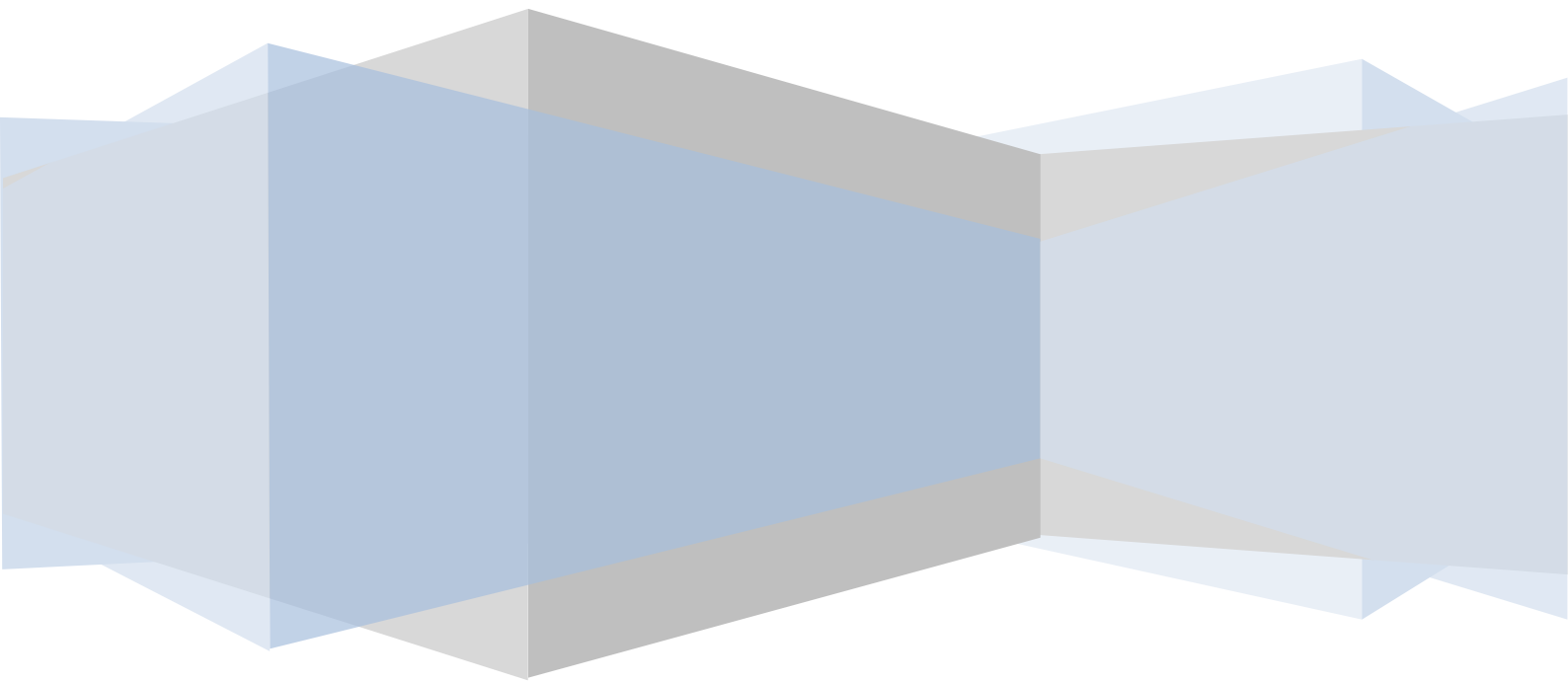


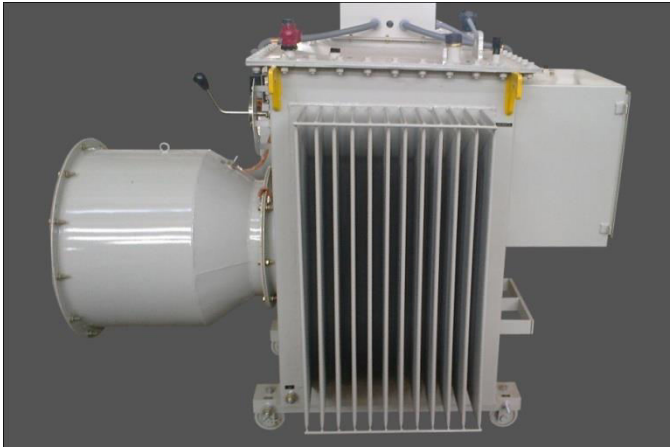


ABHA-APPS

(Advanced Precipitator Power Supply)



ABHA-APPS TR is placed on the roof of the Electrostatic precipitator. This extremely robust transformer rectifier works in harsh operating conditions. This Highly reliable & efficient equipment will provide perfect technical and financial solution. If desired particulate emission control system with reliable continuous operation is required, select ABHA-APPS.



Features of ABHA-APPS TR

- ❖ HV Transformer Design as per IEC:60076, IS:2026
- ❖ Doubly wound, cross over winding with electrostatic shield between primary and secondary.
- ❖ Available in Single Phase and Three Phase versions
- ❖ HV Transformer, Rectifier, Linear Reactor & HF Choke assembly is Oil filled & Tank mounted for efficient Cooling & effective HV clearance.
- ❖ Measuring resistances for voltage and current
- ❖ Excellent Surface Treatment for increased life & sustainability in Harsh Industrial Environment
- ❖ Can be equipped with internal or external grounding switch
- ❖ Variety of Grounding Switches & Bus coupler (optional)
- ❖ Wide ambient temperature range.
- ❖ Sound output level pursuant to DIN VDE 0532 Part 7 Issue 1/92 < 65 dB (A)
- ❖ Warranted not to contain PCB
- ❖ Insulation material provided, offers more than 200 kV per cm of Dielectric Strength
- ❖ EHV grade mineral oil used for ONAN cooling as per IEC:60296 / IS:335
