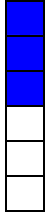


Systems for Equipment Leak Detection

Action on Alarm



Common Alarm Indication (Common Alarm Contacts)

Dedicated Alarm Indication (Common Alarm Contacts)

Dedicated Alarm Indication and Equipment/Valve Shutdown Relay/ w/Manual Reset

Dedicated Alarm Indication and Voltage Output for Solenoid Valve Control

Autodialer

RS-485 Serial Communication Output

For other Actions on Alarm please contact your Local Tracetek Representative.

General

This section addresses the installation of fluid leak alarm systems in curb areas and drip pans typically provided for floor mounted and overhead mechanical equipment such as chillers, air handlers, boilers, fan coil units, DX units, and water heaters.

In this application, sensor probe(s) are dedicated for each piece of equipment. In some cases a curb or drip pan is provided for each piece of equipment. The probes associated with each monitored piece of equipment are connected back to a wall mounted alarm panel using low voltage, plenum-rated Tracetek jumper wiring. An alarm panel, which monitors the entire system, and each equipment probe(s) independently, provides local audio/visual alarms, provides common remote alarm contacts, and dedicated alarm relay contacts associated with each equipment probe(s). These dedicated alarm relays are often used to interlock the equipment (shutdown circuit), to close motorized isolation valves in the water supply piping to the equipment, and to provide specific leak alarms to the BMS or Security system.



The Insurance Industry has stated that water damage is the single largest cause of insurance claims in buildings. Even in general "non-critical" workspaces, overhead water leaks result in equipment damage, downtime, loss of productivity, and emergency cleaning costs.



Most building fires are the result of wet wires or failed insulation. High temperature electrical arcing is a likely result of water released in the presence of line voltage used for lighting, computers, appliances and most machinery.

Site Conditions

Floor mounted equipment is typically located in machine rooms where construction debris, condensate, slowly dripping pipes, and periodic mopping are present.

Overhead equipment is usually located above general office space and is difficult to access. For this reason it is recommended to move all possible leak sensor electronics to a remote, wall mounted control panel.

Equipment drip pans often contain metal shavings, construction debris, condensate, and water treatment residue.



Sensors

Sensors used for this “dirty” environment should be low profile, probe type sensors with adjustable contact levels. All Tracetek sensor systems are “supervised” (Unsupervised probes or detectors using integral alarm relays should not be used since a problem with the probe wiring or internal components may not result in an alarm).

Sensor cables will alarm faster for small leaks; however they will also be more sensitive to the contaminants found in these “dirty” applications.

Tracetek high visibility yellow water detection probes are designed for mounting either on vertical or horizontal surfaces and extend only 1-1/2” above the mounting surface. The low profile design decreases the risk of damage due to normal installation, operation and maintenance of other wiring and equipment in the area.

Alarm Panel

The alarm panel provides a local audio/visual common alarm and remote alarm contact. The alarm panel also provides specific indication for “Leak”, “Cable Break”, and “Power” for each drain pan probe/sensor. Dedicated alarm contacts for each drip pan (w/manual reset) may be utilized to shutdown equipment or associated control valves, and to send specific alarms to a BMS or Security system. The dedicated alarm relays utilized are industrial grade plug-in type to be easily replaceable, and of high current carrying capability.

For options such as Autodialer, Battery Back-up, Independent Alarm Contacts for each pipe or section of piping, H-O-A switch(s) for equipment or valve(s) controlled by “Leak” alarm relay contacts, please contact your local Tracetek Representative.