or down.

They are essential whenever reliable power is needed or when normal operation of electrical or electronic equipment is disrupted by voltage variations.

In general when suppliers of today's modern electrical and electronic equipment design their products they do so knowing that most electrical utilities around the world cannot provide or promise better than a  $\pm 5\%$  output voltage accuracy of nominal and as such they design their equipment so it is able to operate efficiently within this range.

**ESR Stabilisers** are specifically designed to meet the requirements of today's modern loads, being feature rich and virtually maintenance free static mains control solutions.

They ensure the availability of a constant voltage at a level that always meets the design requirements of the load equipment, even for the most challenging of power environments or site loads.

Configured for optimal energy efficiency and design life expectancy, **ESR Stabilisers** are supplied by default with the output voltage accuracy set for  $\pm 3\%$  ( $\pm 5\%$  for S45+ Models), being easily site-adjustable to deliver a more or less precise output voltage accuracy - as considered most appropriate for a particular site's needs / available options.



## PRODUCT SELECTION TABLE

S\* = Selected permissible input voltage window - S15 ( $\pm 15\%$ ), S20 ( $\pm 20\%$ ), S25 ( $\pm 25\%$ ), S30 ( $\pm 30\%$ ), S35 ( $\pm 35\%$ ), S40 ( $\pm 40\%$ ), S45 ( $\pm 45\%$ ) or S50 ( $\pm 50\%$ )

ESR Models	Output Power Capacity	Standard Switch Arrangement	Max Rating (Amps per Phase)							Dimensions	Weights
			H SERIES			H-X4680 SERIES					
	kVA		@ 380V	@ 400V	@ 415V	@ 440V (X440)	@ 460V (X460)	@ 480V (X480)	@ 600V (X600)	W x H x D (mm)	Kg
ESR-450H-3P-T2F-S*	450	T2F	683	649	625	590	564	541	432	Dimensions & Weights For S15 to S50 models available on individual request.	
ESR-500H-3P-T2F-S*	500	T2F	759	721	695	655	627	601	481		
ESR-600H-3P-T2F-S*	600	T2F	911	865	834	787	752	721	577		
ESR-650H-3P-T2F-S*	650	T2F	987	937	904	852	815	781	625		
ESR-700H-3P-T2F-S*	700	T2F	1063	1010	973	918	878	841	673		
ESR-750H-3P-T2F-S*	750	T2F	1139	1082	1043	983	941	901	721		
ESR-800H-3P-T2F-S*	800	T2F	1215	1154	1112	1049	1003	962	769		
ESR-900H-3P-T2F-S*	900	T2F	1367	1298	1251	1180	1129	1082	865		
ESR-1000H-3P-T2F-S*	1000	T2F	1518	1443	1390	1311	1254	1202	962		
ESR-1200H-3P-T2-S*	1200	T2F	1822	1731	1669	1574	1505	1443	1154		
ESR-1250H-3P-T2F-S*	1250	T2F	1898	1803	1738	1639	1568	1503	1202		
ESR-1500H-3P-T2F-S*	1500	T2F	2278	2164	2086	1967	1882	1803	1443		
ESR-1600H-3P-T2F-S*	1600	T2F	2430	2308	2225	2098	2007	1924	1539		
ESR-2000H-3P-T2F-S*	2000	T2F	3037	2885	2781	2623	2509	2404	1924		
ESR-2500H-3P-T3F-S*	2500	T3F	3797	3607	3477	3279	3137	3006	2404		
ESR-3000H-3P-T3F-S*	3000	T3F	4556	4328	4172	3935	3764	3607	2885		
ESR-3125H-3P-T3F-S*	3125	T3F	4746	4509	4346	4099	3921	3757	3006		

Note: Smaller kVA and alternative voltage options available to order / individual request.

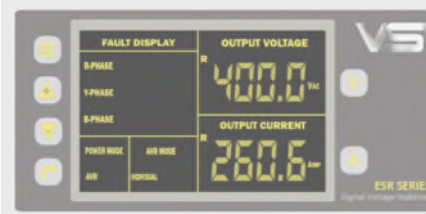
Note: Optional Accessories added may affect dimensions - subject to confirmation.



