

ABSTRACT

A plug-in discharge detection unit includes two plugs 12 of a cathode and an anode configured to allow insertion into respective two plug insertion holes 81 of a plug
5 socket 8, a discharge detection section 20 configured to allow detection of a noise of discharge superimposed on a voltage or current, and an arithmetic section 30 configured to allow determination of whether discharge has occurred based on the noise, the detection unit further including: a ground terminal 13 electrically connected to a
10 ground; at least one first switch 14 electrically connected to a secondary side of the respective plug 12; and a current limiting resistor 16 electrically connected to a secondary side of the first switch 14, wherein the current limiting resistor 16 has a secondary side electrically connected to the ground terminal 13, and the arithmetic section 30 changes, if determining that discharge has occurred, the first switch 14 from an open state to a closed state to pass an artificial leakage current with a current value in
15 accordance with a resistance value of the current limiting resistor 16 through the ground terminal 13.