# TEST REPORT

**Name of product:** Intercom  
**Type of product:** 2N® Helios Vario 9135130E, 9135130KE, 9135160E, 9135160KE,  
2N® Helios IP Vario 9137111(C)U, 9137131(C)U, 9137161(C)U, 9137111(C)KU,  
9137131(C)KU, 9137161(C)KU 9137160(C)KDU  
**Ratings:** IP 53  
**Serial number:** 54-0562-0085  
**Manufacturer:** 2N TELEKOMUNIKACE a. s.  
Modřanská 621/72, 143 01 Praha 4, Czech Republic  
**Production site:** dtto manufacturer  
**EZÚ product coding system:** 105001  
**Ordering firm:** 2N TELEKOMUNIKACE a. s.  
Modřanská 621/72, 143 01 Praha 4, Czech Republic  
**Number of tested samples:** 1  
**Samples submitted on:** 17.12.2012  
**Location of testing:** EZÚ  
**Other data:** Type representative 9137160(C)KDU was tested.  
**The product was tested according to:** EN 60529/A1:2000  

The test results contained in this report refer to the tested items only. The values presented in this report were measured with the accuracy specified in the testing regulations. All measuring instruments used are properly traceable.

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1. Specimen description

Intercom 2N® Helios IP Vario 9137160(C)KDU was provided for testing. For purpose of testing, the specimen is fixed to an artificial wall.
2. Testing

2.1. Tests of protection provided by enclosures
according to EN 60529/A1:2000

2.1.1. Test of protection against penetration of dust - IP 5X
according to EN 60529/A1:2000, cl. 13.4 and 13.5

Test apparatus:
dust chamber VST 1150, inv. No. 834490

Test parameters:
The specimen was tested in an operating position.
dust filling of the chamber: talc
temperature / relative humidity during the test: 55 °C / 30 %
derpressure: no underpressure
duration of test: 8 h

Findings:
During the test, no harmful amount of dust penetrated into the specimen. passed

2.1.2. Test of protection against spraying water - IP X3
according to EN 60529/A1:2000, cl. 14.2, 14.2.3 and 14.3

Test apparatus:
spray nozzle, inv. No. 04729 + counterbalanced shield, inv. No. 20111
stopwatch SECCO, cal. No. N700477

Test parameters:
The specimen was tested in an operating position.
testing: see Fig. 3
spray angle: up to 60° from vertical
water flow rate: 10 l\min^{-1} ±5 %
duration of test: 5 min

Findings:
During the test, no harmful amount of water penetrated into the specimen. passed
3. Photodocumentation - design of the specimen

Fig. 3 - IP X3 testing

Fig. 4 - sealing of the specimen
4. Test result

The submitted specimen - intercom 2N® Helios IP Vario 9137160(C)KDU satisfies conditions for degree of protection provided by enclosures IP 53 according to EN 60529/A1:2000.

Note: Intercom 2N® Helios Vario 9135130E, 2N® Helios Vario 9135130KE, 2N® Helios Vario 9135160E, 2N® Helios Vario 9135160KE, 2N® Helios IP Vario 9137111(C)U, 2N® Helios IP Vario 9137131(C)U, 2N® Helios IP Vario 9137161(C)U, 2N® Helios IP Vario 9137111(C)KU, 2N® Helios IP Vario 9137131(C)KU and 2N® Helios IP Vario 9137161(C)KU have identical enclosure, reduced number of cover elements or equal cover technology. Therefore, test results in this Test Report also regard to these types.

Tested by: J. Šašek