

PRODUCT DATASHEET

# Pantograph-down depot set for HVC360 multi-outlet cabinet

Easy integration into existing operations and bus depot



Pantograph-down depot set offers an ideal solution for charging electric buses fleet with an inverted pantograph positioned over the vehicle at depot for overnight or long charging session.

Positioned on the infrastructure, the pantograph-down depot set can easily be integrated into existing operations and bus depots, ensuring zero-emission public transport.

- **Safe and reliable operation:** RFID\* pairing technology
- **Easy to use** thanks to optimum remote diagnostics and management interface tools
- **Ensured interoperability:** one charger can serve multiple vehicle types and brands



## Technical specifications

Market	CE	NA	
<b>Product information</b>			
DC output continuous current rating	400 A		
DC output current rating max per dispenser (1)	With HVC200: 142 A With HVC300: 215 A With HVC360: 400 A		
DC output power rating	50 - 360kW		
DC output power rating max per dispenser (1)	With HVC200: 200 kW With HVC300: 300 kW With HVC360: 360 kW		
DC output voltage range	150 - 1000 V DC		
Standby power	15 W		
<b>Product characteristics</b>			
Installation	Overhead, on any kind of support (truss, ceiling, ...)		
IP and IK rating	IP-65, IK10	Nema 3R	
Enclosure type	Stainless steel		
Operational altitude	Up to 2000 m / 6562 ft		
Operation temperature range	-35°C to +55°C / -31°F to 131°F		
Storage temperature range	-10°C to +70°C / 14°F to 158°F		
Humidity limitation	5% to 95%, RH - non-condensing		
Dimensions (H x W x D)	Control box	450 x 600 x 250 mm	22.75 x 82.76 x 50.79 in (the control box and the pantograph are one the same kit)
	Pantograph (folded)	575 x 1761 x 670 mm	
	Unfolding range	400 - 1000 mm	
Weight	Control box	45 kg	450 lb (the control box and the pantograph are one the same kit)
	Pantograph	90 kg	
Color	RAL 9002		
<b>User interface</b>			
Emergency button	Option for external emergency button		
Stop button	Option for external emergency button		
LED indicator	Yes, RGB LED on the dispenser (green: ready to charge / blinking green: preparation phase / blinking blue: charging / blue: charging complete / red: error) & external option		
RFID reader (3)	-		
<b>Electrical connection - between power cabinet and control box</b>			
DC power cable	2 or 4 x 185 mm <sup>2</sup> (maximum)	2 or 4 x 350 MCM AWG (maximum)	
AC power cable	3 x 6 mm <sup>2</sup>	3 x 14 AWG	
Distance	Up to 150 m	Up to 492 ft	
<b>Electrical connection - between control box and pantograph</b>			
DC power cable	2 x 185 mm <sup>2</sup> (maximum)	2 x 350 MCM (maximum)	
ACS pantograph control	7 x 2.5 mm <sup>2</sup>	7 x 14 AWG	
Distance	Up to 10 m	Up to 3.28 ft	
<b>Communication and protocols (via power cabinet)</b>			
Communication cabinet - dispenser	CAN2Ethernet		
Connectivity	Internet access via 4G / 3G / Ethernet (RJ45)		
Charge protocols	-		
Communication protocols	OCPP 1.6 JSON		
<b>Certification and standards</b>			
Standards	EN 61851-1: 2011, EN 61851-23: 2014, IEC 61851-1: 2010, IEC 61851-23: 2014, EN IEC 61851-1: 2019, IEC 61851-1: 2017, EN IEC 61000-6-1: 2019, EN IEC 61000-6-2: 2019, EN IEC 61000-6-3: 2021, EN 61000-6-4: 2007+A1, UL 2202: 2009 R2.18, CSA C22.2 No. 107.1-16		
Compliance	CE	NA market, BAA compliant option for transit	
Warranty	Base warranty 24 months after Site Acceptance Test or 30 months after factory delivery. Warranty extensions available.		
Designed lifespan	ABB chargers are designed for a lifetime of 10 years assuming they receive maintenance according to the maintenance schedule by a trained engineer. Under certain conditions and for certain models this can be extended to 15 years.		

(1) DC output current and power ratings per outlet depend on the power cabinet power (200-360 kW) and number of outlets (2-4).

For more information, please refer to the datasheet "HVC360 Charging solution for heavy duty EV fleet".

(2) Values with long distance kit. The standard distance (without long distance kit) is 100 m / 328 ft.

(3) RFID is an additional safety measure to prevent the pantograph from moving down when no bus is parked underneath. It is mandatory when two charge poles or pantographs are positioned within a distance of 12 m or less from each other (centre-to-centre of each pantograph).

RFID is used as a pairing verification method to guarantee the bus always communicates with the right charger. The RFID antenna is installed in the charge pole, and the RFID tag will need to be installed on the bus' roof.

