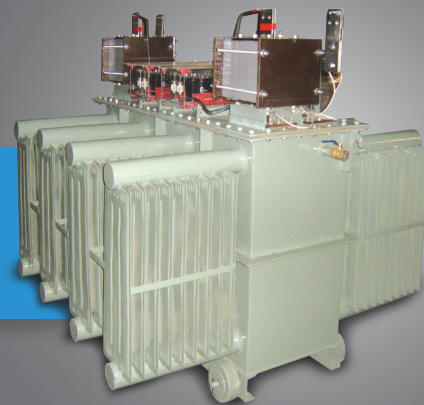


Thyristor Operated Rectifier

A low voltage high current DC power supply with forced air cooled rectifier and oil cooled transformer.



CONSTRUCTION:

3 phase 415V AC fed into thyristor regulator. Regulated output 0 to 415V AC again connected to oil cooled step down transformer with oil immersed diode rectifier at secondary side of transformer.

ELECTRONICS:

- Close loop controller with firing sequence generator
- Thyristor gate trigger circuit
- Protection and annunciation circuit

RANGE:

DC Voltage: 0 to 20VDC
DC Amps: 0 to 4000Amps

PROTECTION:

- AC Surge Suppressor
- AC Fuse
- Fuse failure
- DC over Voltage
- DC over Current
- Phase failure or reversal
- Thyristor temperature high

SCOPE OF SUPPLY:

- Air cooled thyristor regulator assembly
- Electronic controller for thyristor control with close loop operation and annunciation
- Oil cooled transformer with oil immersed diode rectifier assembly

ADVANTAGES:

- Rough in nature and suitable for corrosive environment.
- Simplified version of control circuit for easy maintenance
- Controlled output for marginal variation at input voltage and load resistance.
- Compatible to operate from customer PLC for remote operation.
- Compact rectifier with common control panel concept.

Thyristor Air Cooled Rectifier

A low voltage high current DC power supply with forced air cooled rectifier and dry type transformer.



CONSTRUCTION:

3 phase 415V AC fed into thyristor regulator. Regulated output 0 to 415V AC again connected to dry type step down transformer with diode rectifier at secondary side of transformer.

ELECTRONICS:

- Close loop controller with firing sequence generator
- Thyristor gate trigger circuit
- Protection and annunciation circuit

RANGE:

DC Voltage: 0 to 20VDC
DC Amps: 0 to 4000Amps

PROTECTION:

- AC Surge Suppressor
- AC Fuse
- Fuse failure
- DC over Voltage
- DC over Current
- Phase failure or reversal
- Thyristor temperature high

SCOPE OF SUPPLY:

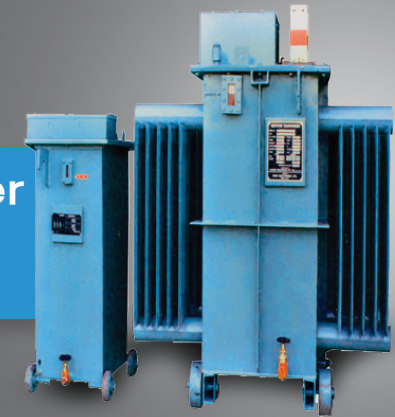
- Air cooled thyristor regulator assembly
- Electronic controller for thyristor control with close loop operation and annunciation
- Dry type transformer with air cooled diode rectifier assembly

ADVANTAGES:

- Compact in size
- Simplified version of control circuit for easy maintenance
- Controlled output for marginal variation at input voltage and load resistance.
- Compatible to operate from customer PLC for remote operation.
- Compact rectifier with common control panel concept.

Motorized or Hand Operated Rectifier

A low voltage high current DC power supply with oil cooled regulator and oil cooled transformer.



CONSTRUCTION:

3 phase 415V AC fed into motorized or hand operated oil cooled dimmer /regulator. Regulated output again connected to oil cooled step down transformer with oil immersed diode rectifier.

ELECTRONICS:

- Close loop controller with current raise or lower command
- Protection and annunciation circuit

RANGE:

DC Voltage: 0 to 20VDC
DC Amps: 0 to 4000Amps

PROTECTION:

- RC network
- Input MCB (optional)
- DC over Voltage
- DC over Current

SCOPE OF SUPPLY:

- Motorized or hand operated oil cooled dimmer /regulator
- Electronic controller for current raise lower control
- Oil cooled transformer with oil immersed diode rectifier assembly
- Rough in nature and suitable for corrosive environment.
- Simplified version of control circuit for easy maintenance
- Controlled output for marginal variation at input voltage and load resistance on MOP.
- Compatible to operate from customer PLC for remote operation.

Pulse Thyristor Rectifier

A low voltage high current DC power supply with oil cooled regulator and oil cooled transformer.



BRIEF SPECIFICATION

- Input : 415V \pm 10%
- DC Output: 80V
- DC Current: Upto 10 kA
- Current Control Range : 20-100%
- Rating Class 'B' of IS 4540
- No of Pulse : 6 (Single Way Bridge)
- FN cooled Dry Type Transformer & Thyristor Rectifier

FEATURES

- 6/12/24 pulse configuration
- Current / Voltage stability: $< \pm 1\%$
- Standards: IS / IEC
- Transformer Cooling : Air Cooled / ONAN
- Rectifier Cooling: Air cooled / Forced Air Cooled
- Efficiency: Upto 95%



Applications

- Hydrogen Generation Plant
- Polarity Reversal Rectifier for Electro Cleaning / De-greasing / Pickling / Winning application
- Electro Chlorination
- Electro Deposit Coating in Automobile industries
- Metal finishing
- Polarisation

Salient features of our system

- Indigenous Design
- Silicon Diode Assembly from our Hirect Semiconductor Division
- Hermatically sealed assembly
- Double wound step-down transformer
- Designed to IS/ IEC / IEEE standards
- Stepless control achieved through motorized variac
- Closed loop constant current controller for current stability.
- Designed for continuous working in ambient temperature upto 50°C
- Rugged & Dependable
- Compact, No 'ageing' & Easy Maintenance
- Withstands Acid & Corrosive Atmosphere
- Ideal for Tropical Conditions

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