

# Cegelec Alva-Air

## Air-conditioning for rolling stock



The new Cegelec Alva product line is complemented by a new addition to the product range in the form of the Cegelec Alva-Air air conditioner. It is intended for the use in both new and older, refurbished rolling stock. Therefore, while designing the air conditioner, the weight and height of the air conditioner as well as the air distribution system within the vehicle demanded particular attention.

The default model provides a cooling capacity of 25 kW. If the ventilation is used, the air is heated with the power of 6 kW. The total weight of the air conditioner amounts to only 400 kg and includes the auxiliary converter from the Cegelec Alvaux line. Thus, when installed the passengers' air conditioner in older vehicles, only minimal intervention in the vehicle's existing electrical circuits is required (connection directly to the traction power supply). And, when implemented into new trams, the requirements on the size of the static converter are downscaled.

At the customer's request, the air conditioner can also be supplemented with cover plates, tailored by the designer to the specific tram model. Optionally, the air conditioner can also be equipped with a special cartridge with UV lamps that destroy bacteria and viruses, including the SARS-CoV-2 virus (Covid-19). Furthermore, a fragrance diffusion into the interior can also be added.

Thermal comfort is undoubtedly a very important aspect when choosing a means of transport. With the Cegelec Alva-Air air conditioner, the quality of travel can be significantly improved.

An example of Cegelec Alva-Air air conditioner is the ACU-100 model intended for tram refurbishment.

Selected technical parameters of the ACU-100 air conditioner		
Cooling capacity of the air conditioner (EN 14750, climatic zone II)	Outer temperature +35 °C Relative humidity 50 %	25 kW
Amount of supplied air	Total	3 200 m <sup>3</sup> /hod.
Amount of fresh air		1 000 m <sup>3</sup> /hod.
Heating capacity for fresh air tempering in ventilation mode		6 kW
Circulating air filtration class		G3
Power supply voltage – power units (EN 50163)		± 600/750 V DC
Basic dimensions (without cover)	Length	3100 mm
	Width of the box / foot spacing	1790 / 1830 mm
	Height	400 mm
Weight		400 kg

