

## EK890 – Underground distribution system with air circulation

Underground distribution systems make it possible to integrate infrastructure components of various sizes invisibly into the urban landscape whilst also protecting them. To do so, the active components require appropriate heat management. The air circulation system in the EK890 enables up to 180 watts to be dissipated at an ambient temperature of 38°C, thereby preventing the undue heating of electrical components.

### Product features - Body

- ▲ **Innovative manhole design with 3D ribFrame**  
Modular, resistant, and durable system solution that can be adapted to the specific location
- ▲ **Modular manhole design**  
Flexible, adapts to the respective situation, and simple to use
- ▲ **Modified polycarbonate (PC)**  
Hard-wearing, certified groundwater compatibility, UV-resistant

### Product features - Cover

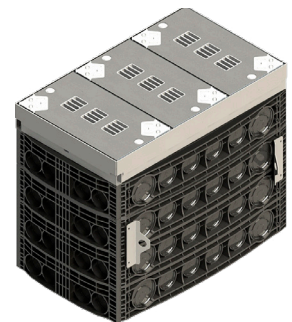
- ▲ **Submersion hood (swivelling)**  
Ideal for areas at risk from flooding
- ▲ **Safety catch for the cover/submersion hood**  
Enhanced accident prevention and safe operation of the equipment compartment
- ▲ **A range of different manhole covers available**  
Variable surface material, design, and structure: can be adapted to the urban landscape
- ▲ **Special construction key required for access to the lock**  
Protects against unauthorised access - security
- ▲ **Solid cover**  
Cover/lid can be safely removed using a mechanical aid
- ▲ **Opening support for submersion hood**  
Easy to open thanks to low submersion hood weight, or by using two stainless steel gas springs

### Submersion hood design variants

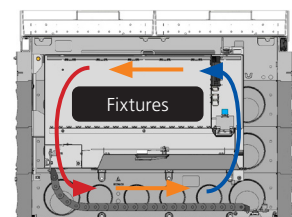
- ▲ Telecommunication equipment
- ▲ Mounting for 19-inch technology
- ▲ Mounting panel for individual configuration



▲ Underground distribution system EK 890 – open



▲ Underground distribution system EK 890 – closed



▲ Fixtures with max. power loss of ~180W

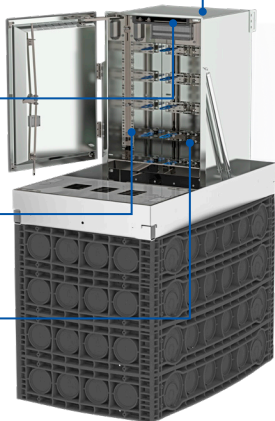
**Design/construction**

Single-walled stainless steel housing with door

19" air circulation unit (as a 19" assembly)

Standard 19" rack installation system

Standard C-rail installation system



**19" air circulation unit**

Intake connector for fresh air/manhole

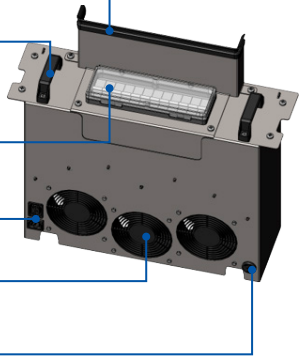
Designed: 19" assembly for ease of installation/removal in a hood

Fuses + Fan control + Customer power socket

Cooling device connector

3x fans (volume flow 285m<sup>3</sup>/h)

Outlet temperature sensor



**Standard extension**

Vertical alignment rails

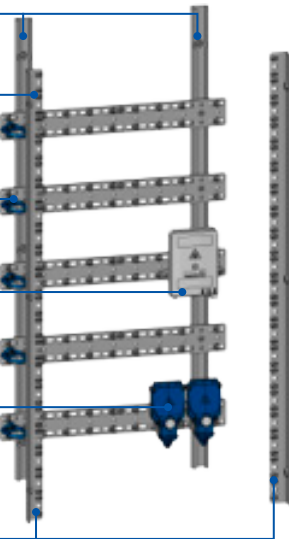
Horizontal installation rails (can be fitted with M4 – M6 cage nuts, if required)

Cable routing guide rings can be individually assigned

Example: optional optical fibre distribution and termination box EK660

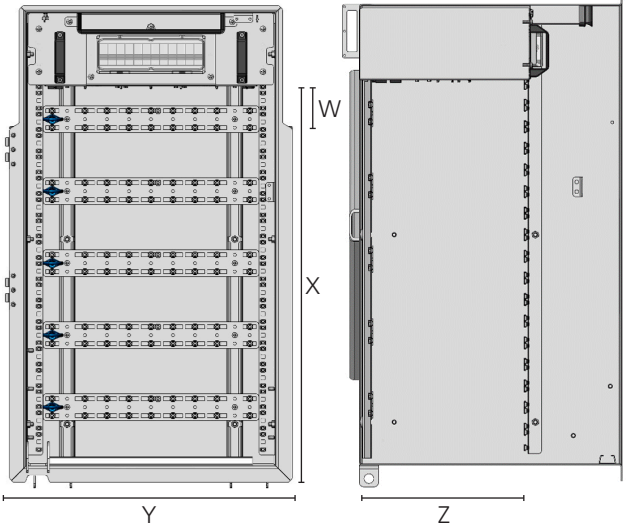
Example: optional 2x gel fibre closures for the gas-tight entry of optical fibre cables

19" installation rails (can be fitted with M4 – M6 cage nuts, if required)



**Dimensions/installation dimensions of submersion hood**

- ▲ 19" rack
  - 16 height units (1.75" = 44.45 mm = W)
- ▲ C-rail installation requirement
  - 740 x 500 x 320 mm (X x Y x Z)



▲ Installed submersion hood - front view

▲ Installed submersion hood - side view

## Technical data

<b>Designation</b>	EK890
<b>Clear dimension</b>	650x1165 mm (LxW)
<b>Overall external dimensions</b>	1326x841x970 mm (LxWxH)
<b>Total weight</b>	Approx. 300 kg
<b>Cover weight</b>	Approx. 150 kg
<b>Max. load class</b>	D400 (40 tonnes, 400 kN) as per DIN EN 124
<b>Air circulation</b>	180 W
<b>Protection rating</b>	closed: IP 48 (as per DIN EN 60529)
<b>Cover material</b>	3-section; paveable, concrete-lined (tray depth 65 mm)
<b>Frame material</b>	steel (hot-dip galvanised)
<b>Body material</b>	polycarbonate (PC)
<b>Submersion hood material</b>	stainless steel (V2A)