

SOLUTIONS BY



MISSION CRITICAL FACILITIES
DESIGN AND CONSTRUCTION

Covis Sdn Bhd

E-03-01, 1st Floor East Wing
Subang Square Business Centre
Jalan SS15/4G, 47500,
Subang Jaya, Selangor

@ www.covis-group.com/
lawrence.lai@covis-group.com

+603 5621 7780

+603 5621 7790



• 1 Year Warranty •

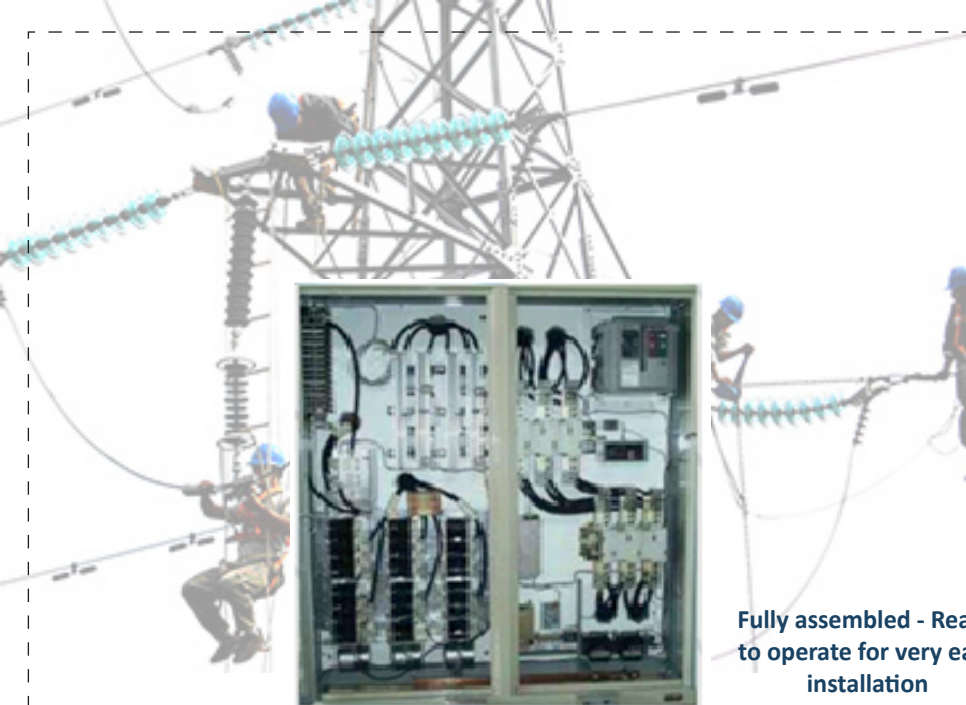


Voltage Conditioner

Deep Voltage Sag Protection- Sag Fighter™

Features

- Compliant with SEMI-F47
- Full Sag Correction Within 2 Milliseconds
- Sag Correction Duration Independent of Load or Power Factor
- Sag Correction for a Minimum 100Seconds
- Non Continuous Inverter Operations Increases Reliability and Provides 99% Efficiency.
- Continuous Protection without Need to Recharge or Reset
- Bypass Operation is not Required For High Inrush or Over load Currents
- Completely Assembled and Requires No Programming, Testing, Measuring, Setting of Switches or Internal Wiring
- Work Automatically and The Unit Display Provides Information of The Unit Status and Timestamps.
- Comes with one year warranty include labour and parts



Fully assembled - Ready to operate for very easy installation



The Sag Fighter™ is an industrial-grade, solid state, electronic voltage sag corrector- active voltage conditioner that operates without batteries or energy storage. Industrial- grade means that the Sag Fighter™ is compatible with all the load types and load power factors and provides a minimum 1000% fault clearing capability.

