



Installation/Operating Manual

Weatherproof Housing VHM/ECLIP-W



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D Betriebsanleitung

GB Installation and Operating Instructions

F Mode d'emploi

PL Instrukcja instalacji i obsługi



www.videor.com

www.eneo-security.com

1. Safety Instructions

The following instructions are for your own safety and should be observed without fail:

- Please read the safety notes and following installation instructions before connecting the unit.
- Keep the operating manual in a safe place for later reference.
- The unit is only intended for permanent connection to the power supply circuit.
- Only connect the device to a suitable electrical source.
- Never operate the housing beyond its technical specification.
- Pay attention to safety when laying the connection cable and lay cable so that it cannot be buckled, damaged, or subjected to loads or damp.
- If moisture has penetrated the device, do not switch on under any circumstances. In this case, have the device checked by a qualified service technician.
- **An easily accessible all-pole disconnecting device with 3mm minimum contact gap width is to be installed near the unit so that it can be disconnected for service work. Earthing must be low-resistance in compliance with DIN VDE 0100.**
- The housing may only be opened by authorized personnel. Connection work must be carried out by a qualified technician.
- The warranty becomes void if repairs are undertaken by unauthorized persons.
- Before opening the device, the mains voltage must be switched off.
- Only DIN VDE 0860 and DIN VDE 0805 tested components/tools are to be used for installation. Installation is to be carried out in compliance with the installation instructions and under observation of all applicable standard regulations.
- Operate the device only at a temperature range of -30°C to +60°C and at a humidity of max. 90%.
- The device must be protected from extreme heat, dust, moisture and vibration.
- Do not place any heavy items on the device.
- The installer is responsible for maintaining the IP 66 protection system.
- Stainless screws must be used when installing the unit outdoors.
- Only use original replacement parts from Videor E. Hartig GmbH.

NOTE: The main rubber gaskets should be replaced after opening the housing for maintenance purposes to ensure protection class IP66.

2. General Description

The VHM housing series is designed mainly for cameras with fixed focus and most 1/3" - 1/2" zoom lenses. 4-stage height adjustment of the camera for mounting is possible using the rack-support (camera tray). The accessories listed in section 8 are for assembly completion and making installation easier.

2.1 Main Features

- Camera weather protection
- Fold-down housing body
- Insulated camera mounting
- 2 cable entries M16x1.5mm, 1 cable entry M20 x 1.5mm
- Window glass with „Clear-Shield“ technology
- Housing body length: 330mm
- 4 levels of camera height adjustment
- Integrated connection board
- Heater, blower 12VDC, thermostat
- Incorporated carrier handle

Parts supplied:

Weatherproof housing

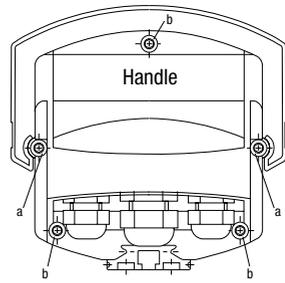
Screw set

Installation/operating manual

3. Opening the Housing

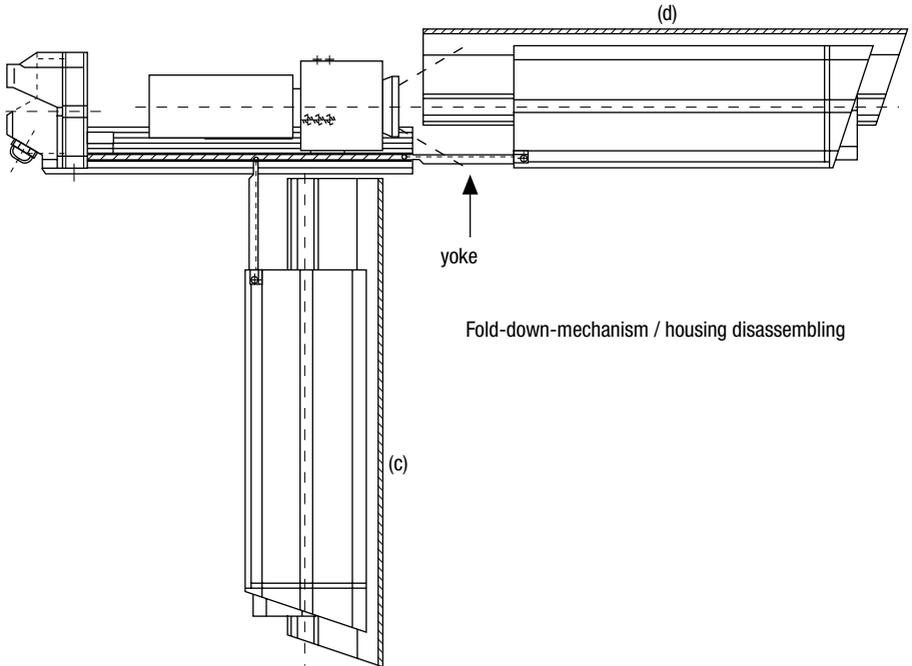
To open the housing, undo the two screws (a) (see fig. 1) located in the middle section. The housing body can now be pulled off the middle section. The plug on the heater cable on models with built-in screen heater will have to be disconnected either at the screw terminal board or the power supply unit, depending on model. An adapter (yoke) provides a removable connection with the camera tray. To obtain free access to installed components, slide housing body to end of range. In a vertical position (c), it can now be folded down and moved to the rear. Alternatively, it can be removed from the remaining housing completely (see fig. 2) by pressing both yoke arms together in a horizontal position (d).

