

66kV/11kV  
30kV/11kV



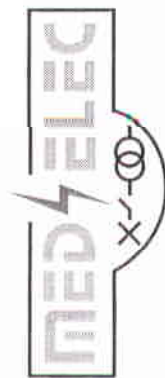
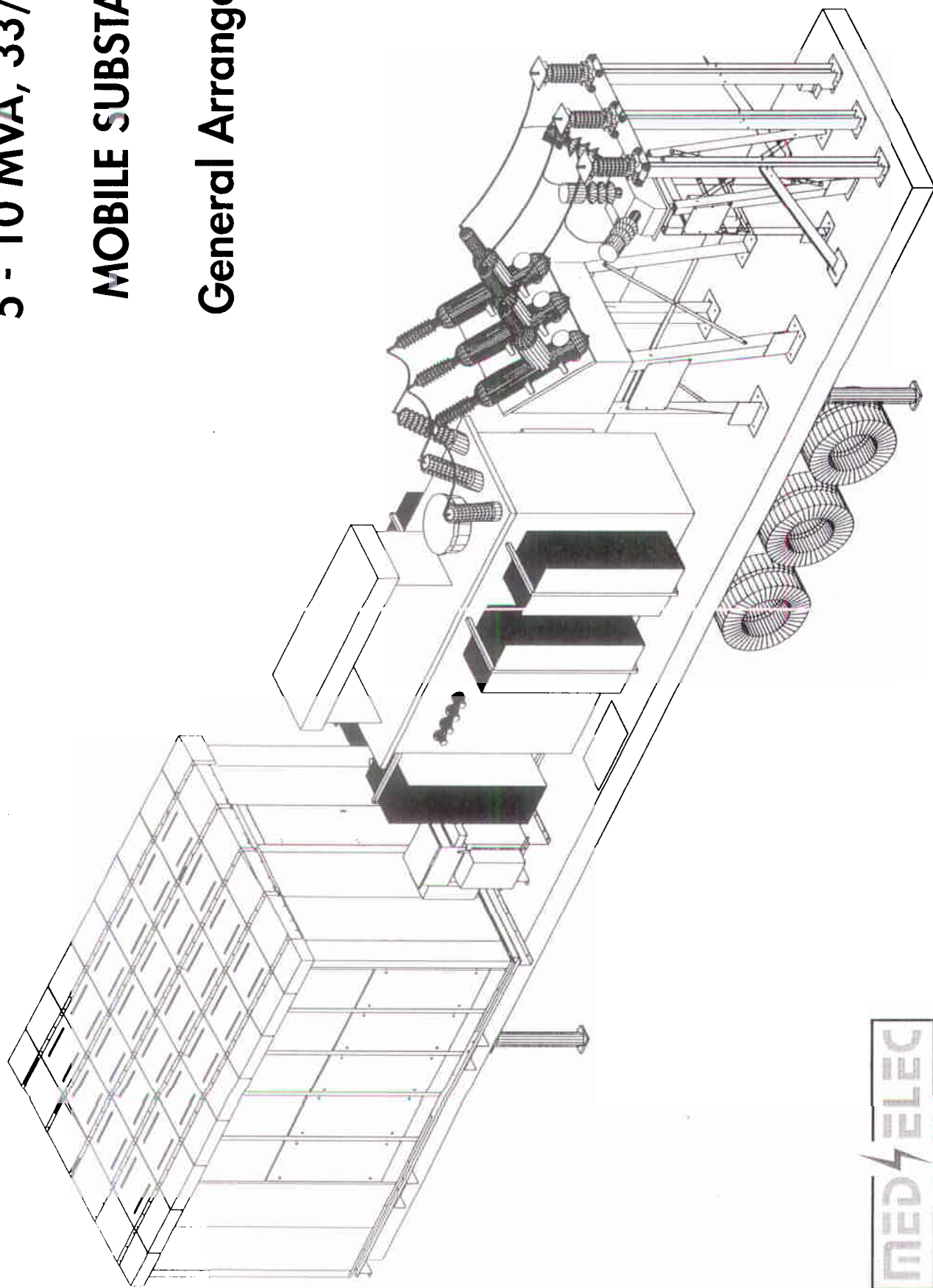
**MEDELEC SWITCHGEAR LTD**  
**P.O. BOX 20 PAOLA, MALTA PLA01**

**5 & 10 MVA MOBILE SUBSTATIONS**

**5 - 10 MVA, 33/11kV**

# **MOBILE SUBSTATION**

## **General Arrangement**



## 5 & 10 MVA MOBILE SUBSTATIONS 30kV / 11kV & 66kV / 11kV

Medelec Switchgear Ltd manufactures and supplies mobile substations in two basic versions namely:

1. 30 kV / 11 kV
2. 66 kV / 11 kV

rated 5 or 10 MVA.

A typical 5 MVA mobile type 30 kV / 11 kV substation includes the following:

- a) One metal structure c/w 30 kV insulators for incoming 30 kV lines
- b) Three single phase kV surge arrestors
- c) 3 single phase 30 / 0.11 kV, low oil volume outdoor type voltage transformer output 100 VA per phase class 1 for operation of voltmeter.
- d) One 30 kV outdoor, triple pole, metal clad, vacuum circuit breaker, GEC type OX.
- e) One indoor combined control and relay panel, complete with control and protection equipment for the OX 30 kV circuit breaker.
- f) One outdoor type 30 / 11 kV ; 5 MVA power transformer c/w on load tap changer and AVR panel.
- g) One 4-panel switchboard, 11 kV indoor, triple pole, single busbar, vacuum circuit breaker GEC type VMX with 630 Amp busbars.
- h) One 11 kV triple pole, indoor/outdoor, oil insulated, transformer fuse switch, Lucy Oxford type EFS, complete with busbar cable box for connection of incoming 11 kV cables.
- i) One 25 kVA, oil insulated, indoor type 11 kV / 380 V auxiliary transformer.
- j) One 30Ahr, 110 V, DC battery / charger unit.

The 30 kV control and relay panels, VMX switchboard, AVR panel and battery unit are installed inside a metal housing including internal lighting and cooling extractor fan.

The complete housing, power transformer, OX circuit breaker, oil fuse switch, auxiliary transformer, 30 kV voltage transformer and surge arrestors are installed on a mobile low loader for transport and relocation of complete substation.

Mobile substations are supplied assembled, complete with all equipment supports and connections ready for connection of incoming 30 kV and outgoing 11 kV cables.