

ABSTRACT

ENVIRONMENTAL ENCLOSURE FOR A TRANSPORT GAS SENSOR

A refrigerant detection assembly operable to detect refrigerant mixed with air includes a housing having an internal cavity fluidly connected with an ambient atmosphere surrounding the housing via an opening. A subassembly mounted within the internal cavity includes an air chamber fluidly connected with the internal cavity, a non-dispersive infrared sensor operably coupled to the air chamber, a printed circuit board, and a heat conduction plate mechanically and thermally coupled to the printed circuit board. At least one insulator is arranged within the internal cavity at a position between a portion of the subassembly and the housing. A shell is connectable to the housing in overlapping arrangement with the opening. The shell has at least one shell opening formed therein such that a flow path extends from the shell opening, through the opening formed in the housing to the internal cavity, and into the air chamber.

[Figure 3]