- ❖ Long service life due to conservative component ratings, hermetically sealed tank.
- ❖ Compact, weight-optimized design
- ❖ HV Rectifier Stack design consists of special glass-sealed passivated avalanche diodes, with controlled avalanche characteristics. Design as per IEC:60146, DIN:57146
- ❖ Oil cooled current Limiting reactor.
- ❖ Interference and harmonic wave free filter voltage signal
- ❖ Temperature, pressure and oil level monitoring with individual components
- ❖ Oil cooled High Frequency Filter
- ❖ Minimal electrical losses
- ❖ Conforms to Ingress Protection class IP-65 as per IEC 947-1.
- ❖ Maintenance free operation for many years warranted
- ❖ Unique insulation system for silicon oil filled transformers

BRIEF SPECIFICATION OF ABHA-APPS RT	
Input Voltage	380 V to 690 V
Variation	+/- 10%
Frequency	50 Hz / 60 Hz +/-5%
Output Voltage	30KV(P) to 250KV (P) On No Load at nominal rated I/P Voltage
Output Current	50mA to 4000mA Avg. (mean) DC
Design Form Factor	1.2/ 1.3/ 1.4 MAX (Not Applicable for 3 Phase T/R)
Design Ambient Temp	-40 Deg. C to +50 Deg. C
Humidity	100% (Non-Condensing)
Various Configuration of Possible Ambient	40/45/50/55 Deg. C with top oil temperature rise limited to 55/50/45/40Deg. C
Bushing Orientation	Horizontal/Vertical
Method of Cooling:	
- T/R Set	Oil Natural Air Natural
	Oil Natural Air Forced
Coolant: Mineral Oil/ Silicon Oil / Natural Oil	

