### R&S®ESH3-Z6 V-Network

For measuring disturbance voltage and susceptibility in low-impedance power supply networks



## R&S®ESH3-Z6 V-Network At a glance

The R&S°ESH3-Z6 single-phase V-network with a simulating impedance of 5  $\mu$ H || 50  $\Omega$  meets the requirements of EN55025/CISPR25 as well as MIL-STD-461  $^{1)}$ , DEF-STAN59-411 and DO-160 in the frequency range from 100 kHz to 200 MHz.

The R&S°ESH3-Z6 is rated for a continuous current of up to 100 A and can handle surges of up to 500 A for a maximum of 30 s.

The R&S®ESH3-Z6 V-network comes with a calibration report for the voltage division factor.

#### **Design**

The R&S°ESH3-Z6 V-network has screw terminals with a large contact area for low-impedance connection to the equipment under test (EUT) and the power supply using cable lugs. Plastic covers on both connections protect against accidental contact.

#### **Key facts**

- 0.1 MHz to 200 MHz
- Continuous current of up to 100 A
- Calibration in line with CISPR 25: 2016 (Edition 4)

The current MIL-STD-461 standard requires an impedance of 50  $\mu$ H  $\parallel$  50  $\Omega$ . A possible alternative for CE101 and CE102 testing is 5  $\mu$ F  $\parallel$  50  $\Omega$ , e.g. for smaller platforms (power distribution less than 50 m) such as fighter aircraft.

## **Specifications**

Specifications		
Frequency range	0.1 MHz to 200 MHz	
Simulating impedance	5 μΗ    50 Ω	
Max. permissible error limits (in line with CISPR 25)	±20% (magnitude)	
Max. permissible continuous current	100 A	
Max. permissible continuous current (up to $T_a = +35$ °C)	115 A	
Max. permissible short-time current (up to 30 s)	500 A	
Max. permissible operating voltage		
DC	600 V	
AC	250 V	
AC supply frequency range	0 Hz to 440 Hz	
Connectors		
Power supply	M8 screw terminal	
EUT	M8 screw terminal	
Ground	2 × M8 screw terminals	
Reference ground	uninsulated baseplate for screwing on ground plane	
RF connector	N female	
General data		
Operating temperature range	0°C to +50°C	
Storage temperature range	-25°C to +70°C	
Dimensions (W × H × D)	122 mm × 128 mm × 322 mm (4.8 in × 5.04 in × 12.7 in)	
Weight	1.9 kg (4.19 lb)	
Electrical safety	in line with EN61010-1, see notes in manual	

# **Ordering information**

Designation	Туре	Order number	
V-network	R&S°ESH3-Z6	836.5016.52	
Accessories supplied			
Cable lugs (4 x), calibration report for voltage division factor			

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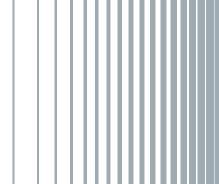
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