## TECHNICAL SPECIFICATION

<b>Technology:</b>	Digital Buck Boost SCR design topology			
<b>Input Voltage Swing Variant Options Available: (S*)</b>	<b>Model</b>	<b>Input Swing</b>	<b>Output Accuracy</b>	<b>Available Ratings</b>
	<b>S15</b>	± 15%	± 3%	±1% to ±5% 250 to 3750 kVA
	<b>S20</b>	± 20%	± 3%	±1% to ±5% 250 to 3750 kVA
	<b>S25</b>	± 25%	± 3%	±3% to ±5% 250 to 2500 kVA
	<b>S30</b>	± 30%	± 3%	±3% to ±5% 250 to 2000 kVA
	<b>S35</b>	± 35%	± 3%	±3% to ±5% 250 to 1200 kVA
	<b>S40</b>	± 40%	± 3%	±3% to ±5% 250 to 1200 kVA
	<b>S45</b>	± 45%	± 5%	±5 to ±10 % 250 to 1200 kVA
	<b>S50</b>	± 50%	± 5%	±5 to ±10 % 250 to 1000 kVA
		<b>Three Phase, 4 Wire (3 Phase + Neutral + G/E).</b> Other swing options available to special quotation / order.		
<b>Output Voltage:</b>	380/220V, 400/230V & 415/240V (Customer to specify), Three Phase, 4 Wire. <b>X460 Models</b> - 440/254V (X440), 460/265V (X460), 480/277V (X480) & 600/346V (X600) - available on request. The permissible input voltage swing is relative to the preset output voltage.			
<b>Output Voltage Accuracy:</b>	± 3% (Default) - adjustable from ± 1% to ±5%, (dependent on input swing - see above).			
<b>Frequency:</b>	35 - 63Hz			
<b>Correction Time:</b>	Within 60 Milliseconds (3 to 4 Cycles) per Step			
<b>Efficiency:</b>	≥98%			
<b>Power Factor:</b>	The Power Factor has no effect on performance providing the stabiliser is being used within its rated capacity			
<b>Overload Capability:</b>	5 x max. current rating for 1 second 3 x max. current rating for 2 minutes 1.5 x max. current rating for 10 minutes			
<b>Surge Suppression:</b>	TVSS - Protects loads against high-energy Spikes and Transient Voltages.			
<b>Harmonic Distortion:</b>	None introduced			
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.			
<b>Automatic Bypass:</b>	Automatic transfer to bypass in the event of an overload or system problem.			
<b>Start Up Protection:</b>	Protects load equipment from damaging start up voltage surges.			
<b>Environment:</b>	Temperature range 0 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 90% RH (non-condensing). Maximum altitude 4000m. Derate by 2.5% for each additional 500m.			
<b>Audible Noise:</b>	< 45 dB (at 1 metre)			
<b>Construction:</b>	Enclosures to IP20 (NEMA 1 Style) - BS EN 60529 (Option - Outdoor IP54 / NEMA 3)			
<b>Paint Colour:</b>	As standard RAL 1013 (Oyster White) - Epoxy Powder Coating. Other colours available as an option on specific request.			
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards.			
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2014/30/EU (The EMC Directive) and 2014/35/EU (The Low Voltage Directive).			
<b>Standard Warranty:</b>	Two Years / 24 Months from date of supply -with extendable option to 5 Years.			
<b>Standard Features:</b>	Input Switch / Breaker with Output Isolation and Manual Bypass, Phase Failure Protection, Automatic Electronic Bypass, Class II Lightning Surge Arrestors and LCD Display Panel with RS/485 Interface			

## LCD DIGITAL DISPLAY PANEL



**Comprehensive LCD Digital Monitoring and Control Panel**

delivering intuitive control and monitoring of all the key system parameters.

### Real Time Display of -

- **Voltage:** Individual & Average Output Phase Voltages
- **Current:** Individual & Average Phase Currents
- **Operational Status:** On AVR & On Bypass
- **Alarm Conditions:** Overload, Over-Voltage, Under-Voltage, Fuse Failure & Phase Failure

### Modifiable System Parameter Settings -

- Output Voltage
- Output Voltage Accuracy
- Correction Time
- Voltage Regulation Method
- Over - Voltage
- Under - Voltage
- Over - Current Value

**Typical AE Model: ESR-1000H-3P-T2F-S15 (400V)**  
1000kVA Three Phase Static Electronic Digital AC Voltage Stabiliser

Front View With Doors Closed



Front View With Doors Open



## SOLID & ROBUST CONSTRUCTION

ESR Series Stabilisers are enclosed in robust floor standing air-cooled cubicles, being built upon a rigid framework construction and offering front door access and removable side panels for ease of installation and servicing.

Supplied as standard with bottom cable entry (top entry to specific order or as standard on T3 systems), ESR Stabilisers offer IP20 / NEMA 3 Style Ingress Protection and are supplied complete with an epoxy powder heavy duty Oyster White (RAL 1013) orange peel paint finish.



Typical Internal View - 2000 kVA Model Cubicle

## ALSO AVAILABLE IN IP54 / NEMA 3 STYLE ENCLOSURES

Suitable for external use, or more challenging internal environments.



