# **EMC/Field-Strength Measurements**



# V-Networks ESH2-Z5, ESH3-Z5, ESH3-Z6

Interference measurements on AC-powered loads Models -Z5 for remote-control via R&S EMI test receivers Insertion loss calibrated to ANSI C63.4

### Main features

- AC voltage supply to EUT
- Isolation of test circuit from line inter-
- Standardized load impedance
- Defined feed of interference voltage produced by EUT to EMI test receiver

## Brief description of ESH2-Z5

Four-line V-network (50  $\mu$ H + 5  $\Omega$ ) shunted by 50  $\Omega$  in line with VDE0876 and CISPR 16-1. It uses air-core inductances and contains an artificial hand as well as a PE simulating network that can be bypassed. A built-in fan with its own



ESH2-Z5 (photo 35326)

AC supply provides automatically controlled or permanent cooling, as required.

# Brief description of ESH3-Z5

Two-line V-network (50  $\mu$ H + 5  $\Omega$ ) shunted by 50  $\Omega$  in line with VDE0876 and CISPR 16-1. It uses air-core inductances and contains an artificial hand as well as a PE simulating network that can be bypassed. The compact design and

low weight make the ESH 3-Z5 an ideal choice for frequently varying applications.



ESH 3-Z5 (photo 35760)

## Brief description of ESH3-Z6

ESH 3-Z6 is a single-phase V-network  $(5 \mu H + 1 \Omega)$  shunted by  $50 \Omega$  complying with the requirements of VDE 0876 Part 1 (onboard power supply systems), CISPR Publ. 16 (low-impedance power supplies) as well as MIL-STD-462 Notice 3,

MIL-I-6181D, MIL-I-16910C, MIL-E-55301,

DEF-STAN 59-41 and DO 160 in the frequency range 100 kHz to 200 MHz.



ESH 3-Z6 (photo 35913)

# Specifications in brief

Frequency range Impedance accuracy Continuous current Max. short-time current Max. AC supply voltage Max. AC supply frequency AC supply input connector

AC supply connector for EUT

RF output to test receiver Remote-control input from test receiver Input for artificial hand Dimensions (H x B x T) Weight

# **Ordering information**

#### V-Network

Control cable to test receiver

#### ESH 2-Z5

9 kHz to 30 MHz ±20% 4 x 25 A 4 x 50 A (2 min) 250 V rms 63 Hz 4 x 32 A (Cekon male) European male for fan 4 x 32 A (Cekon female) 2 x 16 A (earthing-contact type female) BNC female 50-contact Amphenol female two 4 mm jacks 492 mm x 294 mm x 603 mm

#### **ESH3-Z5**

9 kHz to 30 MHz

±20% 2 x 10 A 2 x 16 A (30 min) 250 V rms 63 Hz earthing-contact type male with 1.8-m cable earthing-contact type female

BNC female 9-contact Cannon female 4 mm jack 219 mm x 147 mm x 350 mm

## **ESH3-Z6**

0.1 MHz to 200 MHz ±20 % 100 A (150 A to  $T_{amb} = 35 \,^{\circ}C$ ) 500 A (30 s) 250 V rms; 600 V DC 440 Hz screw terminal M8

screw terminal M8, reference ground to metallic ground plate

122 mm x 128 mm x 322 mm

0338.5219.53 EZ-5, 0816,0625,02 0831 5518 52 EZ-4, 0816.0560.02 (3 m) or EZ-6, 0816.0683.02 (10 m)

0836.5016.52