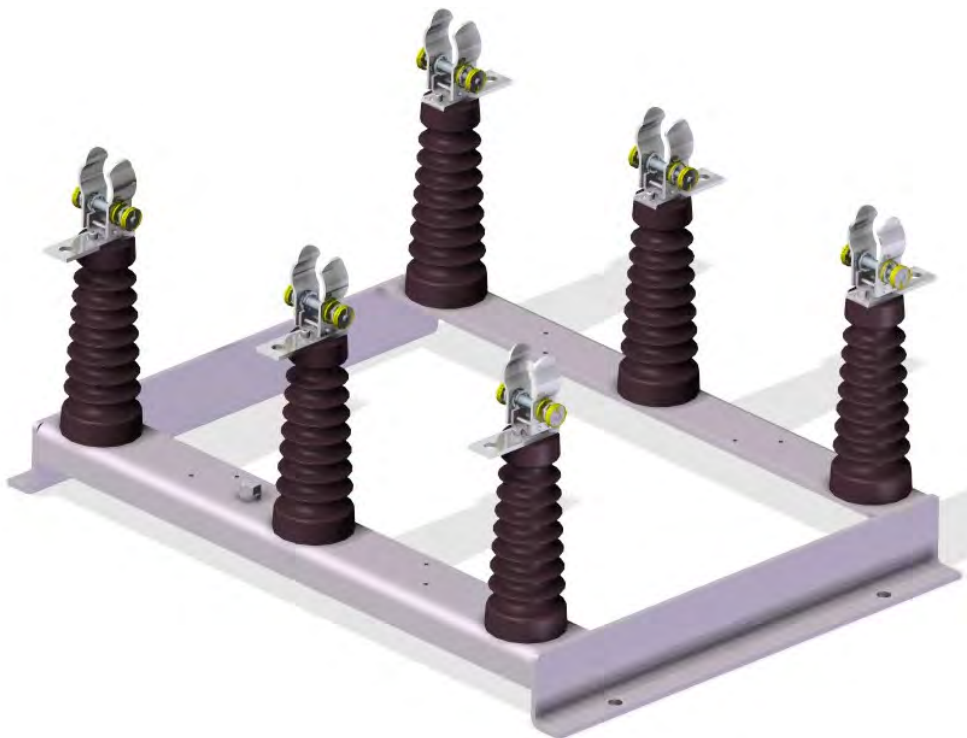




**DRIESCHER Y WITTJOHANN, S.A.**  
MEDIUM VOLTAGE SOLUTIONS

## **TECHNICAL SPECIFICATION**

### **SINGLE POLE AND THREE POLE HIGH VOLTAGE FUSE HOLDERS TYPE SP AND DSP**



**SINGLE POLE AND THREE POLE HIGH VOLTAGE FUSE HOLDERS  
TYPE SP AND DSP**

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# SINGLE POLE AND THREE POLE HIGH VOLTAGE FUSE HOLDERS TYPE SP AND DSP

## 1.- General Features

Single pole and three pole high voltage fuse holders on air DRIWISA® are used in medium voltage systems from 7.2 kV up to 38 kV, fulfilling the following applications:

- Support and connection of the motor protection, capacitor banks or transformers (Type SP y DSP).

Single pole and three pole high voltage fuse holders on air DRIWISA® are installed inside the metal enclosed substations or medium voltage metal enclosed switchgear for indoor or outdoor service and complies with the following requirements:

- High voltage fuse manual assembly.
- Retreat high voltage fuses with DRIWISA® pliers.
- Vertical, horizontal or inverted mounting.

## 2.- Standards

Single pole and three pole high voltage fuse holders on air DRIWISA® comply with the following Standards:

NMX-J-098	Sistemas eléctricos de potencia-suministro-tensiones eléctricas normalizadas
NMX-J-564	Equipos de desconexión y su control - parte 1: especificaciones comunes
NMX-J-068	Tableros de alta tensión
NMX-J-149/1	Fusibles alta tensión-parte 1: cortacircuitos - fusibles limitadores de corriente
IEC 62271-1	Common specifications
IEC 62271-200	Ac metal-enclosed switchgear and controlgear for rated voltages above 1 kv and up to and including 52 kv
IEC 60282-1	High-voltage fuses - Part 1: Current-limiting fuses
IEC 60273	Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000 v
ANSI C37.22	Preferred ratings and related required capabilities for indoor ac medium-voltage switches used in metal-enclosed switchgear
IEEE STD C37.20.4-2001	Standard for indoor ac switches (1 kV–38 kV) for use in metal-enclosed switchgear

## 3.- Service Conditions

Single pole and three pole high voltage fuse holders on air DRIWISA® are able to operate within the range of the following environment conditions.

