

# MANUAL CONTROL AND SWITCHGEAR CUBICLE

## CONSTRUCTION

A sheet steel cubicle, protection degree IP34.

Digital control, monitoring and measuring components are on a door of the cubicle and other components on a mounting plate inside the cubicle.

## **EQUIPMENT**

# **Control equipment:**

Start

Stop

Emergency stop

ON and OFF control of generator main breaker

## **Monitoring equipment:**

Automatic alarm and shutdown for following parameters:

- lubrication oil pressure low
- coolant temperature high
- generator overcurrent

#### Indicators:

- generator main breaker ON
- charging alternator not charging

## Measuring equipment:

Generator voltage

Generator current

Generator frequency

Run hours

Oil pressure

Coolant temperature

## Power equipment:

3-pole main breaker for generator

3-pole short-circuit protection for generator

3-pole over-current protection for generator

3 current transformers

## **OPERATION**

The diesel generating set is started and after voltage has risen the generator main breaker is closed, then the diesel generating set starts to supply consumers. The protection system acts automatically during operation releasing the generator main breaker and stopping the diesel generating set in case any of the monitored parameters gets alarm.

## **PRINCIPAL DIAGRAM**

