

# BRIEF INFORMATION

## DC / DC Voltage Stabiliser

- For 12 V systems
- Output power 200–400 W
- System stabilizers with temporary voltage drop

### PRODUCT FEATURES

#### Application

DC/DC converters are also known as voltage stabilizers. In the event of a sudden voltage drop (i.e. during engine startup), they maintain the output voltage for the electrical subsystem (e.g. the start/stop system).

This primarily affects the elements of the vehicle electrical system that are noticeable by the driver but are not critical from a safety perspective. Included are the radio and navigation system (infotainment systems) as well as various terminals (e.g. for agricultural and construction machinery) and information systems (e.g. in buses).

#### Design and function

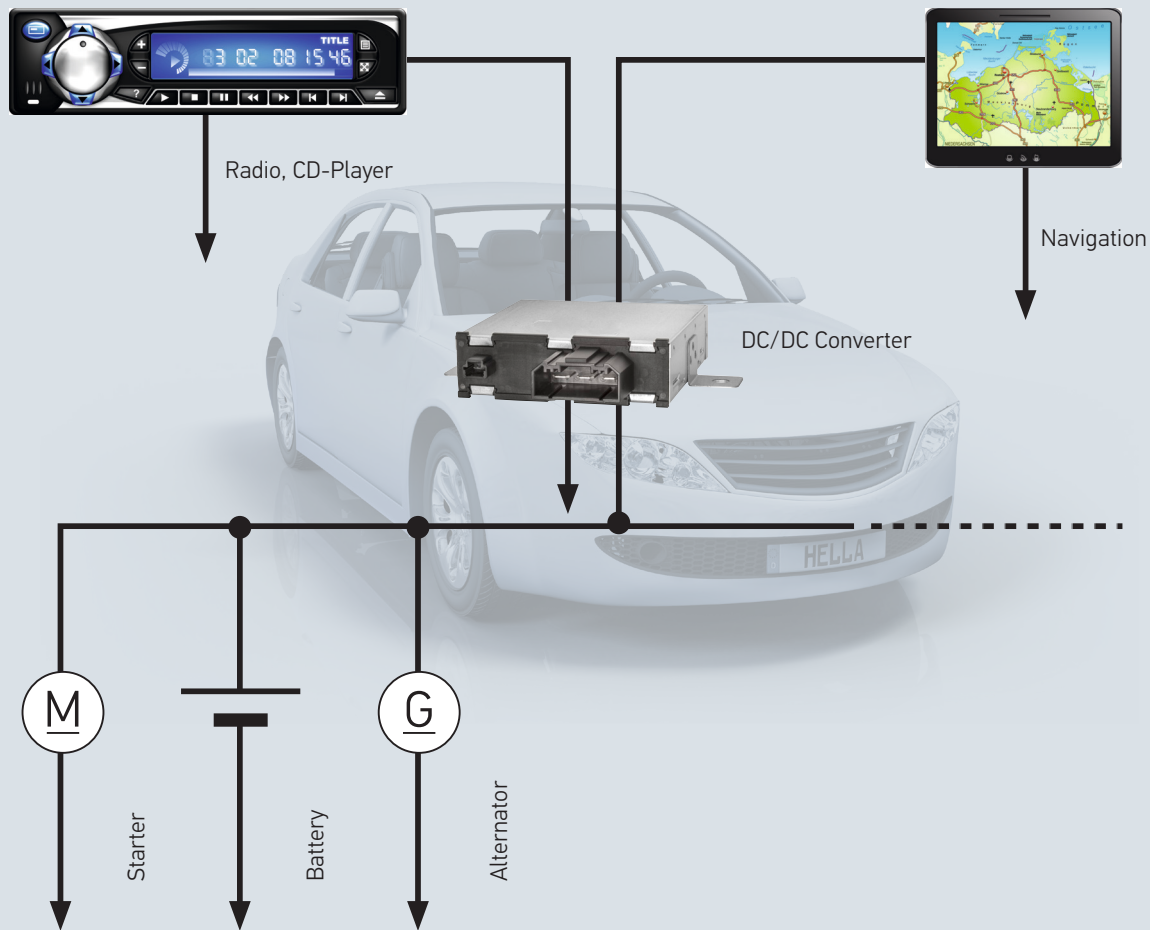
Voltage stabilizers are activated by the ignition. The subsystem of the vehicle electrical system is coupled via a low-impedance line with the main system as long as stabilization is not required.

The voltage drop that occurs at engine startup is signaled by the start signal. The subsystem and main system are then decoupled from each other and stabilization is carried out.

The units can be optionally outfitted with a LIN diagnostic interface.

# HOW IT WORKS

Voltage stabilizers are logically switched between the voltage supply of the vehicle electrical system and the (sub)system to be stabilized. Stabilization is activated as soon as the starter information (terminal 50) is available. Stabilization (boost mode) is limited to 5 seconds.



