



ELECTRICAL A. MODERN FACTORY COMPANY

ROUTINE VERIFICATION CERTIFICATE

Format No. FM 19-04 Rev.04

Date: 03/03/2021

Order No.: 10617

Tag No.: MCC-UR

Customer: MZQ CONTRACTING EST.

Drawing No.: DP-34355-20

Item No.: 09

v Power switchgear and controlgear assembly (PSC)

Un: 400VAC

Distribution boards intended to be operated by ordinary persons (DBO)

InA: 100A

IEC 61439
Section

Test Description

YES

NO

N/A

11.2 Degree of protection of enclosures

- Degree of protection as specified (Visual test)
- All gaskets intact
- Door is aligned (no damages)

v

v

v

11.3 Clearances and creepage distances

- Clearances and creepage distances as per standard

v

11.4 Protection against electric shock and integrity of protective circuits

- All live terminals are covered to IP2X
- Doors are earthed
- Earth is connected to metal frame in all sections

v

v

v

11.5 Incorporation of built-in components

- Busbar dimensions and supports are as specified
- Busbars identification are as specified
- Breakers ratings and settings are as specified

v

v

v

11.6 Internal electrical circuits & connections

- Loose-free connection at joints
- Pressure washers on sides of connection
- Torque checked of all connections/joints

v

v

v

11.7 Terminals for external conductors

- Terminals sizes and numbers are sufficient
- Terminals identification are as specified
- Sufficient space for incoming/outgoing cables

v

v

v

11.8 Mechanical operation

- All mechanical interlocks are working
- All manually operated components are working
- Doors (including locks) are easily open and close

v

v

v

11.9 Dielectric properties

- The Test voltage for power switchgear and control gear assemblies with a rated insulation voltage between 300-690V AC is 2,670 V d.c. for 1 second.

Phase/Phase

≥1000

MΩ

Phase/Neutral

≥1000

MΩ

Phase/Earth

≥1000

MΩ

Neutral/Earth

≥1000

MΩ

- For assemblies with incoming protection rated up to 250 A, the verification of insulation resistance may be by measurement at a voltage of 500 V d.c.

Test is satisfactory if the insulation resistance between circuits and exposed conductive parts is at least 1000 Ω/V

Insulation Resistance:

≥1000 Ω/V

11.10 Wiring, operational performance & function

- Busbar and power continuity test point to point
- Earth continuity test
- Overload and tripping functions

v

v

v



Date

QA/QC

Eject. Engineer

03/03/2021



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