

Surge Protector 2



WARNING – All electrical connections must be performed by qualified experts only! Unqualified handling might lead to shock, burns or death.

WARNING – Beware of high voltage. Never work on a system connected to power or within two minutes after disconnection to avoid electric shock hazard.



CAUTION – The Surge Protector 2 has been designed for quick installation and replacement. To avoid the need for splicing it is designed to be installed inside the LORENTZ controller. The Surge Protector 2 does not have a waterproof rating.



Item no.: 19-005210

Introduction

The Surge Protector 2 is an evolution of the original LORENTZ Surge Protector. The Surge Protector 2 is compatible with more LORENTZ accessories and is faster to install and exchange.

The Surge Protector should be installed where any external sensors may be subject to induced voltages from lightening or other high power sources. The Surge Protector 2 is installed between the controller and any sensors to reduce the chance of the controller being damaged from external voltages.

Compatibility

The Surge Protector 2 can be used with any switched, pulse or analogue (4-20 mA) inputs sensors including

- Well Probe Sensor 19-000000
- Water Sensor 19-000001
- Float Switch 19-000030
- Pressure Switch 19-000310
- Liquid Level (all types e.g. 19-005040)
- Liquid Pressure Sensor (all types, e.g. 19-004460)
- Water Meter (all types, e.g. 19-002160)
- Sun Switch (19-000050)

All specifications and information are given with good intent, errors are possible and products may be subject to change without notice. Pictures may differ from actual products depending on local market requirements and regulations.

Installation

The Surge Protector 2 must be installed inside the controller. The small size allows for multiple Surge Protectors to be installed to protect all connected inputs.








The Surge Protector 2 has two wires at the top that connect to the controller and two terminals at the bottom that connect to the external switch/sensor. The Surge Protector is installed in between the controller terminals and the switch/sensor.

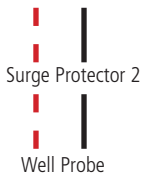
Correct polarity should be observed when connecting any sensors to the controller. Wrong polarity will cause false sensor signals or errors being reported.

The Surge Protector 2 is polarity safe. We recommend using the red wire* (+) for *switched connections (closed switch symbol), pulse or 24V+* and the black wire* (-) for *com or signal*.

*In the example wiring below, red wire is shown as dashed line, black wire as solid line.

Example wiring:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	com		com		com	+24V		+24V				+24V		com	+	-
Well probe		Remote switch		Water meter		Analog 1 4-20 mA		Analog 2 4-20 mA		Out		Water sensor		Sun Sensor		



ATTENTION – The Surge Protector 2 has no inbuilt cable strain relief for the terminal connection. Ensure that the cable gland is tightened to provide strain relief to the cable.

Technical Data

- max. voltage: 30 V DC
- max. current 8/20 μ s: 500 A
- size (B x W x H): 56 x 26 x 12 mm (2.2 x 1.02 x 0.47 in)
- weight: 0.1 kg (0.22 lbs)
- ambient temperature: max. 80°C (176°F)
- wire size: 2 x 1.5 mm² (16 AWG)
- enclosure class: IP 20