# TECHNICAL DETAILS

## Technical specifications – 200 W

Operating temperature	-40 to +85°C (-40 °C to -20 °C bypass mode)
Supply voltage	+ 6.0 V to +18 V
Stabilisation range	+ 6.0 V to +12 V
Output voltage	(Boost mode) 12 V +/- 0.5 V Ripple < 200 mV
Power	200 W
Storage temperature	-40 to +105°C
Cooling	Convection
Weight	approx. 370 g
Mating connector <sup>1)</sup>	156333-1
Output current	17 A
Efficiency	Boost mode 85 % @ U > 8 V Bypass mode > 99 %
Protection class	IP 5K0

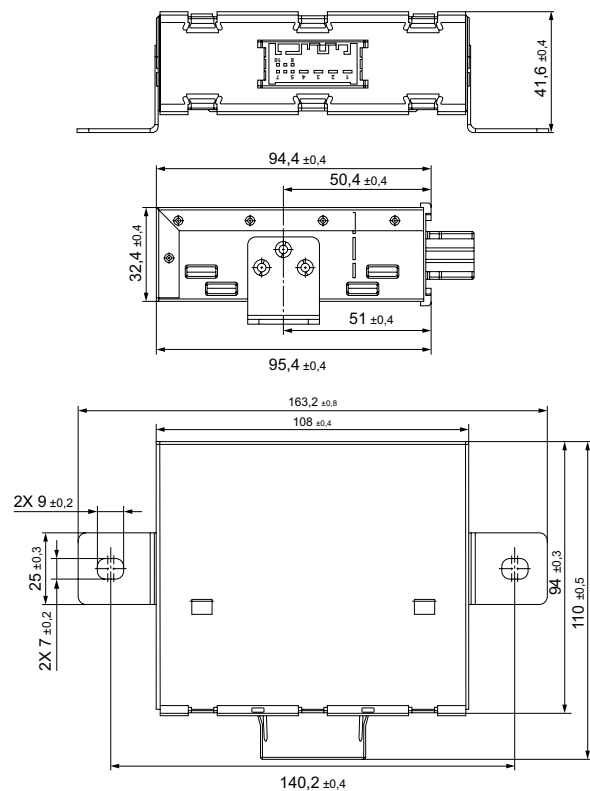
<sup>1)</sup> This accessory is not included.  
May be purchased from TE Connectivity.

## Technical specifications – 400 W

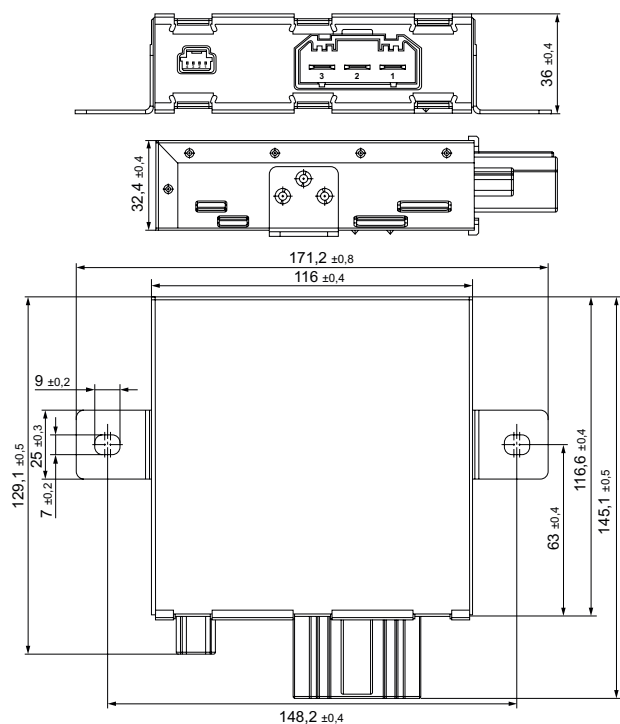
Operating temperature	-40 to +85°C (-40 °C to -20 °C bypass mode)
Supply voltage	+ 6.0 V to +18 V
Stabilisation range	+ 6.0 V to +12 V
Output voltage	(Boost mode) 12 V +/- 0.5 V Ripple < 200 mV
Power	400 W
Storage temperature	-40 to +105°C
Cooling	Convection
Weight	approx. 370 g
Mating connector <sup>1)</sup>	Mating connector 1: 1473672-1 Mating connector 2: 1897519-1
Output current	34 A
Efficiency	Boost mode 85 % @ U > 8 V Bypass mode > 99 %
Protection class	IP 5K0

<sup>1)</sup> This accessory is not included.  
May be purchased from TE Connectivity.

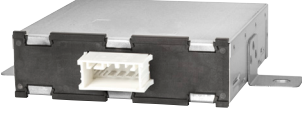
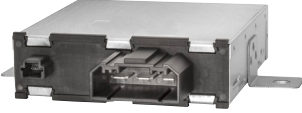
## Technical drawing



## Technical drawing



# RANGE OVERVIEW

Product image	Description	Power	Part number
	DC/DC voltage stabiliser	200 W	<b>On request</b>
	DC / DC voltage stabiliser	400 W	<b>8ES 312 331-101</b>