Features of ABHA-APPS CC

❖ Fully customized control cabinets
❖ Compact Design.
❖ Layout as per DIN Standard. Inherent EMI/EMC protection through Cable routing & separation
❖ Excellent Surface Treatment for increased life & sustainability in Harsh Industrial Environment
❖ Options for standalone panels as well as cascaded arrangement
❖ Ingress Protection Class as per IEC 947-1/NEMA Type 12
❖ Options for Incoming Power Cubicle
❖ IP 54: Up to 160A Input Current
❖ IP 31: For Input Current More than 160A
❖ Compatible with all World Renowned TR Controllers

BRIEF SPECIFICATION OF ABHA-APPS CC

Method of cooling	Air Natural or Air Forced
Installation	Indoor Pressurized Room or Air Conditioned Room
Control voltage	230 VAC or 110 VAC
Paint Shade	As per choice (Any RAL or MUNSEL Shades)
Construction	Free Floor Standing Type. CRCA Sheet of 2.0 mm thk. Gland plate of 3 mm thk.
Cable Entry	Bottom or Top



ESP Controller for 1PH suitable for 50Hz or 60Hz

- ❖ Full cycle control using SCR
- ❖ CC mode CV mode selectable
- ❖ Energy optimize function
- ❖ Quick spark response and recovery
- ❖ Alarm and Trips for protection
- ❖ Inbuilt 3 Rapper operation
- ❖ RS485 MODBUS Communication for DCS



ESP Controller for 3PH suitable for 50Hz or 60Hz

- ❖ Full control on three phase using 6 SCR control (6 pulse output)
- ❖ CC mode CV mode selectable
- ❖ Energy optimize function
- ❖ Quick spark response and recovery
- ❖ Alarm and Trips for protection
- ❖ Inbuilt 3 Rapper operation
- ❖ RS485 MODBUS Communication for DCS

Manufacturing Facilities:

Abha Enviro Care Pvt. Ltd. Works is located to the North-West of Pune City in an Excellent Environment near MIDC Talegaon. Total Covered area is approx. 16250 Sq. ft. & uncovered area of 10000 Sq. ft.

We have State of the Art equipments & World class facilities for Manufacturing including HV & LV Winding Machines, Vacuum Drying Plant, Oil Filtration Machine, 5 Ton EOT Crane etc. Sanctioned Power through Express Feeder of State Electricity Board ensures Uninterrupted Factory Operations.



We follow all International & National standards for Design, Manufacturing & Testing of Transformer Rectifier & Control Cabinet which ensures Highest Product Reliability & World Class Quality.

We have installed Manufacturing capacity of 50 Nos. Transformer Rectifier & Control Cabinet per Month which can be increased to 75 Nos. per Month as per order inflow.



TEST BENCH



HV LOAD BANK



VACCUME PLANT

Testing Facilities:

- 1) Test Bench for Open Circuit Test, Short Circuit Test, Induced Overvoltage Test, Separate Source AC Withstand Test.
- 2) Resistive – Capacitive Load Bank & Spark Gap for ESP Field Simulation & Load trials.
- 3) 300A, 3 Phase Motorized Auto Transformer for Transformer Rectifier & Panel Testing & 100A, 3 Phase Motorized Auto Transformer for Sub-Assembly Testing.
- 4) Metravi Make Oil BDV Tester
- 5) AE Make HV Tester
- 6) Tektronix make "Digital Storage Oscilloscope"
- 7) AE Make High Accuracy, Precision Meters for AC Voltage, Current, Power & DC Voltage
- 8) Fluke Make Multimeter, Clamp Meter & IR Tester

We are backed up by very energetic & strong team of Professionals having Rich experience in various fields like Design, Procurement, Manufacturing, Testing, Quality & Field Service to ensure full Customer Satisfaction.



Abha Enviro Care Pvt. Ltd
An ISO 9001 : 2008 Company

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Factory Address :

Gat No. 466, Mauje Badhalwadi,
Navalakh Umbre, Taluka : Maval,
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