Wireless Switches – Generator

AFIG, AFIM Series

Energy Harvesting



Description

The generator and generator with RF-Electronics PCB convert mechanical energy to electrical energy, enabling our Energy Harvesting wireless snap and rocker switches to provide data transfer via RF technology, eliminating the need for batteries. This also eliminates the need for complex wire assemblies and increases flexibility for use in previously inaccessible locations.

The generator is integral to the switches, and is also available as a stand-alone unit for use with your own mechanical switch. There are multiple frequencies available.

Features

- Small size, with high energy efficiency
- 868 MHz and 915 MHz frequency bands allow global use within different applications
- Long mechanical life
- Protocols are sent up to 3 times

Typical Applications

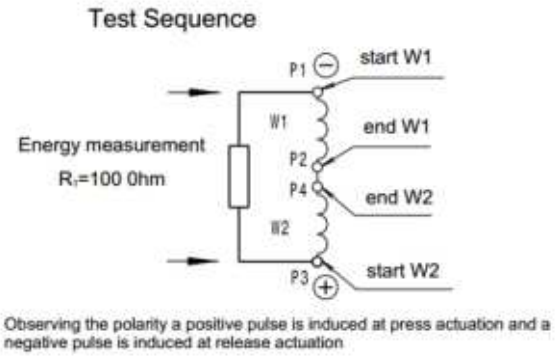
- Building Automation
- Industrial Automation
- Smart Home
- Lighting

Technical Specifications

Operating Temperature	-40 ºC to 85 ºC (-40 ºF to 185 ºF)
Mechanical Life	Up to 1,000,000 operations
Frequency Bands, Generator with RF-Electronics	868 MHz or 915 MHz
RF Distance with Cherry Energy Harvesting Switches (open area)	Up to 300 m (984')
RF Distance with Cherry Energy Harvesting Switches (buildings)	Up to 30 m (98')
Operating Force	13 N max
Energy Generated	0.33 mWs actuating and releasing

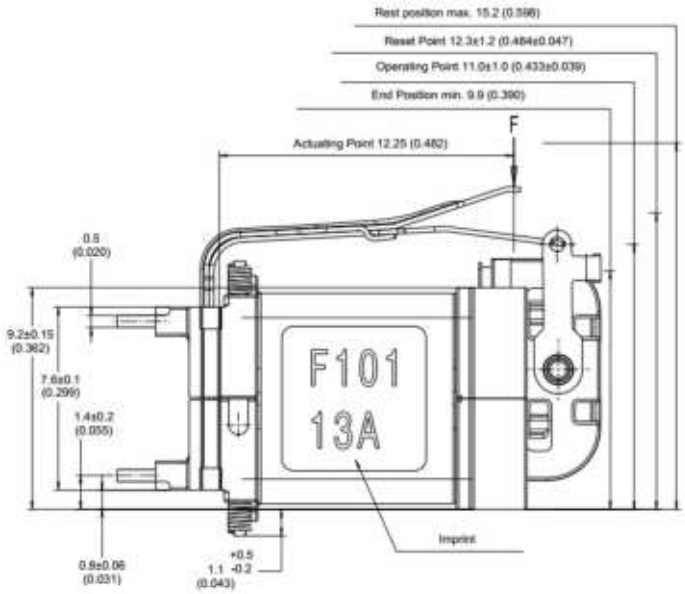
Products

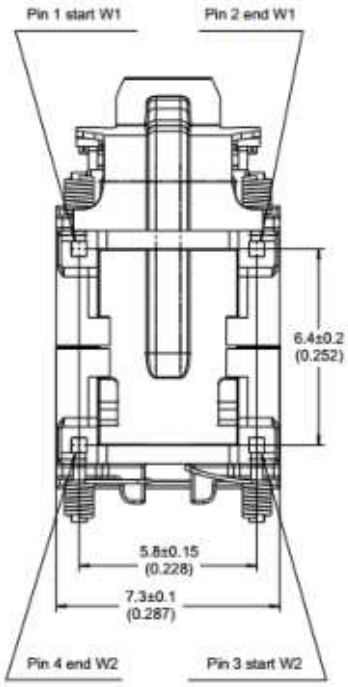
Part Number	Description
AFIG-0007	Generator
AFIM-1001	Generator, RF-Electronics, ZF protocol wire, antenna, 868 MHz
AFIM-5002	Generator, RF-Electronics, ZF protocol wire, antenna, 915 MHz

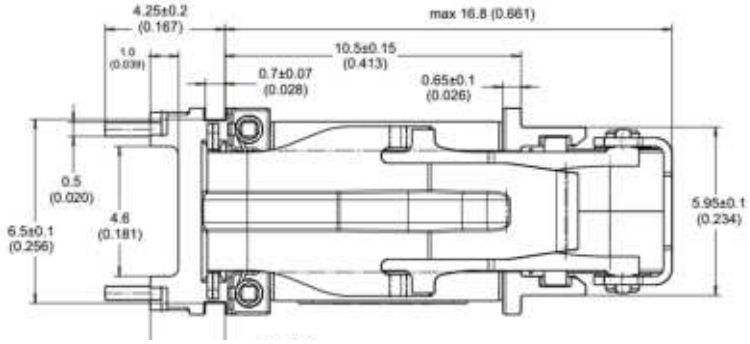


Observing the polarity a positive pulse is induced at press actuation and a negative pulse is induced at release actuation

Dimensions mm (inches)







GENERATOR WITH PCB AND WIRE ANTENNA

