

## INTRODUCTION

The pillar is of first class quality certified and type tested by KEMA in Holland and designed for continuous satisfactory operation as continuity of supply is of prime consideration. The design allows all necessary precaution for the safety of operation and maintenance personal. The equipments operate satisfactorily under variation of load, voltage and short circuit or other conditions, which may occur on the system.

All equipments design is to withstand the accidental short circuit. it has the features of strong complete set, small volume, compact structure etc. and this reduces greatly design workload and costs.

The body constructed of polyester fiberglass reinforced to be stronger enough and avoid any damages and cracks for the equipments installed.

All the main equipments are arranged so that it is accessible from the front. The doors are removable and are provided with hinges allowing to be opened to 180degree and give the end users easy installation and maintenance for inside equipments and apparatus. The pillar has a sloping weatherproof roof and adequate ventilation.

The pillar is designed to accommodate completely insulated 416 V covered bus bar (3P+N). The bottom part (underground)is designed to allow the entrance and outgoing cables from 4x70mm<sup>2</sup> up to 3x120+240mm<sup>2</sup>

## TECHNICAL SPECIFICATION:

The used equipment is suitable for the following climatic conditions prevailing at site.

1-1 Ambient Temperature

Maximum 55 °C.

Minimum 10- °C.

2-1 Under direct solar radiation where a black metal object may attain a temperature of 80+ °C.

3-1 Air Humidity Maximum %92

4-1 Altitudes: Form sea level up to 1000 M

5-1 Frequent sand storms laden with saline atmosphere

6-1 System data

Nominal voltage 240/416 System -3phase, -4 wire with neutral solidly earthed Frequency 50Hz Short circuit level is according to the pillar capacity.

## GENERAL STANDARDS:-

The low voltage pillar complies with the main international standards:

IEC 1-60439 relating to construction of low voltage switchgear and control gear assemblies.

IEC 11-2-60068 defining resistance to salt mist.

IEC 30-2-60068 defining resistance to damp heat construction.

EN 50102:1995 degree of protection provided by enclosures for electrical equipment against mechanical impacts (IK code).

IEC 2001-60529 degree of protection provided by enclosure .

IEC 62208:2003 empty enclosures for low voltage switchgear and control gear and control gear assemblies.

IEC 11:2000-2-60695 fire hazard testing part 11-2: glowing hot-wire based test methods. Glow-wire flammability test method for end products.