



## ■ Summary

SJ Magnetics 1,000 kVA three-phase, liquid-filled pad-mounted transformer with 14400V delta primary and 480Y/277 secondary. Aluminum windings, loop-feed connections, DOE efficiency, and a seven-position primary J-tap selector.

## ■ Product Description

The SJ Magnetics 1,000 kVA pad-mounted transformer supplies 480Y/277 power from a 14400V delta distribution system. Its delta-wye winding arrangement provides a neutral for the secondary system. Aluminum primary and secondary windings operate in mineral oil with natural oil and air cooling. The seven-position J-tap selector allows the primary connection to be matched to the supply voltage while maintaining the selected secondary voltage. The loop-feed design includes a four-position loadbreak switch and bayonet fuses backed by ELSP current-limiting fuses. Liquid level, temperature, and pressure/vacuum gauges support routine inspection, while the pressure relief, fill, and drain/sample valves provide service access.

## ■ Specifications

|                    |                |                  |                           |
|--------------------|----------------|------------------|---------------------------|
| Phase              | Three Phase    | Transformer Type | Liquid-filled pad-mounted |
| Rated Power        | 1,000 kVA      | Winding Material | Aluminum / Aluminum       |
| Primary Voltage    | 14400V delta   | Vector Group     | Dyn1                      |
| Secondary Voltage  | 480Y/277       | Cooling          | ONAN                      |
| Temperature Rise   | 65°C           | Insulating Fluid | Mineral oil               |
| Primary BIL        | 95 kV          | Secondary BIL    | 30 kV                     |
| Feed Configuration | Loop feed      | Loadbreak Switch | 4-position LBOR           |
| Fuse Protection    | Bayonet + ELSP | Tap Positions    | 7 positions               |

## ■ Ratings & Standards

DOE efficiency • 65°C temperature rise • Mineral-oil natural cooling

## ■ Common Applications

Commercial power distribution • Industrial facilities • Medium-voltage service

## ■ Configuration

Seven-position primary J-tap selector. Loop-feed primary connections and a grounded-wye secondary. Liquid level, temperature, and pressure/vacuum gauges; pressure relief, fill, and drain/sample valves.



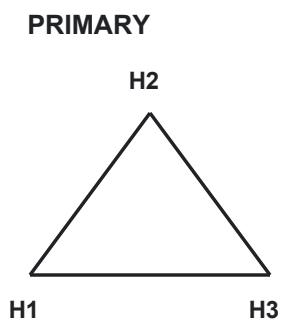
## ■ PRIMARY J-TAP SCHEDULE

| Position | Primary voltage | From nominal | Setting       |
|----------|-----------------|--------------|---------------|
| 1        | 14,400V         | 0.00%        | Nominal       |
| 2        | 13,800V         | -4.17%       | Below nominal |
| 3        | 13,200V         | -8.33%       | Below nominal |
| 4        | 12,700V         | -11.81%      | Below nominal |
| 5        | 12,470V         | -13.40%      | Below nominal |
| 6        | 12,000V         | -16.67%      | Below nominal |
| 7        | 11,700V         | -18.75%      | Below nominal |

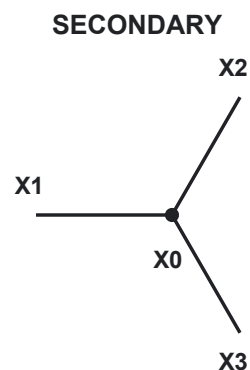
0 above / 6 below nominal; 7 positions. Tap percentages reference the selected nominal primary voltage.

De-energize the transformer before operating the tap changer.

## ■ WINDING CONNECTIONS



14400V delta



480Y/277

Vector group: Dyn1. Secondary X0 is the neutral. Primary H terminals receive the medium-voltage supply.

Connection symbols show winding arrangement. Use the unit connection plate for terminal location and installation.