

Mirrors with lighting: Manual for installation, use and maintenance.

Mirrors with lighting: description

The mirrors are made of high-quality glass panes (glass covered with a reflective layer of silver). In some models the pane may be fitted into a fixture made of aluminum, stainless steel, wood, MDF or glass. There may be decorative elements placed on the surface of the mirror, such as prints, crystals, glass and mirror appliques, or functionally-improving elements, e.g. a magnifying glass, a clock, or an LCD. Mirrors are for indoor use only! The mirrors are mounted on the wall by means of hangers attached to the back of the mirror. In some models the hanger system makes it possible to hang the mirror vertically or horizontally. The mirrors are illuminated with both traditional fixtures/lamps and modern energy-efficient systems producing white, bright and non-blinding light. Many mirror models have advanced lighting control: a touch or proximity on/off switch, a light intensity control system and a motion sensor.

Purchase, unpacking, and storage

When unpacking the mirror, it should be checked for quality and integrity, especially for any mechanical damage that may arise in transport (damage, crushing, cracks, and scratches), as such faults are not covered under the manufacturer's warranty. It is recommended to unpack the mirror after receiving to let the moisture that could have penetrated into the package in transport, evaporate. If the mirror's packaging is slightly moist, the mirror has to be immediately unpacked and left until it is completely dry. Before installation recheck for any damage. The mirror has to be stored in a dry and airy room. The mirror may not be stored in places where it may be exposed to high humidity or chemical substances, as this may cause the mirror's silver layer to corrode quickly. It is recommended to store the mirror vertically. Mirrors should not lie flat or on top of each other.

The mirror is best unpacked on a soft carpet, as this will reduce the risk of the mirror's surface or edge getting damaged. The mirror should never rest on any of its corners!

Technical data

The mirrors with lighting are to be used with 120V/60Hz AC power supply, regardless of the type of lighting (lamps) used in a given mirror model.

The lighting fixtures have built in lamps which cannot be replaced by the user (high-and low –power LEDs).

All the mirrors with lighting belong to electrical protection class I or II, which ensures that it is safe to use them, provided that the installation, used and maintenance requirements specified in the manual are met.

Depending on the safety measures used, the mirrors have different IP (Ingress Protection) ratings. IP20 means that the mirror can be used in places where it will not be exposed to direct contact with water (in rooms and halls-without restrictions, in bathrooms – outside of the protection zones defined in the HD 60364-7-701-2010 standard). IPx4 means that the mirror can be installed also in household bathrooms in second protection zone, as it is water splash proof. IPx5 means that the mirror can be installed also in bathrooms of public utility buildings in the second protection zone, as it is water jet proof.

The information on the mirror's electrical protection, class, voltage, lamp type, and parameters, IP and energy efficiency is included on the mirror labels.

Installation precautions

The mirror with lighting should be installed by a licensed electrician. Before the installation, please read the manual carefully. Before the installation, the power in the electrical wires led out from the wall should be cut off (switch off the fuses). Make sure that there are no pipes or electrical wires in the places where the wall will be drilled for the hook anchors. Do not alter the structure of the mirror's lighting fixtures or the electrical wires led out from the mirror used to supply power to the lighting fixtures. If the mirror with lighting is installed on a conductive surface (not recommended), this surface has to connect to the protective earth wire.

In most of the mirror models, lighting fixtures are assembled by the manufacturer. The exception is mirrors with wall lamp fixtures. These fixtures are included with the mirror separately. In this case, the user has to attach them to the mirror in properly reinforced installation holes. The installation screws should be tightened lightly, with just enough force to ensure that the lighting fixture is stably joined to the mirror. Mirrors with lighting are not meant for permanent mounting into recesses.

The mirror should be hung on properly chosen hook anchors, securely mounted on a non-crumbling surface capable of carrying the mirror's weight. During the installation, in order to avoid scratches and stains, one should use clean soft cotton gloves.

The mirrors should be connected to the 120V/60Hz power supply.

How to connect the mirror in electrical protection class II to the power supply

These mirrors have one or more lighting fixtures ("3") built in. A two-core electrical wire is lead out from every fixture. One of the conductors is brown or black, the other is blue. The mirror is connected to the 120V/60Hz power supply by connecting the electrical wires of the lighting fixture (or more than one fixture) with the electrical wires of the 120V/60Hz power supply using a 2-way crimp connector ("1") compliant with IEC 60 998-2-1, in protective cover (not included with the mirror). The brown or black live wire led out from the lighting fixture ("L") should be connected with the brown or black live wire ("L") of the power supply. The blue neutral wire lead out from the lighting fixture ("N") should be connected with the blue neutral wire ("N") of the power supply.

How to connect the mirror in electrical protection class I to the power supply

These mirrors have one or more lighting fixtures ("4") built in at the plant. A three-core electrical wire is led out from the fixture assembly to the outside of the mirror. One of the conductors is brown or black, the second is blue, and the third is green-and-yellow. The mirror is connected to the 120V/60Hz power supply by connecting the three-core electrical wire led out from the mirror with the electrical wires of the 120V/60Hz power supply using a 3-way crimp.

Connector ("2") compliant with the IEC 60 998-2-1, in a protective cover (not included with the mirror), the brown or black live wire lead out from the lighting fixture ("L") should be connected with the brown or black live wire ("L") of the power supply. The blue neutral wire led out from the lighting fixture ("N") should be connected with the blue neutral wire ("N") of the power supply. The yellow-and-green wire led out from the lighting fixture ("PE") should be connected with the blue protective wire ("PE") of the power supply.

Proper use, care and maintenance

The mirror with lighting should be used according to its intended purpose, in absolute compliance with the technical descriptions, information symbols, the use and maintenance requirements specified on the labels of a given mirror model, and the manual and information included with the mirror. The mirror may not be used in conditions in which it will be exposed to excessive humidity or temperature. It is necessary to ensure a free flow of air for the lighting fixtures built into the mirror. When mounted on the wall, the mirror may not be additionally weighed down (except mirrors with shelves for toiletries), as this may cause the hook anchors to fall out of the wall or the hangers to detach from the mirror.

The mirror should be cleaned regularly to prevent large and hard to remove stains. The mirror should be cleaned with clean warm water. To remove larger stains and produce a crystal-clear shine, one should use good, readily available non-aggressive glass and mirror cleaning agents. The mirror is best cleaned with a soft, absorptive cloth that does not leave scratches or lint on the surface of the glass (microfiber, diaper cloth). Do not pour or spray any cleaning agents on the cloth or directly onto the mirror. It is best to spread a little water or cleaning agent on the cloth and use it to wipe the mirror. The cloth should not be pressed too hard to the surface. Next, the mirror should be carefully cleaned with a dry cloth. This will prevent the liquid from collecting on the lower edge of the mirror, and the silver layer will not be corroded. The back of the mirror should be only cleaned to get rid of dust, with a dry soft cloth and without any cleaning agents.

Before cleaning or replacing lamps, the mirror with lighting should be disconnected from the 120V/60Hz power supply and left for some time to cool down to avoid burns caused by hot light sources, hot glass cracking after contact with a cool cleaning agent, or electric shock. Do not use lamps with power higher than permitted or lamps of any type other than specified on the fixtures information label. All repairs of mirrors with lighting should be performed by the manufacturer's service or an authorized, specialized facility.