



IMPACT INNOVATOR GLASS DOOR

Entered by: Ingersoll-Rand Hussmann

Molder

Ingersoll-Rand/Hussmann
Carretera Mexico Laredo KM, 1009
Cienega de Flores, Nuevo Leon

Designer

Ingersoll-Rand/Hussmann
12999 St. Charles Rock Rd., Bridgeton, MO 63044

Moldmaker

E.P.W.
1500 West Hively Avenue, Elkhart, IN 46517

Original Equipment Manufacturer (OEM)

Ingersoll-Rand/Hussmann
12999 St. Charles Rock Rd., Bridgeton, MO 63044

Entry Description

This product is an electrically heated multi-pane glass freezer door with a RIM molded polyurethane elastomer frame. The insulating glass assembly is a custom construction comprised of a desiccant-filled polypropylene spacer and high-performance moisture barrier film. This glass assembly, as well as hinge bearings, reinforcements and electrical key are all insert-molded. The spacer, electrical key, and copper foil conductors power a thin-film semi-conductive coating on the inside surface of the glass.

Why is this Part Innovative?

Traditionally, these glass freezer doors are assembled from extruded aluminum profiles, and are mitered and screwed together at the corners, with anti-sweat heaters to prevent condensation. The design is labor intensive, lacks rigidity, and is expensive to operate. The new RIM frame construction chemically bonds to the glass providing a rugged, seamless, thermally insulated frame. The low pressure of the RIM process facilitates molding without crushing of the insulating glass assembly. A unique multi-pane glass construction allows the RIM process to provide the primary seal against moisture infiltration into the insulating air space. Post-mold shrink ensures solid contact of the copper foil busbars bringing power to the heated glass.