## STANDARD TYPE 2F SWITCH ARRANGEMENTS - on 450 kVA to 2000 kVA Models

The Type 2F style switch arrangement consists of a motorised input air switch and output / bypass changeover switch – as depicted below - with full electronic interlocking to prevent inadvertent mis-operation.

### T2F - Schematic

### T2F – Control Panel with Electronic Interlocking

Refer to the Manual for Operating Instructions

AVR Indicator #A	Alarm Indicator #B	Bypass Indicator #C	Start Indicator #D	On Indicator #E	Off Indicator #F	AVR Indicator #G	Indicator #H	Bypass Indicator #J
#1 Power Push Button			Start Push Button #2	On Push Button #3	Off Push Button #4	On Push Button #5	On Push Button #6	On Push Button #7

ESR - T2F SERIES SYSTEM CONTROL PANEL

## STANDARD TYPE 3F SWITCH ARRANGEMENTS - 2500 kVA & Above Models

Similar to the Type 2F arrangement, T3F systems utilise separate motorised air output and bypass switches – as depicted below - whilst still offering full electronic interlocking to prevent inadvertent mis-operation.

### T3F - Schematic

### T3F - Control Panel with Electronic Interlocking

Refer to the Manual for Operating Instructions

AVR Indicator	Bypass Indicator	Start Indicator #1	On Indicator #2	Off Indicator #3	Start Indicator #4	On Indicator #5	Off Indicator #6	Start Indicator #7	On Indicator #8	Off Indicator #9
Power Push Button		Start Push Button #1	On Push Button #2	Off Push Button #3	Start Push Button #4	On Push Button #5	Off Push Button #6	Start Push Button #7	On Push Button #8	Off Push Button #9

ESR - T3F SERIES SYSTEM CONTROL PANEL

Available as an option on 2000 kVA and below models (-T3F) and with eSpec Upgrade (-eSP)



## UNSURPASSED TOTAL PROTECTION FEATURES

Offered with an impressive **2 Years Warranty** (extendable to 5 Years), **ESR** Three Phase Static Electronic AC Voltage Stabilisers are widely considered to be the finest in class and incorporate as **standard** many advanced protection features which 'others' only deem fit to offer as expensive add-on options.



**+** Inclusion of an **optional** screened Input Isolation Transformer (-PC) enhances Transient Voltage Surge protection and ensures defence against less prevalent common and normal mode electrical noise – delivering what is commonly referred to as a 'Clean Supply'.

Inbuilt **STANDARD** advanced protection features include:-

- Automatic input switch ensuring protection against potential faults and /or short-circuits inside the stabiliser.
- Output isolation / automatic output switch delivers protection against overload, short circuit, over voltage, under voltage and phase failure.
- In addition to the provision of an inbuilt automatic electronic bypass, all **ESR** stabilisers offer an integral 'Break Before Make' bypass switch, enabling the stabiliser to be segregated from the line supplying the load.
- To avoid damage to the stabiliser and load, switch interlocking prevents inadvertent mis-operation of the switches.
- SPD Class II Surge Arrestors ensure protection for the stabiliser and load against extremely high voltage surges and transients caused by atmospheric (eg. lightning induced strikes) or operational issues on the utility supply .

## ADD-ON OPTIONS

Where required **ESR** Series AC Voltage Stabilisers can be supplied with the following additional accessories / add-on features.

- **Input Isolating Transformer (- PC)**

Through the integration of a shielded isolation transformer, provides enhanced spike & electrical noise (Common Mode: 120db @ 100khz & Normal Mode Noise: 60db @ 100khz) suppression and neutral ground bonding. Delivers what is commonly referred to as a 'CLEAN' supply.

- **IP54 Ingress Protection (- IP54)**

Stabiliser presented in durable IP54 (BS / EN 60529) / NE-MA 3 free standing steel cubicles suitable for external use, or more challenging internal environments.

- **AquaStop (- AS)**

PCB protective coating offering protection against damp and moisture ingress.

- **Additional Digital Metering (-ADM)**

Additional Digital Metering for Input Voltage and Frequency.

- **Alternative Switch Arrangements (-T2F or -T3F)**

Alternative Input, Output and Bypass Switching arrangements - see Switching Arrangement Section.

- **4 Pole Switches / Breakers (-FP)**

As standard ESR Stabilisers utilise 3 Pole Switches / Breakers. As an option 4 Pole alternatives can be supplied.

- **eSpec Upgrade (-eSP)**

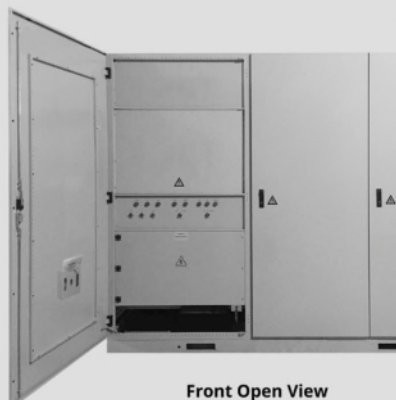
- While we endeavour to keep production costs to a minimum by sourcing top specification components from around the globe we realise that some clients have a requirement for their own designated protection devices.

