CHILL AND FREEZER HINGED DOORS

Hinged chill doors are used for closing refrigerated space down to temperatures as low as -2°C; freezer hinged doors are used for closing freezer units down to temperatures as low as -30°C.

Doors manufactured by our company can be ordered to open on the right side or left side. Their construction ensures that the required temperature differences are maintained, that there are no thermal heat bridges, and that hygiene standards are upheld.

Door Wings

In the basic version, the door wing is covered with 1.2 mm thick white lacquered aluminum sheet metal. The door is also available covered with 1.0 mm thick stainless steel metal sheets. The core is made of polyurethane foam (PUR) adhering to the metal sheets and thus creating a very light self-supporting panel with excellent insulation properties.
The overall thickness of a door wing is 80 mm for chill doors and 120 mm for freezer doors. The rubber gasket system, fitted in a plastic dovetail groove, ensures a precise fit and can easily be replaced. The lifting hinges, air curtains, plastic curtains, and door handles with integrated patent locks ensure high operational durability and reliability. The door is fitted with a safety opening system that allows persons, accidentally locked inside, to open the door from within.

Doors with Door Frames

Doors are supplied with the following door frame types: PUR Door Frame or “P” Door Frame (Note: the “P” Doorframe cannot be used for freezer doors). Door frames are used for fitting the doors into the corresponding openings in PUR panel walls or for fitting the doors into brick partitions.

PUR Door Frames have a construction similar to that of a door wing – i.e., it is filled with a hard polyurethane foam and fitted with a load-bearing steel frame with reinforcements to allow the mounting of curtains and safety lock latches. The construction consistently prevents heat loss. There are no thermal bridges. The freezer door frames, including the door thresholds, are fitted with a heating cable to prevent the wing gasket from freezing to the door frame. To ensure the proper function of the unit under special conditions, e.g. a closed space with inside temperatures below -30^{o}C, it is necessary to heat not only the door frame but also the door wing beneath its gasket.

Heated doors must be fed by an independent 230V/50Hz line that depends on the size of the door. The input for heating is between 140 and 180 W. If the wing is heated along with the door frame, the power input is between 280 and 360 W.

The “P” Door Frames consist of a plastic profile upon which are placed the wing hinges and a closing latch.

Both door frame types, PUR and P" can be fitted in the 75 mm or 125 mm panel wall, and it is also possible to manufacture door frames for different thicknesses of the PUR panel walls, per the customer's requirements.

Doors for constructed walls are used for units insulated by the construction (e.g. brick walls). These doors have only the external doorframe mounted into the wall by anchor elements. These doors require additional insulation to connect the door frame to the wall.

Doors with Door Frame Panels

These 800 mm width doors are used when the doorframe panel is a fixed part of the chiller or freezer unit.

Threshold

Typically, doors are made with a recessed threshold and are sealed "to the threshold". Doors with door frames have thresholds made of stainless steel profiles (a part of the door frames) that fit with the lower part of the door wing when it is closed. For doors with door a frame panel, the threshold is part of the panel. The threshold on a freezer door is always heated; the heating conductor is hidden in the threshold cover sheet. If the door is to be fitted with a recessed threshold, it is necessary to leave a space (groove) where the door threshold will be.

It is recommended to consider an access ramp for doors with non-recessed thresholds.

Only chill doors can be supplied without a threshold. When the door is closed, the lower sealing fits tightly to the floor.

Accessories fitted to the hinged door:

All these types of doors can be fitted with PVC or air curtains for the reduction of heat loss. Energy can be saved by fitting the door with an end switch (i.e, a switch to turn off the ventilator on the refrigerating machine, the air curtain, or inside light). When requested by the customer, we can supply a door wing with a peek-through window made of insulated double glass or triple glass. The door can also be fitted with a protection frame and railing.

Basic dimensions of hinged doors

Most frequently used door CHILL HINGED one wing					
Door clearance (wxh)	650x2000	800x2000	900x2000	1000x2000	1200x2000
Door thickness in mm	80				
Weight of wing in kg, lacquered Al sheet metal	23.5	27.1	30.3	32.3	38.5
Weight of wing in kg, stainless steel version	38.6	46.2	51.3	56.2	66.5

Most frequently used FREEZER HINGED one wing				
Door clearance (wxh)	800x2000	900x2000	1000x2000	1200x2000
Door thickness in mm	120			
Weight of wing in kg, lacquered Al sheet metal	33.0	36.5	39.8	46.0
Weight of wing in kg, stainless steel version	52.0	56.5	61.8	74.0
Power input for heating of the door frame (W)	165.7	160.1	154.8	145.3

Other types of hinged doors

Two-wing hinged door	Chill (CHO-2K)	Freezer (MO-2K)
	1400x2000 1700x2500 2000x2500 2000x2700	1400x2000 1700x2500 2000x2500 2000x2700

Hinged meat rail door	Chill	
	1000x2150+400 1200x2150+400 1400x2150+400 1400x2500+400	

More information can be sent upon request. The Sales and Technical department in Prague can provide information about other available dimensions and types of hinged doors.

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