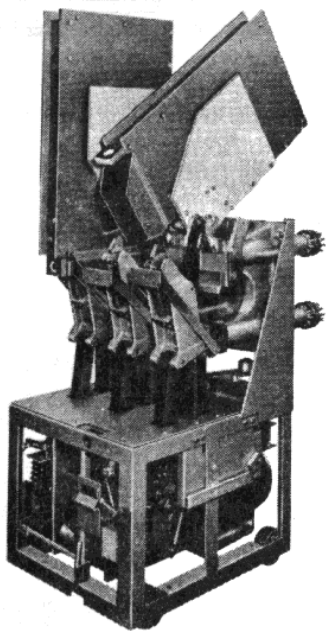
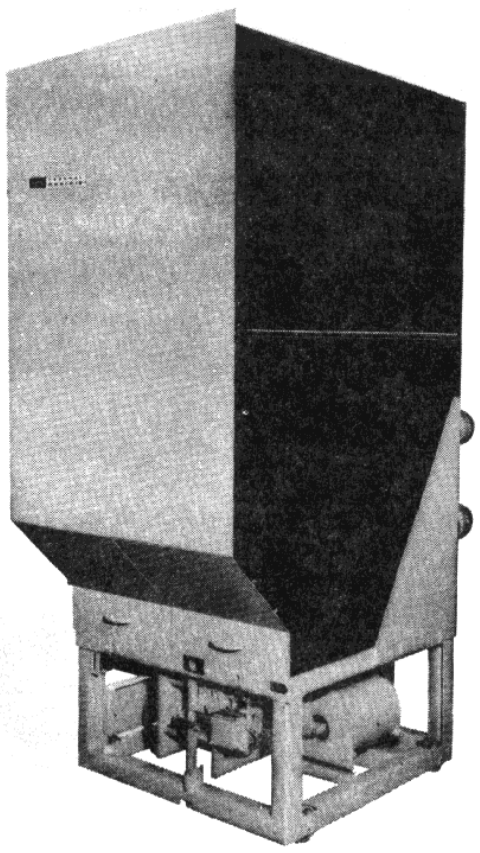
FPE **EQUIPMENT DESCRIPTIVE SHEET** **CLASS 6045**

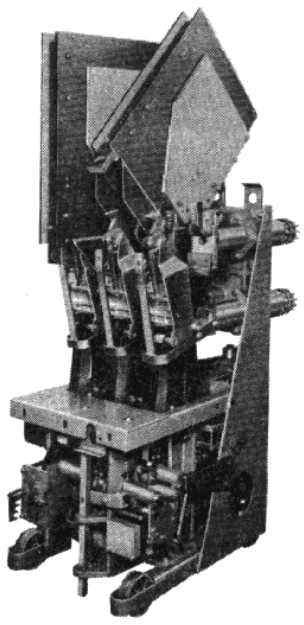
DST MAGNETIC AIR CIRCUIT BREAKERS



DST 5-250



DST 15-1000



DST 5-75

Type DST Magnetic Air Circuit Breakers can be quickly withdrawn from their cells with ease due to their horizontal drawout construction. Completely foolproof interlocking to meet all operator requirements is provided for by a rugged, positive acting racking in mechanism.

Primary disconnects provide positive alignment and are simple to maintain and inspect. Contact fingers are of high-conductivity extruded copper, heavily silver plated. Each finger is independently spring loaded to assure positive contact.

Breaker closing mechanism is completely self-contained—attached to the frame by only four bolts. No bearings or shafts are in contact with the breaker frame and the mechanism can be removed for inspection and maintenance as a unit simply and quickly. The closing solenoid has an exclusive double acting plunger disc which provides maximum closing torque and insures closing and latching of contacts at maximum current ratings of the breaker.

Built-in puffer assures effective arc interruption in less than 5 cycles at all current ranges, including magnetizing and line dropping currents. One large-volume air-puffer serves all three breaker poles. The puffer piston is driven by a solid connection to breakers main drive rod. This gives [p]ositive operation at the precise moment the air stream is [r]equired, for fast interruption of low currents.

Safety design provides four-way protection through mechanical breaker interlock. Breaker can not be inserted or removed in the closed position—raising vertical interlock bar to insert racking-in crank trips the breaker. If the breaker is not racked-in all the way, the cell interlock bar prevents vertical interlock bar from dropping and the breaker remains trip-free. If breaker is not racked-out all the way to "Test" position, breaker remains trip-free, and if any operation is attempted with trip coil armature down, the breaker is trip free.

Racking-in mechanism's extreme simplicity provides positive locking in any position once racking has started.

Polestiglas insulation provides flame retardant and non-tracking arc chutes and interphase barriers. Polestiglas insulation also has the additional ideal insulating features of low power factor, high impact strength, high tensile strength, high flexural strength and excellent dielectric characteristics.

STORED ENERGY CLOSING MECHANISM

Federal Pacific DST Magnetic Air Circuit Breakers are normally supplied with a d.c. closing solenoid. These breakers may be equipped, when required, with either hand charged or electric motor charged **stored energy** closing mechanism. Both of these stored energy mechanisms are unique in that they occupy only the space formally used by the closing solenoid. The mechanism delivers more than sufficient closing energy required for either the 5 or 15 KV breaker. Excess energy is absorbed by buffers at the end of the spring stroke and considerably reduces the breaker impact as compared with the solenoid operated breaker. Both types of stored energy breakers are provided with means for maintenance closing for inspection of breaker.