"ASL" Distribution and Power Transformers Air Cooled

INSTRUCTIONS

GENERAL

Type "ASL" air-cooled transformers are suitable for indoor service only. Fig. 1 shows a typical unit. The core and coils are mounted in an expanded metal case to permit the free circulation of air. The bushings are located either on the cover or on the front of the transformer. Lifting lugs are fastened to the transformer core and project through the cover. A handhole is provided on the cover to allow easy access to a terminal board for changing taps. A standard air-cooled transformer has no fittings or accessories mounted on the case.

SHIPMENT

Air-cooled transformers are shipped completely assembled and ready to place in service.

LOCATION

It is important that air-cooled transformers be installed indoors in a clean, dry, well-ventilated location. The core and coils are exposed to the surrounding air and if it contains an excessive amount of dust the coils may be damaged or the ventilating ducts become clogged. Although the core and coils are treated with a weather-proofing compound, the insulation may be damaged if the transformer is allowed to get wet. Proper ventilation is necessary to prevent the transformer from overheating when loaded. The ambient temperature should not exceed 40°C.

Air-cooled transformers should always be well separated from one another and from adjacent walls, partitions, etc., so as to permit circulation of air. This separation should not be less than 12 to 24 inches, depending on the size of the transformers.

Type "ASL" transformers are constructed with Class "B" insulating materials. They do not have to be installed in special vaults.

INSTALLATION

After uncrating, inspect the entire transformer for any damage resulting from shipment. If undamaged, move the transformer into place and connect to the lines.

FIG. 1—AIR-COOLED TRANSFORMER

In handling, all lifting must be done by means of the lifting lugs. When a transformer cannot be handled by means of a crane, it may be skidded or moved into place on rollers.

Caution: When working about a transformer, care must be taken in handling tools and loose objects, since material dropped into the windings may cause a breakdown.

PLACING IN SERVICE

When voltage is first applied to the transformer it should, if possible, be brought up slowly to its full value so that any wrong connection or other trouble may be found before damage is done.

MAINTENANCE

Due to the absence of liquid and fittings, air-cooled transformers require less maintenance than other types. It is advisable, however, to check the transformer periodically to see that no foreign material, such as an excessive amount of dust, has settled on the core and coils. While the necessary number of inspections will vary with conditions of service, they should be made at least once a year.

The core and coils should be blown out with dry compressed air whenever an excessive amount of dust has accumulated. Care should be taken to blow any water out of the air hose before using it on the transformer.

If necessary remove the expanded metal case in order to blow out the transformer. This is accomplished by removing the line leads, unscrewing the terminal adapters and removing all bushings. Remove the bolts around top and bottom of the case walls and bolts at the center of each end. Front and rear halves of the case can then be removed independently if the cover is lifted approximately three inches.

If an air-cooled transformer gets wet, it must be removed from service and thoroughly dried.

RENEWAL PARTS

Renewal parts for "ASL" transformers should be purchased directly from the factory. When writing with reference to any transformer the full name plate reading should always be given.

SERVICE DEPARTMENT

This company maintains a Sevice Department for the purpose of giving service to customers. It is recommended that questions of installation, operation, or maintenance which are not covered in this instruction book be taken up with the nearest Service Department or Sales Office. When writing with reference to any transformer, the full name plate reading should always be given.

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