

**CERTIFICATE OF ELECTRICAL INSPECTION AND TESTING AT FLAMMABLE LIQUIDS & FUEL STORES FOR  
EXISTING INSTALLATIONS IN AND ASSOCIATED WITH POTENTIALLY EXPLOSIVE ATMOSPHERES IN  
ACCORDANCE WITH I.S EN 60079**

*Certificate only to be completed by persons that can demonstrate core competence in electrical works in hazardous areas as per  
qualifications attached to this document*

**CHECKLIST FOR INSPECTION OF AN ELECTRICAL INSTALLATION**

All emergency stop switches are correctly labelled and have red operators on yellow background	
An emergency stop switch is provided at every operating position	
An emergency stop switch is provided at each exit of the Autogas compound	
The autogas emergency stop switch(es) functions correctly	
Driver Controlled Delivery emergency stop switch functions correctly	
Firefighter's switch is at the correct height and functions correctly	
The public address (PA) system is operating correctly and is not disabled by the pump emergency stop system	
The tanker stand lighting is functioning correctly	
Fill points bonded to earth	
Vent pipes bonded to earth	
Earth electrode present	
Mains water bonded to earth	
Mains gas bonded to earth	
Doms switched through emergency stop system	
Ducts sealed correctly with correct sealant	
The emergency switch circuit cannot be re-energized other than by an authorized person	
No loose electrical connections, including those for earthing, bonding etc	
No loose fixings, glands, conduit, stoppers etc.	
No corrosion of enclosures, fixings, cable entries etc.	
No undue accumulation of dust, dirt or rubbish (leaves, paper etc.)	
No indication of fuel, oil or compound leakage	
explosion protection suitable for zone of installation	
correct circuit identification	
RCD protection has been provided for dispensers	
No overhead lines (e.g. HV and LV power and telephone lines) over or encroaching on hazardous areas	
No building opening extends into the hazardous area (including the zone around vent pipes)	
The zone around the vent pipes is free from electrical equipment including cables	
No part of the hazardous area extends beyond the forecourt perimeter (including the zone around vent pipes)	
Presence of test earth fault loop impedance socket-outlet adjacent to supply intake (non-hazardous area)	
Presence of lightning protection	
Labelling of circuits, protective devices, switches and terminals	
Main switchboard and distribution boards - circuit identification	
Evidence of general electrical periodic inspection report (non-hazardous areas)	
Evidence of emergency lighting reports	
Interceptor Alarm present and functioning correctly	

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**Date:**

**Contractor Name & Address**

**Occupant Name/Trading as:**

**Address:**

**Reg No.**

**Installation Approx. Age:**

**Reason For Inspection:**

**If Other please specify:**

**Extent of installation covered by this report:**

**N.B** *Cables concealed within the fabric of the building, conduits and trunking or underground have not been inspected unless otherwise stated*

If Partial please state what part this report refers to:

Type of Earthing:

No. of Phases:

Frequency:

Voltages:

If earthing is TNC-S then please refer to 9.3.5, APEA/EI DESIGN, CONSTRUCTION, MODIFICATION, MAINTENANCE AND DECOMMISSIONING OF PETROL FILLING STATIONS 4th edition April 2018

L1

L1-L2

Prospective Short Circuit Current:

A

L2

L2-L3

Prospective Fault Current:

A

L3

L3-L1

External Earth Fault Loop Impedance Zs:

Ohms

Max. Earth Fault Loop Impedance Ze:

Ohms

**Primary supply Overcurrent protective device:**

TYPE:

RELEVANT EN STANDARD:

NOMINAL CURRENT RATING:

A

SHORT CIRCUIT CAPACITY:

kA

**Main Switch or Circuit Breaker:**

VOLTAGE RATING:

V

CURRENT RATING:

A

RCD RATED OPERATING CURRENT:

mA

OPERATING TIME:

ms

**Test Instrument Serial Numbers**

**Site Documentation to be attached**

Continuity Tester:

Hazardous area classification I.S EN 60079-10-1/2

Insulation Resistance Tester:

Equipment group, category and temperature class

Loop Impedance Tester:

Sufficient records to enable the explosion protected equipment to be maintained in accordance with it's type of protection

Installation drawings as required by IS 10101

Combination Tester:

Inventory of explosion protected equipment

Descriptive system document for intrinsically safe circuits (if applicable)

Any other documentation required by statute

HAZARDOUS AREA CIRCUITS TESTED

Circuit Description: Labelled correctly:

No. of Phases: Wiring Type: Conductors CSA: Multi-pole Isolation:

**OVERCURRENT PROTECTIVE DEVICE:**

EN Standard: Type: Rating: A Short Circuit Capacity: kA

Maximum permissible earth fault loop impedance  $Z_L$ :  $\Omega$  Circuit Impedance (R1+R2) :  $\Omega$

**INSULATION RESISTANCE:**

Phase-Phase  $M\Omega$  Phase-Neutral  $M\Omega$  Phase-Earth  $M\Omega$  Neutral-Earth  $M\Omega$

Polarity:  Maximum measured earth fault loop impedance:  $\Omega$

Functionally checked as per IS 10101

Phase sequence and motor rotation check as per IS 10101

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No. of Phases:

Wiring Type:

Conductors CSA:

Multi-pole Isolation:

**OVERCURRENT PROTECTIVE DEVICE:**

EN Standard:

Type:

Rating:

A

Short Circuit Capacity:

kA

Maximum permissible earth fault loop impedance  $Z_L$ :

$\Omega$

Circuit Impedance (R1 + R2) :

$\Omega$

**INSULATION RESISTANCE:**

Phase-Phase

M $\Omega$

Phase-Neutral

M $\Omega$

Phase-Earth

M $\Omega$

Neutral-Earth

M $\Omega$

Polarity:

Maximum measured earth fault loop impedance:

$\Omega$

per IS 10101

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M $\Omega$

Phase-Neutral

M $\Omega$

Phase-Earth

M $\Omega$

Neutral-Earth

M $\Omega$

Polarity:

Maximum measured earth fault loop impedance:

$\Omega$

per IS 10101

Observations and recommendations including timeframe for completion of remedial action:	Recommendation as detailed below
No remedial works required	

One of the following numbers, as appropriate is allocated to each of the observations made above to indicate to the person(s) responsible for the installation the action recommended.

- (1) REQUIRES URGENT ATTENTION (2) REQUIRES IMPROVEMENTS (3) REQUIRES SOME ATTENTION (4) DOES NOT COMPLY WITH CURRENT NATIONAL RULES FOR ELECTRICAL INSTALLATIONS IN POTENTIALLY EXPLOSIVE ATMOSPHERSES\***

*\*This does not necessarily imply that the electrical installation inspected is unsafe*

**OVERALL ASSESSMENT:**

**Name of Tester:**

**Qualifications:**

**Date of Inspection:**

**Report Date:**

**Recommended date for next inspection:**

**Signature of Inspector:**

**Certification of Qualifications**

***Proof of core competence for working in hazardous  
areas e.g. Compex 07/08***

please attach documentation here