Fig. 1



Housing back view

Fig. 2



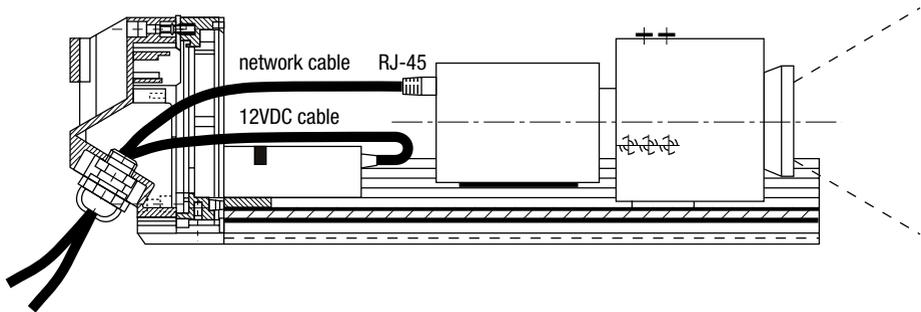
The rear housing cover is fastened to the middle section by 3 Allen screws (M4) with seal (see fig. 1). The housing's lower support rail serves as guide.

4. Connection and Startup

The VHM/ECLIP-W is basically identical to the VHM EC housing, which has been successful for many years. For the integration of network cameras, the IP version has been expanded by an air circulation system for cooling and has been optimized for easy installation.

The connection cables can be guided towards the interior through one, two or three threaded joints on the housing (see Fig. 3). The centre threaded joint, in the M20 x 1.5 mm version, is intended for the network cable. A standard RJ45 connector fits through this threaded joint, and installation of the housing is significantly simplified by a slotted sealing ring insert.

Fig. 3



Wiring in the housing

A mounting module for the circuit board and the fan is located in the back portion of the housing (see Fig. 3a and 4). The circuit board must be supplied with 12VDC and offers 12VDC connections for the camera and defroster.

Fig. 3a

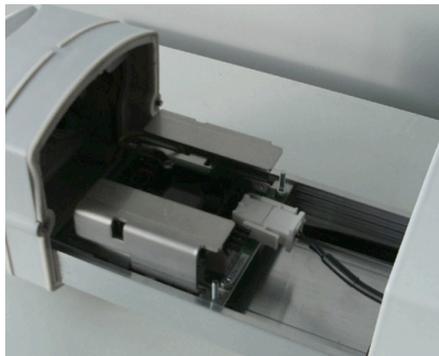
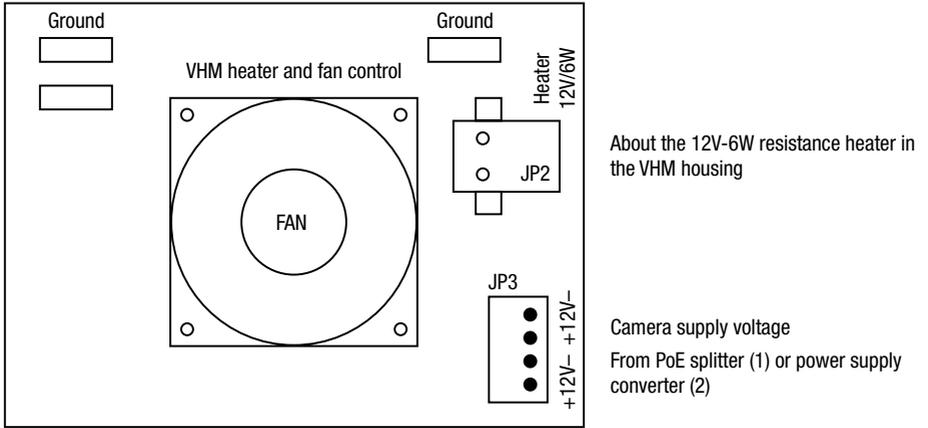


Fig. 4 – Fan board



The optional PoE splitter or the optional power supply can be attached to the mounting module with the included cable ties (see Fig. 5 and 6).

