



Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin

OIML Member State
Germany

OIML Certificate No.
R76/2006-A-DE1-2020.01

OIML CERTIFICATE ISSUED UNDER SCHEME A

OIML Issuing Authority

Name: Physikalisch-Technische Bundesanstalt,
Conformity Assessment Body
Address: Bundesallee 100, 38116 Braunschweig, GERMANY
Person responsible: Hon.-Prof. Dr. R. Schwartz

Applicant

Name: Siemens AG
Address: Östliche Rheinbrückenstr. 50, 76187 Karlsruhe

Manufacturer

Name: Siemens AG
Address: Östliche Rheinbrückenstr. 50, 76187 Karlsruhe

Identification of the certified type (*the detailed characteristics will be defined in the additional pages*)

Analogue data processing device
Type: SIWAREX WP231

Designation of the module (*if applicable*)

Analogue data processing device

This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R 76

Edition (year): 2006

For accuracy class (if applicable): III, IIII

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

The conformity was established by the results of tests and examinations provided in the associated OIML type evaluation report:

No. TER-R76/2006-A-DE1-2020.01 dated 2020-11-24 that includes 9 pages

The technical documentation relating to the identified type is contained in documentation file:

No. ZDS-R76/2006-A-DE1-2020.01 dated 2020-11-24 that includes 2 pages

OIML Certificate History

Revision No.	Date	Description of the modification
0	24.11.2020	Initial Issuing

Identification, signature and stamp

The Issuing Authority

The OIML Member

Oliver Mack

Hon.-Prof. Dr. R. Schwartz

Member of Conformity Assessment Body



Date: 24.11.2020



Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

Identification of the certified type (continued)

Metrological characteristics of the pattern:

Reference to R76/2006, annex F.1 to F.4		
Accuracy class		 
Load cell supply voltage	U_{exc}	4,85 V DC
Range of load cell signal (measuring voltage incl. dead load)	$U_{min} \dots U_{max}$	- 4 mV ... 4 mV
Smallest permissible input signal per verification scale interval	$\Delta u_{min} / e$	0,5 μ V / e
Maximum number of verification scale intervals	n_{ind}	$n \leq 3000$
Range of load cell impedance	$R_{Lmin} \dots R_{Lmax}$	40 Ω ^{a)} ... 4100 Ω ^{b)}
Fraction of mpe	p_{ind}	$p_i = 0,4$ ^{c)}
Temperature range	$T_{min} \dots T_{max}$	- 10°C ... + 40°C
Load cell connection		4- / 6-wire conductor
Maximum cable length in dependence of the cable diameter	L / A	$\leq 666 \text{ m/mm}^2$ ^{d) e)}
Power supply voltage		24 V DC, 500 mA

^{a)} minimum input resistance of the load cell(s)

50 Ω , if the EXI-interface of type SIWAREX IS is used.

^{b)} maximum output resistance of the load cell(s)

^{c)} $p_i = 0,5$, if the EXI-interface of type SIWAREX IS is used.

^{d)} Using a 6-wire conductor from the analogue data processing unit to the load cell or the junction box

^{e)} Cable material: copper