Temperature: -10 °C / +40 °C.  
Relative Humidity: < 60%  
Altitude: 0 - 1000 msnm \*

\*For higher installation heights must apply the appropriate correction factor. (IEC 60694).

# SINGLE POLE AND THREE POLE HIGH VOLTAGE FUSE HOLDERS TYPE SP AND DSP

The enclosure, metal enclosure substation or board, must have the appropriate NEMA or IP degree protection to secure the specified temperature or humidity conditions and keep the inside air free of smoke, gases, water, corrosive or explosive steamers and electrically conductive particles (dust).

IEC 60529                                      Degrees of protection provided by enclosures (IP Code).

NEMA 250                                        Enclosures for electrical equipment (1000 volts maximum).

## 4.- Electrical Capacities

Single pole and three pole high voltage fuse holders on air DRIWISA® comply with the following electrical values (according to the requirements of Section 2 Standards):

RATED MAXIMUM VOLTAGE <b>kV</b>	RATED CURRENT <b>A</b>	RATED WITHSTAND VOLTAGE IMPULSE (BIL) 1.2 X 50µs <b>kV</b>	RATED WITHSTAND VOLTAGE 60Hz DRY 1 min. <b>kV</b>
7.2	630	60	20
17.5	630	95	38
25.8	630	95	60
38	630	125	80

## 5.- Construction

Single pole and three pole high voltage fuse holders on air DRIWISA® are mainly constructed with the following elements:

### 5.1- Mounting structure

A steel frame made of angles and canals with an electrolytic galvanized corrosion coating with a 18 µm thickness, able to support mechanical efforts resulting of the normal operation and the effects of short circuit currents.

### 5.2- Insulators

Non-hygroscopic and non-flammable material with the mechanical strength to support the efforts generated of the the normal operation and the effects of short circuit currents. Its mechanical strength does not allow deformations that cause insulation failures in the non-load isolator switches.

### 5.3- Conductive parts

Are made of electrolytic cooper (99.9%) with round edges, plated with 5 µm, able to support short-term currents and stand up to the limits of temperature increase according to the standards in Section 2 Standards.

## 6.- Technical Information

### 6.1.- Drawings

Printed drawings as required can be provided in letter size, multiple letter size or electronic format (2D and 3D).

# SINGLE POLE AND THREE POLE HIGH VOLTAGE FUSE HOLDERS TYPE SP AND DSP

## 6.2.- Instructives

Easily accessed on our website <http://www.driwisa.com/instructions.htm>

## 7.- Tests

### 7.1.- Prototype test reports

Reports of prototype tests performed in accredited national laboratories (LAPEM) that guarantee the fulfillment of the values and capacities specified in Section 4 Electrical Capacities.

### 7.2.- Routine Tests

Routine test are done to each Non-Load isolator Switches on air DRIWISA®.

- Visual inspection and dimensional analysis.
- Voltage withstand 60 Hz.

## 8.- Marking

Single pole and three pole high voltage fuse holders on air DRIWISA® contain a nameplate made of stainless steel material and has recorded the following information:

- Name of the manufacturer.
- Serial number.
- Type and model.
- Nominal voltage kV.
- Rated withstand voltage impulse in kV.
- Rated current A.
- Legend "Made in México".

## 9.- Accesories and spare parts.

### 9.1.- Accesories

It offers optional accesories to be installed before or after the delivery of the Single pole and three pole high voltage fuse holders on air DRIWISA®.

- a) Auxiliary contacts to indicate the high voltage position.
- b) Voltaje presence indicators.
- c) DRIWISA pliers to remove high voltage fuse holder.

### 9.2.- Spare parts

It has all components parts to provided for maintenance of the Single pole and three pole high voltage fuse holders on air DRIWISA®.

- a) Complete pole (isolator and conductive parts).
- b) Live parts set (conductive parts).
- c) Isolators