

Medium Voltage Submersible Switchgear SD3100 Series Solid Dielectric Insulated Vacuum Fault Interrupter

Grid Smart. Grid Tough.

15kV and 25kV, 16kA and 20kA, 600A, 3WAY * VACUUM LOAD BREAK VFI

Trayer Solid Dielectric Switchgear is a form fit function substitute for existing Trayer products and is an excellent alternative for applications where liquid or gas insulation is not preferred. Trayer Solid Switchgear utilizes the same proven vacuum technology (all high voltage operations occur in a vacuum contact bottle) backed by over 50 years of industry leading quality and performance with the convenience of cycloaliphatic solid polymer insulation of the active switching components.

Trayer Solid features:

- 15kV and 25kV 60Hz class three-phase gang-operated submersible vacuum load interrupting switchgear assembly with continuous rating of 630 Amps for use in underground alternating current distribution systems
- Unit includes a sealed port, pressure gauge for the visual indication of tank sealing integrity.
- Manual or Remote Operation; Motor Operator Option
- Industry's smallest footprint solid dielectric load interrupting switchgear
- Time proven over toggle drive mechanism for added safety *see one line diagrams; number of ways is variable by model

About Trayer Switchgear: products available in a variety of dielectric insulation types, all with the patented Trayer Vacuum Switch technology:

Liquid Insulation SF6 Insulation Solid Insulation

and feature

- Ultra low maintenance switchgear
- Dead-front design
- 100% 304 or 304L Stainless Steel tank construction
- All load make and break occurs in sealed vacuum bottles
- Fully submersible
- Hermetically sealed, maintenance free switch tanks with pressure gage
- Copper internal bus structure
- 100% corrosion resistant 304 stainless steel construction
- Remote/SCADA operation options
- Auxiliary contacts available on all switched ways
- Choice of load break or non load break parking stands
- Industry leading warranty and service



Trayer 3100 series Solid Dielectric Load Break Switch
25kV, 600A, 3 ways, 2ways switched 1 way protected
Submersible Vacuum Fault Interrupter



Trayer Submersible Relay Box

Trayer Engineering, San Francisco, CA is the recognized leader in tailoring equipment to the specific demands of customers. Trayer switchgear products are distinguished by their rugged, fully sealed and welded 304 stainless steel construction built for years of trouble-free operation. Units also feature options to include the latest in advanced electronic controls.





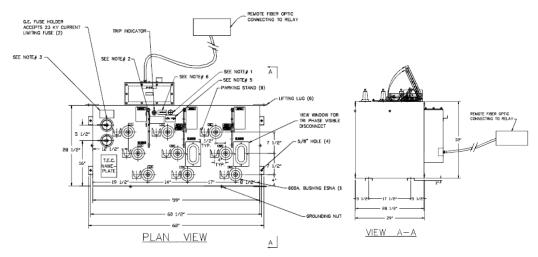
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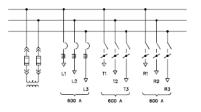
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Trayer Solid Dielectric Ratings for the Unit/System Voltage								
Nominal Voltage (Series)	15kV				25kV			
Maximum Design Voltage	15.5kV				27kV			
Device	Load Break Switch		Vacuum Fault Interrupter		Load Break Switch		Vacuum Fault Interrupter	
BIL Phase-to-Phase, Phase-to-Ground	110kV	110kV	110kV	110kV	125kV	125kV	125kV	125kV
BIL Across Open Contacts	110kV	110kV	110kV	110kV	125kV	125kV	125kV	125kV
One Minute Withstand (60Hz)	34kV	34kV	34kV	34kV	40kV	40kV	40kV	40kV
Continuous Current	630A	630A	630A	630A	630A	630A	630A	630A
Load Switching	630A	630A	630A	630A	630A	630A	630A	630A
Peak Current	41.6kA	52kA	41.6kA	52kA	41.6kA	52kA	41.6kA	52kA
Load Break Operations at Full Load	5,000	5,000	N/A	N/A	5,000	5,000	N/A	N/A
Maximum Emergency Three-Time Interrupting	2000A	2000A	N/A	N/A	2000A	2000A	N/A	N/A
Number of Fault Interruptions at 16kA	N/A	N/A	65	65	N/A	N/A	65	65
Short-time Withstand Current (1s), Short Circuit Current, and Fault-making Current 600A Symmetrical	16kA	20kA	16kA	20kA	16kA	20kA	16kA	20kA
Short-time Withstand Current (1s), Short Circuit Current, and Fault-making Current 600A Asymmetrical	25.6kA	32kA	25.6kA	32kA	25.6kA	32kA	25.6kA	32kA

^{*}Short-circuit withstand current ratings may be limited by the capabilities of bushings, separable connectors, terminations or cables used in conjunction with this switchgear device.

Additional Configurations Available





THREE LINE DIAGRAM

The Trayer Way

With over 50 years of industry experience as a leading producer of medium voltage switchgear, Trayer has a sterling reputation for designing and building the toughest and smartest products on the market. Trayer is a pioneer in vacuum breaker technology and continues to lead the industry with designs that meet the demands for highly reliable electrical grids. Trayer gear is unsurpassed for reliability, safety, and ease-of-operation. That's why Trayer switchgear is specified by utilities around the globe. By combining leading edge engineering, high quality manufacturing and an industry leading commitment to customer service, you can depend on Trayer Switchgear to perform.

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