CITY OF AUSTIN, ELECTRIC UTILITY DEPARTMENT
PURCHASE SPECIFICATION
FOR
PROTECTORS, NTWK, VLT, 480Y/277V, W/SEMI-DUST TIGHT ENCLOSURES

Department Approval

Date	Prepared by	Issuance/Revision	Division Manager/Standards Manager
10/19/72		Issuance	
05/29/91	G.M. Martinez	Revision	

This specification, until revised or rescinded, shall apply to each future purchase and contract for the commodity described herein. Retain for future reference.

1.0 SCOPE AND CLASSIFICATION

1.1 Scope

1.1.1 This specification covers three phase open type 480Y/277 volt network protectors with semi-dust tight enclosures.

1.1.2 No deviation from this specification will be permitted.

1.1.3 Only products from manufacturers approved by the Material Standards Committee, of the Austin Energy, will be considered for use on the Utility's Electric System.

1.2 Classification

1.2.1 Voltage shall be 480Y/277 three phase 60 cycle.

1.2.2 Current rating shall be as follows:

1600 amp - 1000 KVA and smaller

2250 amp - 1500 KVA

3000 amp - 2000 KVA

2.0 APPLICABLE SPECIFICATIONS

2.1 Unless otherwise stated in these specifications, these network protectors shall be manufactured, tested and made ready for shipment in accordance with the NEMA Standard SG3.1 - latest edition.

3.0 FUNCTIONAL REQUIREMENTS

3.1 Protectors shall be motor operated, trip free and automatic.

3.2 Protectors shall be furnished with NEMA 1A semi-dust tight enclosures, and shall be suitable for mounting on 12500/480Y/277 volt or 34500/480Y/277 volt standard EEI-NEMA and ANSI transformers.

3.3 Each protector shall be completely wired and furnished with one master relay and one phasing relay.

3.4 The relay equipment furnished shall be for sensitive tripping with provisions for adding nonsensitive tripping.

3.5 Ammeter jacks shall be furnished on the protector for load checking.

3.6 Two single pole auxiliary switches shall be furnished for operating indicating devices. One of the auxiliary switches shall be closed when the breaker is closed, and the other switch shall be closed when the breaker is open.

3.7 Manufacturer shall state whether relays are at line voltage or at a lower voltage.

3.8 Removable links and fuses shall be provided at top and bottom of breaker to facilitate disconnecting and rolling out breaker.

3.9 Phase rotation shall be ABC from left to right facing front of protector.

4.0 PHYSICAL AND ELECTRICAL

4.1 Physical

4.1.1 The connection to the secondary grid system shall be made at the top of the protector and shall be four hole NEMA spade providing for the connection of four 500 MCM cables per phase for the 1600 amp and 2250 amp protectors and nine hole NEMA spade providing for the connection of six 500 MCM cables per phase for the 3000 amp protector.

4.1.2 The phase bars of the protectors shall be completely isolated by unbroken barriers and also shall be completely isolated to grounded framework by unbroken barriers.

4.2 Electrical

4.2.1 None

5.0 GENERAL

5.1 The supplier shall furnish five (5) copies of the following: photographs, outline drawings, wiring diagrams and instruction manuals for the installation, maintenance and operation of these protectors.