Fig. 5 – Fan board on the mounting device, with add-on device (1) or (2)

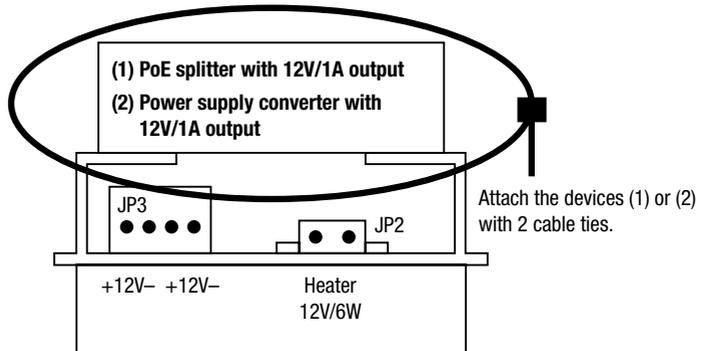
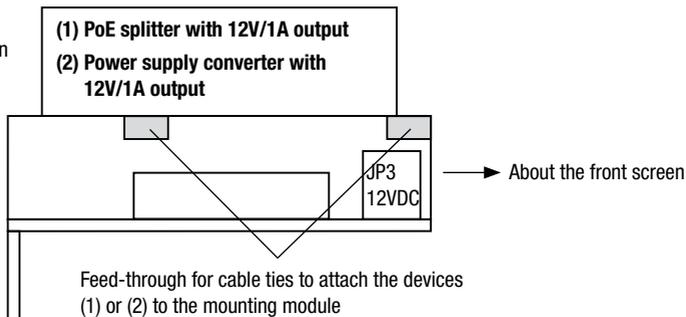


Fig. 6
Mounting module, side elevation



The fan and heater are controlled electronically. The start-up temperature for the fan is approx. 38°C. The fan ensures uniform air circulation in the housing and thus a reduced interior temperature, which significantly increases the camera's lifespan.

The front screen heater is turned on if the temperature in the housing falls below approx. 16°C. In the temperature range of 16°C to 38 °C, the fan and heater remain turned off.

CAUTION !

When operating on 230V AC, you must definitely connect the metal housing parts to each other by using the included yellow-green grounding wires. The three contact pins (grounding) on the fan board lend themselves to this.

5. Connection of Screen Heater

Insert the 2-pin plug into the fan board (JP2) (see Fig. 7).

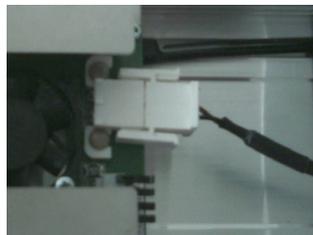
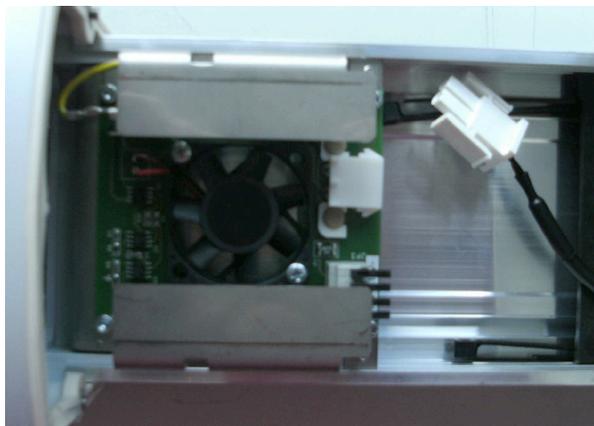
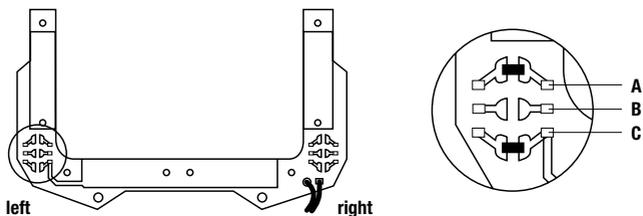


Fig. 7 – Connection to the screen heater

The resistance heater is configured for 12VDC operation (factory setting).