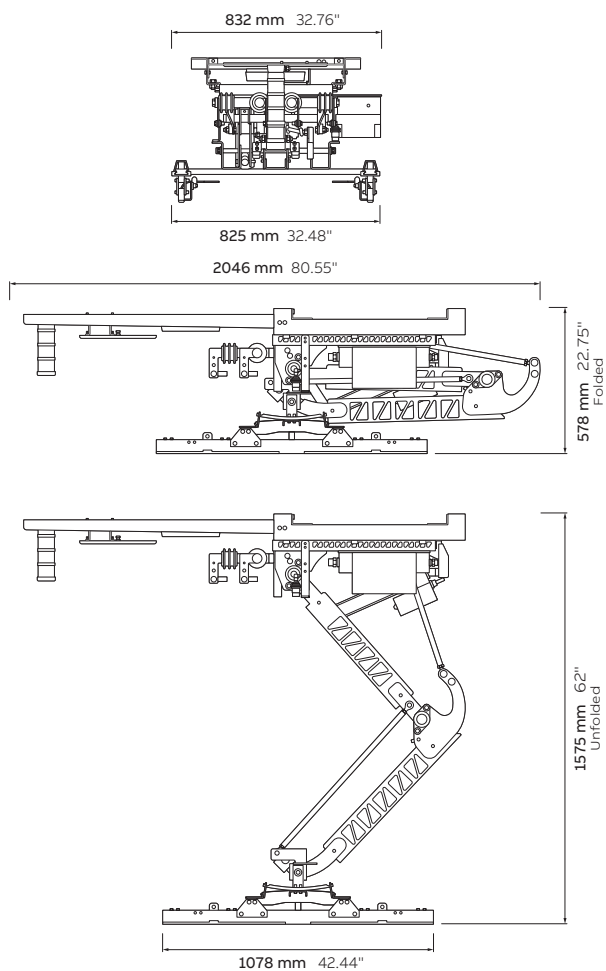
## Product codes

Compliance	Product code
CE	6AGC102132

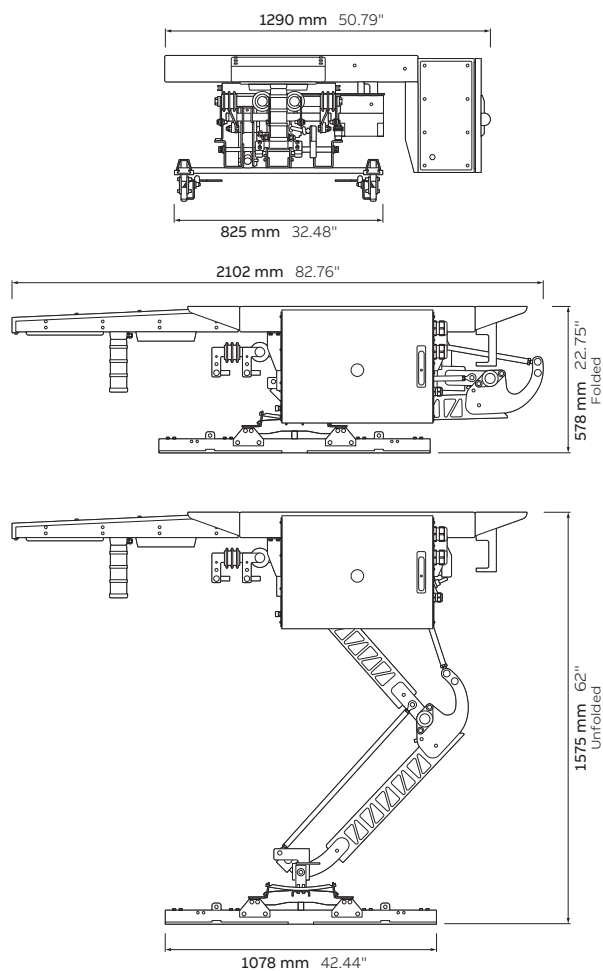
## Dimensions

### Pantograph-down depot set - CE version

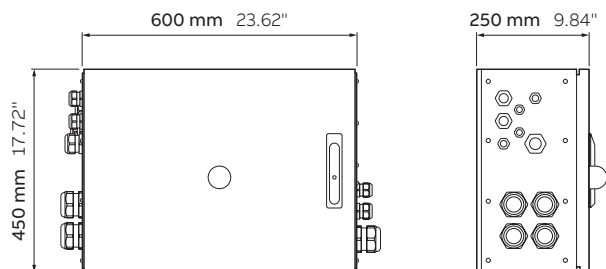
#### Pantograph-down



### Pantograph-down depot kit - NA version



### Control box



For more information  
[e-mobility.abb.com](http://e-mobility.abb.com)