The Sag Fighter™ consists of a three phase transformer with each of its secondary windings connected in series between the source (incoming line) and the load(s). Load current flows through windings transformer while the unit operates in a “monitoring” mode with the primary of the transformer shorted through SCR switches. The Sag Fighter™ continuously monitors the input waveform for any deviation from a balanced, three phase’s voltage. Upon sensing a deviation, Sag Fighter™ engages an inverter circuit to apply an injection voltage to the primary windings of the series connected transformer. The injection voltage is synthesized a magnitude, shape angle such that when added in series with the incoming voltage with the incoming voltage, a balanced, three phase voltage results. When a normal. Three phase incoming voltage is detected at the input of the Sag Fighter™, the inverter circuit is disengaged and the unit returns to the monitoring mode

Deep Voltage Sag Protection:

- Down to 30% Remaining Voltage
- Ultra-fast 2ms Response
- Unlimited Sag Correction Time
- Meets SEMI F47-0706
- Without Batteries
- Corrects Phase Shifting
- Very Low O & M Cost

For three phase application:

- Any Voltage up to 600VAC
- 50 Hz | 60 Hz
- Compatible with all load types
- For all load Power Factor
- 99% Energy Efficient
- Very High Load Inrush Capacity
- Small Footprint

Typical applications include:

Manufacturing | Robotic | Machining | CNC Processes | Semiconductor | Plastic | Textiles
Food Processing | Baking | Printing | Pulp & Paper | Batch Processes | Continuous Processes

Standard Unit Specifications & Technical Data

Application			
Sizes(kVA) [Ø- Phase]	20,25,30,50,75,100,125,150,200,250,300,400,500,600,750,1000,1250, 1500,1750, 2000...Larger Sizes Available		
Input/output Voltages	60 Hz: 208,240,480	50 Hz: 110,220,380,400	Non Standard Voltages Available
Sag Correction/ Operating Characteristics			
Sag Correction	1 or 2 Phase Sags to 30% Remaining Voltage (-70% Sag) Corrected to 95% of Nominal Voltage 3 Phase Sags to 60% Remaining Voltage (-40% Sag) Corrected to 95% of Nominal Voltage		
Output Regulation	Nominal Voltage $\pm 5\%$ During Sag Correction [Note: Unit Normally Operates in Monitoring Mode Until Voltage Reaches 90% of Nominal Voltage, at Which Time Sag Correction is initiated]		
Response Time	Full Sag Correction Within 2ms Regardless of Load or Power Factor		
Correction Duration	Sags Corrected for a Minimum of 100 Seconds Regardless of Load or Power Factor		
Regulation Variation	None-Regulation Constants for 0 to 100% Load and Any Load Power Factor.		
Phase Shift Correction	Phase Shifts are Corrected Automatically During Sag Correction		
Harmonic Distortion	None Added in Monitoring Mode		
Overload/Inrush Capability	6000%-1 Cycle, 1000% - 1 Second, 500% - 5 Seconds, 200% - 1 min; 1000% Fault Clearing		
Load/ Power Factor	No Minimum or Part Load or Load Power Factor Limitations, Compatible with All Load Types		
Efficiency	99% During Normal Operation		
Operating Frequency	$\pm 3\%$ of Nominal Frequency		
Noise Suppression/ Protection			
Surge Suppression	Included, Compiles with ANSI/IEEE C62.41		
Input Circuit Breaker	Included, Refer to Standard Circuit Breaker Sizes		
FailSafe Electronic Bypass	Auto-Actuation on High Temperature, Over-Current or Component Failure- With No Loss of Load		
Construction			
Technology	Microprocessor- Controlled, Inverter-Based Series Voltage Injection		
Transformer	Copper Wound, Dry-Type Series Transformer (3W+ G Input and Output)		
Inverter Operation	Non-Continuous Operation – Only During Sag Correction		
Cooling	Natural Convection Cooled With Heatsink Fans Used Only During Sag Correction		
Enclosure	Floor-Mounted NEMA 1, ANSI 61 Grey, Other Enclosure Types & Colour Available		
Cabling/ Connections	See Enclosure Drawing for Cable Entry/ Exit Options and Circuit Breaker/ Lug Size Table		
Audible Sound Level	Less Than 65dB @ 1 Meter		
Display	Touchscreen Event Recorder and Unit Log (Backlit LCD Display on Units Less Than 100kVA)		
Controls	No Controls or Programming Required, No User-Adjustable Controls		
Monitoring	Contracts for Remote Indication of Units and Surge Suppression Status are Included		
Environmental Requirements			
Temperature-Humidity	Ambient 32° to 104°F (0°C to 40°C)- Relative Humidity 0%- 95% Non-Condensing		
Operating Attitude	0 ft to 10,000 ft (3000m)		

*Specification subjects to change without prior notice