

NOTIFICATION OF TEST RESULTS

Issued to: Wago-Kontakttechnik GmbH & Co. KG
Hansastraße 27, 32423 Minden/westfalen, Germany

For the product: terminal blocks for copper conductors

Trade name: WAGO

Type/Model: 255

Manufactured by: Wago-Kontakttechnik GmbH & Co. KG
Hansastraße 27, 32423 Minden/westfalen, Germany

Ratings: 2,5 mm², 250 V, 400 V, 500 V, 800 V, 1000 V, 4 kV, 6 kV, 24 A, T65

Pre-licence factory inspection carried out by
DEKRA Certification B.V.

Additional information

This NTR-NL replaces NTR-NL 6248 dated 26 October, 2007
See annex for factory locations

A sample of the product has been tested and found to be in conformity with the current HD/EN and equivalent national standard
EN 60947-7-1:2009

As shown in the Test Report
2160584.117 (26 pages)

This Notification of Test Results is the result of testing a sample of the product submitted, in accordance with the provisions of the relevant specific standard.

This Notification of Test Results has been established by a body, which participates in the CENELEC Certification Agreement (CCA) of 11th September 1973 as amended on 29th March 1983. Any other body participating in the CCA will take this Notification as a basis for granting a national mark of conformity or a national approval as specified in the CCA, as long as the standard referred to above is still in force in the country of that body.

Arnhem, 29 April 2013

Number: NTR NL-7146

DEKRA Certification B.V.



F.S. Strikwerda
Certification Manager

© Integral publication of this attestation and adjoining reports is allowed

CCA
CENELEC CERTIFICATION AGREEMENT
ACCORD DE CERTIFICATION DU CENELEC

Annex Ref. no. NTR NL-7146

Arnhem, 29 April 2013

Factory locations:

Wago Elwag sp.z.o.o.
ul. Piekna 58 a, 50-506, Wroclaw
Poland



Wago & Controls (India) Ltd.
C-27, Sector-58, Phase III, 201 301 Noida Gautam Bugh Nagar (U.P)
India

Wago Electronic (Tianjin) Co. Ltd.
No. 5 Quanhui Road, 301700, Tianjin
China

WAGO Kontakttechnik GmbH & Co. KG
Hansastraße 27, 32423 Minden/Westfalen
Germany

WAGO Kontakttechnik GmbH & Co. KG, Werk Sondershausen
Waldstraße 1, 99706, Sondershausen
Germany

WAGO Contact S.A.
Route de l'Industrie 19, 1564, Domdidier
Switzerland

Testing procedure and testing location:	
<input checked="" type="checkbox"/> CCA Testing Laboratory:	DEKRA Certification B.V.
Testing location/ address	Utrechtseweg 310, 6812 AR Arnhem, The Netherlands
<input type="checkbox"/> Associated CCA Laboratory:	
Testing location/ address	
Tested by (name + signature)	W.C. van Ginkel 
Approved by (+ signature)	H.L. Schendstok 
<input type="checkbox"/> Testing procedure: TMP	
Tested by (name + signature)	
Approved by (+ signature)	
Testing location/ address	
<input type="checkbox"/> Testing procedure: WMT	
Tested by (name + signature)	
Witnessed by (+ signature)	
Approved by (+ signature)	
Testing location/ address	
<input type="checkbox"/> Testing procedure: SMT	
Tested by (name + signature)	
Approved by (+ signature)	
Supervised by (+ signature)	
Testing location/ address	
<input type="checkbox"/> Testing procedure: RMT	
Tested by (name + signature)	
Approved by (+ signature)	
Supervised by (+ signature)	
Testing location/ address	

Summary of testing:	
Tests performed (name of test and test clause): <i>Complete examination</i>	Testing location: <i>DEKRA Certification B.V. Utrechtseweg 310, 6812 AR Arnhem, The Netherlands</i>
Summary of compliance with National Differences:	
Copy of marking plate <i>WAGO</i> <i>255</i>	

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict

5.1	MARKING		
	Terminal block shall be marked with:		
	- manufacturer's name or trademark	WAGO	P
	- type designation	255-...	P
5.2	The following information shall be stated by the manufacturer if applicable, e.g. in the manufacturer's data sheet, or his catalogue or on the packing unit:		
	- manufacturer's claim for compliance with EN 60 947-7-1	IEC 60947-7-1	P
	- rated cross-section	2,5 mm²	P
	- rated connecting capacity	0,08 mm² - 2,5 mm² rigid and flexible	P
	- rated insulation voltage (Ui)	250 V 500 V 400 V 800 V 500 V 1000 V	P
	- rated impulse withstand voltage (Uimp)	4 kV, 6 kV	P
	- conventional free air thermal current (Ith)		N
	- service conditions if different from those of Cl. 6.		N

7.	CONSTRUCTION		
7.1	Constructional requirements		
7.1.1	Clamping units		
7.1.7.1	All parts of clamping units which maintain contact and carry current shall be of metal having adequate mechanical strength		P
	Clamping units connections shall be such that necessary contact pressure is maintained		P
	Clamping units shall be so constructed that the conductor is clamped between suitable surfaces without damage to the conductor and terminal		P

