



The Circle of Protection

Advanced Frost Control and EZlatch:
The key to an integrated access and frost mitigation system.

Opening the door of an ultra-low temperature freezer is not an insignificant event.

Because extreme inside/outside temperature differentials often exceed 116°C (212°F), careful planning is encouraged before accessing the interior. To minimize duration of the door opening, users should know the location of stored product inside the freezer. Such best practices lead to better chamber uniformity, faster recovery of setpoint temperature and longer freezer life.



VIP Series -86°C Model MDF-DU900VC-PA upright ultra-low temperature freezer, 29.8 cu.ft. (845 liter) capacity.



The Advanced Frost Control, a combination of nine individually engineered components, is designed to work together to minimize frost, protect contents and extend freezer life.

5.1. **1 Outer Door** The outer door is insulated and mounted on heavy duty oval fastened hinges to permit adjustment throughout the life of the freezer. The door incorporates a gentle, unobtrusive lift mechanism to resist sagging over time.

2 EZlatch The patent pending door handle spans an arc of 45 degrees in total movement for easy operation. Ergonomically designed for minimal effort and one-handed operation, the latch includes a roller engage trigger with motion stopper to eliminate a false catch or over-torque.

When opening, the handle gently pushes the door away from the face of the cabinet. When closing, it evenly draws the door to the cabinet face against the multi-point gaskets. Excess air trapped between the inner doors and outer door is displaced for enhanced frost reduction.

3 Security The EZlatch includes an integral key lock, as well as a provision for a secondary padlock to restrict access.

4 Gaskets Multi-point door gaskets create micro air breaks around the face of the cabinet, restricting moisture migration into the cabinet and minimizing frost. Gasket composition withstands extreme relative temperature differentials ensuring a full peripheral door seal.

5 Mullion Heater Refrigeration system heat output is diverted to the non-temperature conduction extrusion to resist moisture accumulation which can cause frost and ice build-up.

6 Air Space When closed, the outer door design minimizes space between the outer door and inner doors which diminishes trapped ambient air volume. This reduces ice build-up and nuisance vacuum which can complicate a quick additional door opening.

7 Inner Doors Insulated inner doors with gaskets minimize cold air loss during door openings and include positive latches to hold firmly against the two main compartments.

8 Heat Breaks To minimize frost and protect the cabinet seal, all materials at the door/cabinet interface are engineered to reduce passive heat transmission from the outside to the inside and to diminish cold surfaces in contact with moist, ambient air.

9 Vacuum Relief When required, vacuum relief port can be manually opened to equalize pressure and permit the outer door to be opened easily for quick re-entry.

6.1-2

9. Jei reikia, vakuuminio slėgio angą galima atidaryti rankiniu būdu, kad būtų galima išlyginti slėgį ir leisti lengvai atidaryti išorines duris, kad būtų galima greitai vėl įeiti.

5.2. **2. EZ latch rankena. Patentuota durų rankena su 45 laipsnių judesiu, kad būtų galima lengvai atidaryti duris su minimaliomis pastangomis.**

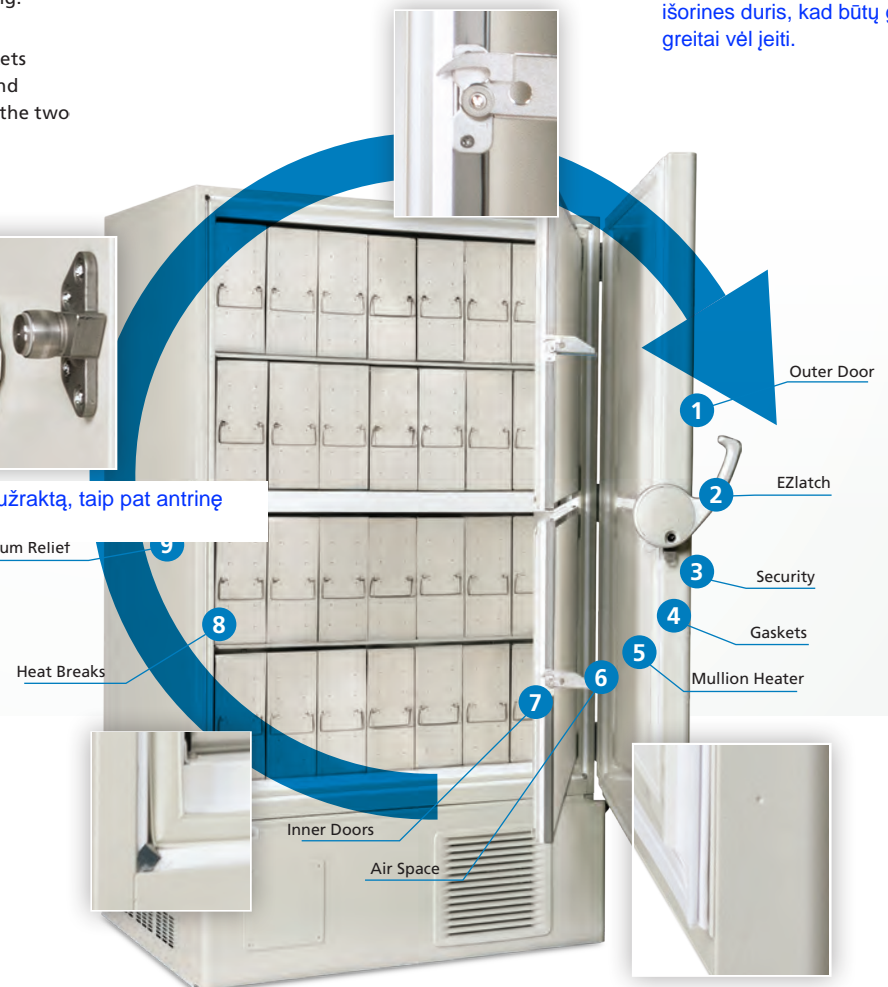
5.4. **4. Daugiataškis durų tarpiklis, blokuojantis drėgmės patekimą ir pašalinantis prišalimą.**

5.5. **5. Šaldymo sistemos šilumos išeiga nukreipiama į laidumą ne pagal temperatūrą, kad būtų atsparus drėgmės kaupimuisi, kuris gali sukelti šalčio ir ledo kaupimąsi.**

5.3. **3. Saugumas „EZlatch“ turi integruotą raktų užraktą, taip pat antrinę spyną, leidžiančią apriboti prieigą.**

5.1. **7. Vidinės durys Izoliuotos vidinės durys su tarpikliais sumažina šalto oro praradimą durų angų metu ir turi teigiamus fiksatorius, kad tvirtai laikytųsi prie dviejų pagrindinių skyrių.**

4.1. **1. Išorinės durys Išorinės durys yra izoliuotos ir pritvirtintos prie tvirtintų vyrių, kad būtų galima juos reguliuoti per visą šaldiklio tarnavimo laiką. Durys turi švelnų, netrikdomą kėlimo mechanizmą, kuris laiku bėgant atsilaiko nusėdimui.**



PHCbi

PHC Corporation of North America
1300 Michael Drive, Suite A, Wood Dale, IL 60191
Toll Free USA (800) 858-8442, Fax (630) 238-0074
www.phchd.com/us/biomedical

Printed in USA | 03 | 28 | 2018 | OW11560 | vf