Fig. 8 - resistance heater



The solder bridges A and C are closed, the solder bridge B is open.

6. Closing the Housing

Attention must be paid when closing the housing that the sealing rings are left in correct position and no wiring is caught between the housing and cover edges.

7. Specifications

Type	VHM/ECLIP-W
Art. No.	79722
Series	eneo VHM
Maximum installation length	330mm
Cable entries	2x M16 x 1.5mm, 1x M20 x 1.5mm
Window screen	Coated with „Clear Shield“ Technology. With this technology the glass corrosion, caused by environmental pollution, is avoided and screen cleaning cycles will be extended. The coating is UV light resistant, colour neutral and it causes no F-stop loss.
Clear Shield	yes
Window heater	12V/6watts PTC
Thermostat heater	On: temperature < 16°C Off: temperature > 18°C
Thermostat blower	On: temperature > 40°C Off: temperature < 38°C
Blower	yes, 12VDC
Wiper	no
Sunshield	yes
Hidden cable management	Optional
Integrated wall mount	no
Protection rating	IP66
Housing	Outdoor
Housing material	Aluminium with plastic covers (ABS)
Colour (housing)	RAL9016, RAL7035
Dimensions	See drawing
Weight	2.8kg
Parts supplied	Screw set, Thermostat switch, Screw terminal
Certificates	CE

8. Optional Accessories

8.1 Option: Power supply NE-112/4 with voltage supply 230VAC (item no. 200134)

The network cable and 230VAC must be fed in from the outside.

Voltage (phase/null) is connected via pin connectors with the power cord inside the weather-resistant housing .

Grounding conductor is connected via pin connectors with the grounding cable.

Grounding cable is connected to the fan board.

Power cord is inserted into the power supply.

Secondary power supply 12VDC is connected to the fan board.

Distribution of voltage to camera, fan, heater occurs through the fan board.

8.2 Option: PoE splitter POE 21-120H (item no. 170009)

The network cable must be fed in from the outside.

The network cable (RJ45 plug) is internally connected to the splitter.

A voltage of 12VDC is set up on the fan board.

Distribution of voltage to camera, fan, heater occurs through the fan board.

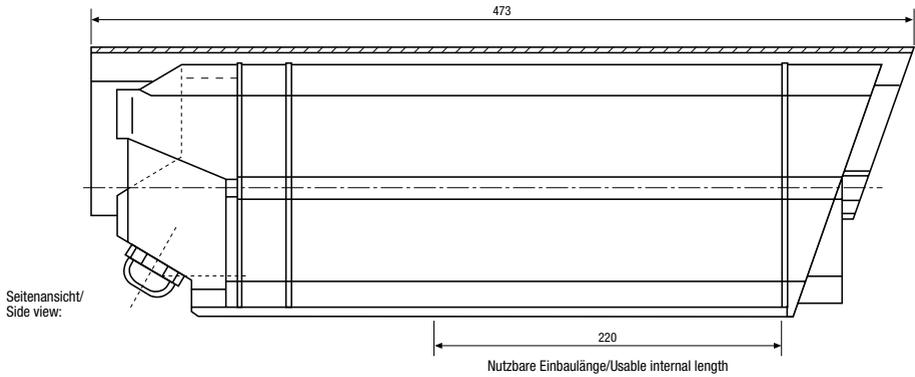
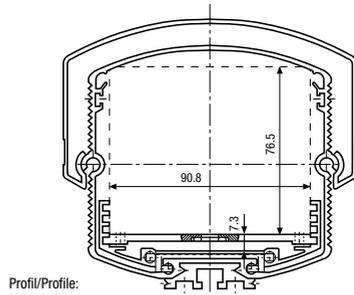
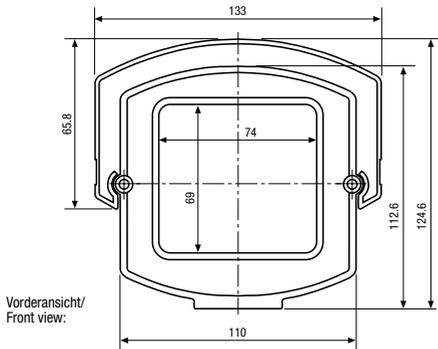
The camera is connected to the splitter by using a network cable.

The splitter's 12VDC line must be adjusted (stripped, shortened).

