

MV Switchgear Dew-Point and Heater Verification Worksheet

Space heaters do not remove moisture. They maintain internal surfaces above the local dew point. Record the design assumptions and verify the minimum measured temperature margin.

Project / Site		Document No.	
Panel / Bay		Revision	
Prepared by		Date	
Witnessed by		Status	

Site design inputs

Status	Checklist item	Evidence / comment
[]	Record minimum and maximum ambient temperature and daily rate of change.	
[]	Record maximum relative humidity and expected shutdown duration.	
[]	Record indoor/outdoor location, altitude, pollution, washdown and coastal exposure.	
[]	Check room ventilation, HVAC, cable-trench moisture and construction drying status.	

Panel inputs

Status	Checklist item	Evidence / comment
[]	Record compartment volume, enclosure material, sealing and intentional ventilation.	
[]	Identify thermal bridges, external walls, cable entries and cold surfaces.	
[]	Record heater location, rated power at actual voltage, guard and clearance.	
[]	Record thermostat/hygrostat setpoints, deadband, sensor location and alarm contacts.	

Verification measurements

Status	Checklist item	Evidence / comment
☐	Record ambient and compartment temperature and relative humidity simultaneously.	
☐	Calculate dew point using a documented formula or calibrated instrument.	
☐	Measure the coldest accessible internal surface; do not rely only on air temperature.	
☐	Confirm heater current, control operation and protective-device rating.	
☐	Repeat during the most adverse cool-down or humidity transition.	

Acceptance record

Status	Checklist item	Evidence / comment
☐	Required margin above dew point: _____ degC.	
☐	Measured minimum margin above dew point: _____ degC.	
☐	Sensor calibration reference and date recorded.	
☐	Test duration and environmental state recorded.	
☐	If insufficient, correct moisture ingress, ventilation, distribution or control logic before increasing wattage.	

Overall result	☐ Accepted ☐ Accepted with comments ☐ Rejected
Open actions	
Final approval	Name / signature: _____ Date: _____

Use project-specific standards, approved drawings, settings and manufacturer instructions. This resource does not replace competent engineering judgement or contractual acceptance requirements.