Accordingly we are able to offer our **eSpec Pack Upgrade** package which offers the client the short circuit and overcurrent protection components from their preferred leading European or American manufacturers.

- **Alternative Paint Colour (-RAL)**

Alternative Paint Colour Finnish - customer to specify.

**NB:** The inclusion of the above add-on options may increase enclosure sizings and weights - subject to confirmation at time of ordering.



Front Open View



Rear View

AE Model: **ESR-2000H-3P-T2F-S20 (400V)**

Typical T2F Style ESR 2000 kVA Series Three Phase Static Electronic AC Voltage Stabiliser

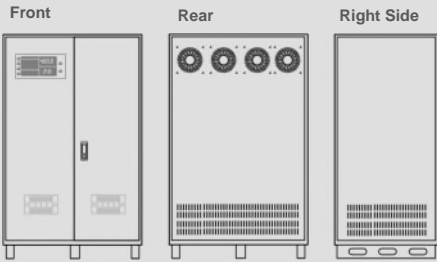


## STANDARD ENCLOSURE TYPES

ALSO available in Outdoor IP54 / NEMA 3 Style Enclosures - **IP54 OPTION**

### C05 to C06 Enclosures

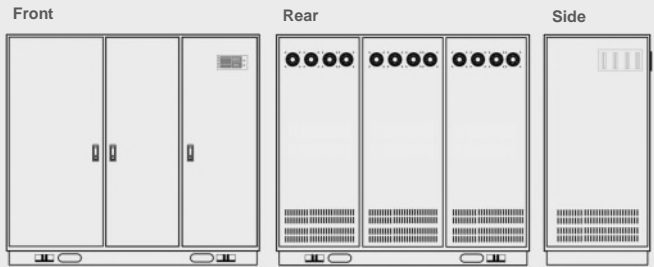
2 Front Doors with removable rear and side panels



Physical Size:	Bottom Cable Entry (Option for Top Cable Entry)	
<b>C05</b>	1200(W) x 1600(H) x 800(D) mm	47.3"(W) x 63.0"(H) x 31.5"(D) inches
<b>C06</b>	1500(W) x 1900(H) x 1000(D) mm	59.1"(W) x 74.8"(H) x 39.4"(D) inches

### C07 to C09 Enclosures

3 Front Doors with removable rear and side panels



Physical Size:	Top Cable Entry (Option for Bottom Cable Entry)	
<b>C07</b>	2800(W) x 1900(H) x 1100(D) mm	110.3"(W) x 74.8"(H) x 43.4"(D) inches
<b>C08</b>	3200(W) x 1900(H) x 1200(D) mm	126.0"(W) x 74.8"(H) x 47.3"(D) inches
<b>C09</b>	3200(W) x 2200(H) x 1200(D) mm	126.0"(W) x 86.7"(H) x 47.3"(D) inches

## ESR TYPICAL APPLICATIONS

- Computers & Network Systems
- Medical Equipment
- Electronics Equipment
- Testing Equipment
- Laboratory Equipment
- Process Control Systems
- TV/Radio Broadcasting Stations
- Elevators / Lifts
- Audio/Video Systems
- Production Lines
- CNC Machines
- SMT Equipment

Every Voltage Stabilization or Power Conditioning solution we offer is backed by the unrivalled experience we have gained in the world market over the last 25 years or so.

Tried, tested and extensively proven in all corners of the world, including some of the harshest and most remote power environments on this planet, our solutions can be found on duty protecting vital equipment where the supply must never be found wanting . . . not even for a single second.

Only by delivering Quality in product and service have we been able to consistently grow our client base year on year. Today we are an approved supplier to many well-known major international corporations and public organisations.

With an emphasis always on building and maintaining strategic and long-lasting relationships with our Customers, our Clients are drawn from a wide selection of industries and market sectors spread throughout the world.

### APPLICATIONS IN . . .

- Africa
- Europe
- Middle East
- North America
- Central & South America
- Caribbean
- Asia
- Oceania

**Want to learn more about us and the Clients we serve?**  
Check us out online at [www.VSi.UK.com](http://www.VSi.UK.com)

## CUSTOM BUILT SOLUTIONS

VSi, with a strong and wide manufacturing base, is able to meet the requirements of customers from our own in-house professional resources.

Where bespoke / custom built solutions are required we are able to call upon our extensive portfolio of proven standard designs and tailor offerings to accommodate, without breaking the bank, most individual specific requirements.