Further optional accessories

Additional optional accessories currently available can be found on our Homepage: www.eneo-security.com.

9. Dimensional Drawings



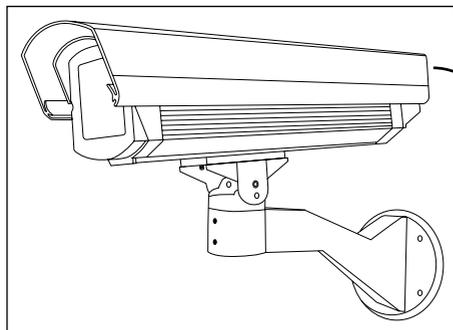
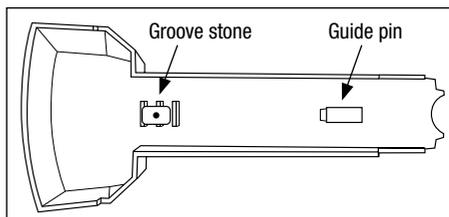
Dimensions: mm

APPENDIX – Wire Cover VHM/PC-1-LG (Art. No. 79696)

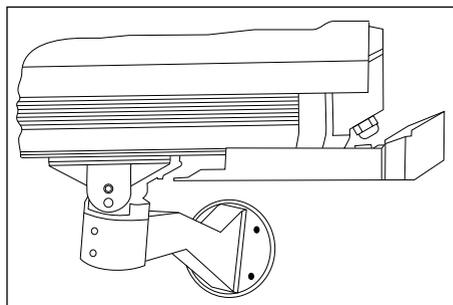
For the 330mm VHM/EC&ST weatherproof housing in combination with the wall bracket WD-16/MK-W (Art. No. 73177) and WD-16/MK-KG (Art. No. 73178)

NOTE: The two screws provided for mounting the housing onto the wall bracket (in the VHM housing accessory pack, M6x25) must be exchanged for the screws from the wire cover accessory pack (M6x22).

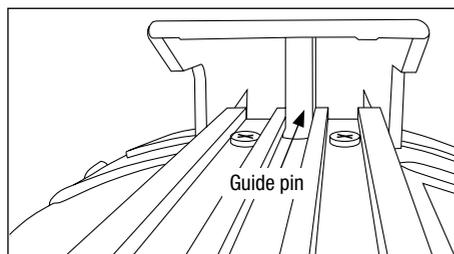
1. Mount the wall bracket and connect the wires.
2. Mount the wire cover as follows:

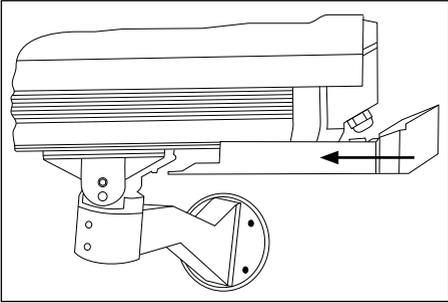


- a) Loosen the Allen screw on the wall bracket and slightly turn the housing away from the wall.



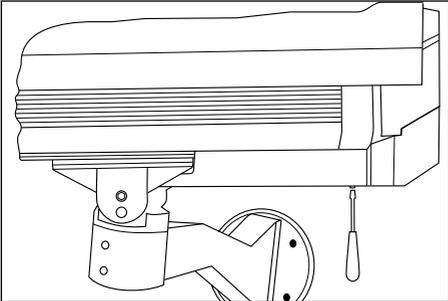
- b) Place the wire cover onto the guide rail on the lower side of the housing. In order to do this, slide the guide pin into the guide rail (see figure).



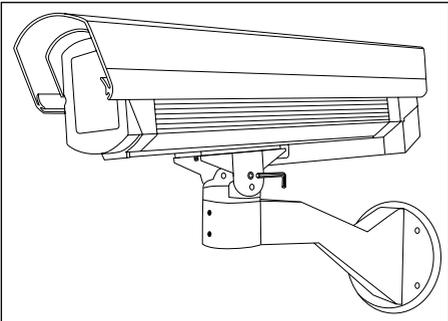


- c) Slide the wire cover over the wire towards the wall bracket until the back of the housing is flush against the cover.

If necessary, change the position of the housing on the tilting head so that the cover is aligned with the bevel.



- d) Tighten the wire cover onto the housing with the locking screw; push the wall bracket until it is aligned with the cover and retighten.



- e) Reposition the housing and use the Allen screw to tighten it to the wall bracket.



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