

TECHNICAL STANDARDS DEPARTMENT
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T&D MATERIAL PURCHASING SPECIFICATION

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| JPSCo SPECIFICATION#: TRANSFORMER CLUSTER MOUNT BRACKETS | DATE: May 13, 2004 |
| ITEM STOCK: | SUPERSEDES: ALL PREVIOUS |

STOCK DESCRIPTION: Brackets, Cluster Mount, Transformer

APPLICATION: For Mounting Transformers ranging in size from 3kVA to 100kVA for single and three phase application.

SPECIFICATION

This specification covers the cluster mount bracket for use to install transformers to both concrete and wooden poles.

The cluster mount bracket shall be capable of mounting transformers on poles ranging in sizes from 7.75" to 12.5". This bracket shall be capable of mounting 3kVA through 100kVA transformers having any combination of 12" or 24" vertically spaced ANSI/NEMA type A and Type B lugs.

The brackets shall be packaged preassembled along with sufficient ASTM A153 class C hot dipped galvanized transformer mounting bolts, nuts and lock washers. A ground wire clamp, instruction sheet and pole measuring tape shall also be furnished with each package.

Extruded Aluminum Structural Elements

The extruded aluminum parts of the bracket shall conform to all mechanical and chemical requirements as established for alloy 6061-T6, by the Aluminum Association and ASTM standard specification B221. The bracket shall have **minimum** mechanical parameters as stipulated below.

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| Tensile Strength | 45,000 psi |
| Yield Strength | 40,000 psi |
| Elongation in 2" centers | 17% |

The mechanical strength of the cluster mount bracket shall be as such as to accommodate the stipulated load at the stipulated distance per position as indicated below.

| Type | Equipment load (lbs) per position for distance (“) from mounting pad face to equipment center of mass (C.O.G.) | | | |
|--------------|--|-------|-------|-------|
| | 14” | 18” | 22” | 26” |
| Single Phase | 3,200 | 2,500 | 2,000 | 1,725 |
| Two Phase | 3,200 | 2,500 | 2,000 | 1,725 |
| Three Phase | 3,200 | 2,500 | 2,000 | 1,725 |

Galvanized Steel Assembly Fasteners

The galvanized steel hardware used to assemble the cluster mount bracket shall conform to all stipulation of IEEE standard specification C135.1 and ANSI/ ASME specifications B18.2.1, B18.2.2, B18.5, B18.21.1, B18.22.1. All steel hardware components shall be class C hot dipped galvanized as per ASTM A153.

The cluster mount bracket shall have dimensions as per attached drawing CMB-1.0.

Tests

The cluster mount bracket and the accompanying accessories shall be subjected to tests and stipulated results as per ASTM B221, AA 6061-T6, IEEE C135.1, ASTM B557, ASTM A153, ANSI/ ASME B18.2.1, B18.2.2, B18.5, B18.21.1, B18.22.1. Certified test reports shall be made available to the purchaser upon tender.

Drawings

Manufacturer’s drawing shall be furnished at the time of tendering, and shall indicate the outline of the cluster mount bracket, together with all pertinent mechanical characteristics, and dimensions as specified herein.

All suppliers shall complete the attached form (F248) which shall form part of the evaluation process.

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| Prepared By: Craig Francis, April 19, 2004 | Approved By: _____ Manager, Technical Standards Department _____ General Manager, Engineering _____ Director, Distribution Systems Date: |
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