

Surge protection devices (SPD) are designed to protect from transient overvoltage in the electrical network and transfer surge currents, keeping electronic equipment safe from voltage and current spikes.

### **Attention**

This installation guide contains important safety instructions that must be followed during installation and maintenance of the equipment, This manual should be considered an integral part of the equipment and must be always available for everyone who interacts with the equipment. ORBLIGHT shall not be liable for damages caused to people and/for the equipment due to installation, maintenance or operation in disagreement with the recommendations of this manual.

### **Safety Information**

Before starting the installation, check the physical integrity of the product. If there is any damage or failure, the device must be replaced before installation. The product should only be installed by qualified professionals with technical knowledge in electricity. In order to carry out the installation, the national technical standards and regulations must be followed. The device should be used only as described in the installation manual. If the device is exposed to surges that generate currents exceeding the values indicated in the technical data table, the device may be damaged. Any modification to the device invalidates its warranty. In case of doubt, the user should contact







### **Product**



### **Technical specifications**

MODEL	RESIDENTIAL SURGE PROTECTOR - H2/20kA
NOMINAL OPERATING VOLTAGE (Vo)	100~270(L/N); 220(L/L)-[+/-10%]
MAXIMUM OPERATING VOLTAGE (Uc) Vac/Vcc	275/440
NOMINAL FREQUENCY	50/60Hz
MINIMUM NOMINAL DISCHARGE CURRENT@8/20µS (In)	5kA
MAXIMUM NOMINAL DISCHARGE CURRENT@8/20μS (In)	10kA
LEVEL OF PROTECTION(Up/VPR)	≤1,5kV @10kA [L-N   L-L]
CAT.C HIGH EXPOSURE	(8/20µs) [1 time 20KA / 13 time 10KA]
EXPIRATION FOR STORAGE	UNDETERMINED
COMPONENTS – VARISTOR B72225S4271K101	275V - UL1449
CASING	POLYPROPYLENE – UL94
INSTALLATION SCHEME	PARALLEL WITH THE LOAD
ELECTRICAL CONNECTION	FLEXIBLE WIRE [16AWG 221°F - 600V]- UL(3578 or 1015 or 1007)
CABLE LENGTH	6.02in – 153mm [+/-5%]
PROTECTION MODE	COMMON MODE(L-PE/N-PE)
OPERATING TEMPERATURE	(-104+ 185)°F – (-40+ 80)°C
DEGREE OF PROTECTION - IP	IP 67
APPROXIMATE WEIGHT	40g (0.08)lbs
DIMENSIONS [LxWxH]	(3.78x2.46x1.83)in - (96x62.5x46.5)mm
INPUT CONNECTION TYPE	BLACK(L)- WHITE(N)- GREEN (G)
PRODUCT WARRANTY AGAINST MANUFACTURING DEFECTS*	55 YEARS FROM THE DATE OF SALE
COUNTRY OF ORIGIN	MADE IN BRAZIL







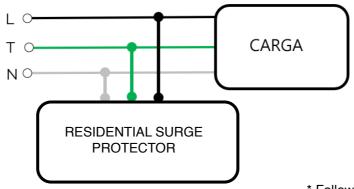
### **Identification Tag**

lmáx	Maximum Surge Rating
Up	Protection level
ln	Maximum discharge current
IL	Line Current
Uc	Maximum continuous operation voltage

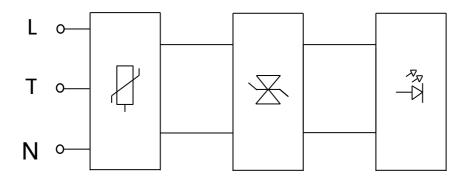


#### **Connection modes**

This device only supports the connection method in parallel with the grid



\* Follow product connection scheme.





#### Installation

- **Step 1:** Turn off the power before starting any installation to ensure safety.
- **Step 2:** Identify the appropriate location for the SPD in the electrical panel. It is usually installed at the power input, next to the main circuit breaker.
- **Step 3:** Connect the SPD wires to the corresponding terminals on the switchboard. The SPD has terminals for connecting the phase, neutral and ground wires.
- **Step 4:** Make sure to connect the SPD's ground wire to the switchboard's grounding system.
- **Step 5:** Fix the SPD securely to the switchboard using screws or a bracket.
- **Step 6:** Check again that all the wires are properly connected and that the SPD is firmly fixed.
- **Step 7:** After ensuring that everything is correctly installed, turn the power back on.