

IC System

Integrated Control Surge Device (ICSD)
ID: (HS1000)

RAIN BIRD



INTEGRATED CONTROL SURGE DEVICE (ICSD)

The Integrated Control Surge Device (ICSD) is installed between the IC System wire path and grounding electrodes to allow transient surges to exit to ground.

The ICSD is normally open, but will close when transient surge energy is detected, shunting the surge to ground.

GROUNDING THE DEVICE

Each ICSD grounding location must have an earth ground resistance of 50 ohms or less.

An ICSD shall be located every 15 ICMs or every 500 feet (150 meters), whichever condition is reached first. This recommendation offers "containment" by limiting exposure to the area between ICSDs and drains the surge energy from the line.

SUCCESSFUL CONTAINMENT

The key for successful containment is proper installation of ground rods or plates so that the desired resistance level is achieved. Doing so can help prevent damage to the IC modules and significantly reduces troubleshooting, repair time and expense. Failure to do so could result in important system failures, voiding the warranty.

LOCATION

ICSDs should be located at dead ends on long wire runs approaching 500 feet (150 meters). Short wire runs do not require ICSDs at the dead ends. In particular, herringbone pipe layouts do not require ICSDs at the end of each herringbone lateral.

ELECTRICAL SPECIFICATIONS

- DC Sparkover $\pm 20\%$ @ 100 V/s = 230 V
- Impulse Sparkover @ 100 V/ μ s = 450 V
- Impulse Sparkover @ 1000 V/ μ s = 650 V
- Impulse Discharge Current = 20 kA, 8/20 μ s

DIMENSIONS

- 2 inches x 1.41 inches (51 mm x 43 mm)

ENVIRONMENTAL

Operating and Storage Temperature

- -40 to 90 °C

Rain Bird Corporation

6991 E. Southpoint Road
Tucson, AZ 85756
Phone: (520) 741-6100
Fax: (520) 741-6522

Rain Bird Corporation

970 West Sierra Madre Avenue
Azusa, CA 91702
Phone: (626) 812-3400
Fax: (626) 812-3411