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	Clamping units shall not allow the conductor to be displaced or to be displaced themselves in a manner detrimental to the operation of equipment and the insulation voltage shall not be reduced below the rated value		P
	Clamping units shall allow the conductor to be connected by means ensuring that a reliable mechanical linkage and electrical contact is properly maintained		P
	Clamping units shall be able to withstand the forces that can be applied through the connected conductors		P
	Contact pressure is not transmitted through insulation materials		P
7.1.2	Mounting		
	Terminal blocks shall be provided with means that allow them to be securely attached to a rail or a mounting surface (see 8.3.2)		N
7.1.3	Clearances and creepage distances		
	For clearances and creepage distances see 8.4.2		P
7.1.4	Terminal identification and marking:		
	- terminals intended exclusively for the neutral conductor		P
	- other terminals		P
	- terminal blocks shall have provision, or at least space, for identification marks or numbers for each terminal or terminal assembly to be related to the circuit of which it is to form a part		P
	- For the identification of the terminal block the colour combination green-yellow is not allowed		P
7.1.5	Resistance to abnormal heat and fire		
	Needle flame test for insulation materials of terminal blocks (see 8.5)		P

EN 60947-7-1

Clause	Requirement – Test	Result - Remark	Verdict
--------	--------------------	-----------------	---------

7.1.6	Rated cross-section and rated connecting capacity		
	Terminal blocks are so designed that conductors of the rated cross-section and/or the rated connecting capacity can be accepted	0,08 mm² - 2,5 mm² rigid and flexible	P

8	TESTS		
8.3	Verification of mechanical characteristics		
8.3.2	Attachment of the terminal block on its support		
	mounting rail	PCB	—
	Tightening torque (Nm)	-	—
	steel pin diameter (mm)	1 mm	—
	force (N)	1 N	—
	During the test, no terminal block shall work free from its rail or support, nor suffer any other damage		P
8.3.3	Mechanical properties of clamping units		
8.3.3.1	Test of mechanical strenght of clamping units		
8.2.4.1	Mechanical strength of clamping units (EN 60947-1)		
	rated cross-section of a rigid conductor (mm ²)	2,5 mm²	—
	diameter of thread (mm)	-	—
	torque (Nm)	-	—
	5 times on 2 clamping units at the centre terminal block out of 5 terminal blocks		P
	Voltage drop before and after mechanical strength test		
	rated cross-section of a rigid conductor (mm ²)	2,5 mm²	—
	test current (A) d.c.	2,4 A	—
	voltage drop (mV) before mechanical strength test not exceeding 3,2 mV	0,73 mV – 0,91 mV	P
	If the measured value exceeds 3,2 mV, the voltage drop is determined on each individual clamping unit seperately, which shall not exceed 1,6 mV		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	voltage drop (mV) after mechanical strength test not exceeding 150% of the value measured before mechanical strength test :	0,76 mV – 0,88 mV	P
	minimum cross-section of a flexible conductor (mm ²)	0,08 mm²	—
	test current (A) d.c.	0,1 A	—
	voltage drop (mV) before mechanical strength test not exceeding 3,2 mV	0,72 mV – 0,79 mV	P
	If the measured value exceeds 3,2 mV, the voltage drop is determined on each individual clamping unit separately, which shall not exceed 1,6 mV		N
	voltage drop (mV) after mechanical strength test not exceeding 150% of the value measured before mechanical strength test	0,75 mV – 0,76 mV	P
8.3.3.2	Testing for damage to and accidental loosening of conductors of a terminal block (flexion test)		
	conductor of the smallest cross-section (mm ²) ... :	0,08 mm² rigid and flexible	—
	number of conductors of the smallest cross-section	1	—
	torque (Nm)	-	—
	diameter of bushing hole (mm)	6,5 mm	—
	height between the equipment and the platen (mm)	260 mm	—
	mass at the conductor(s) (kg)	0,2 kg	—
	135 continuous revolutions: the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	Pull-out test		
	force (N)	10 N	—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	conductor of the rated cross-section (mm ²)	2,5 mm² rigid and flexible	—

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	number of conductors of the rated cross-section :	1	—
	torque (Nm)	-	—
	diameter of bushing hole (mm)	9,5 mm	—
	height between the equipment and the platen (mm)	280 mm	—
	mass at the conductor(s) (kg)	0,7 kg	—
	135 continuous revolutions: the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	Pull-out test		
	force (N)	50 N	—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	conductor of the largest cross-section (mm ²)	2,5 mm² rigid and flexible	—
	number of conductors of the largest cross-section:	1	—
	torque (Nm)	-	—
	diameter of bushing hole (mm)	9,5 mm	—
	height between the equipment and the platen (mm)	280 mm	—
	mass at the conductor(s) (kg)	0,7 kg	—
	135 continuous revolutions: the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	Pull-out test		
	force (N)	50 N	—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		P
	conductor of the largest or smallest cross-section (mm ²)		—
	number of conductors of the largest or smallest cross-section		—
	torque (Nm)		—

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	diameter of bushing hole (mm)		—
	height between the equipment and the platen (mm)		—
	mass at the conductor(s) (kg)		—
	135 continuous revolutions: the conductor shall neither slip out of the terminal nor break near the clamping unit		N
	Pull-out test		
	force (N)		—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		
8.3.3.4	Verification of rated cross section and rated connecting capacity		
	One conductor of the two next smaller cross-sections can be unhindered and connected in each clamping unit of one terminal block (up to 35 mm ²)	1 mm²	P
8.4.2	Verification of clearances and creepage distances (<i>type 255-412</i>)		
	Conductor type and conductor cross-section	2,5 mm² rigid	—
	Conductor end length (mm)	5 – 6 mm	—
	Type of support	Printed Circuit Board	—
8.4.2.2	Clearances		
	Case A (mm)	3 mm	P
	Case B (mm)	1,2 mm	
	Measured (mm)	> 3,5 mm	
	Rated impulse withstand voltage U _{imp} (kV)	4 kV	P
8.4.2.3	Creepage distances:		
	- pollution degree	3	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage U _i (V)	250 V	—
	- minimum creepage distances (mm)	3,2 mm	—
	- measured creepage distances (mm)	> 4 mm	—

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
8.4.2.3	Creepage distances:		
	- pollution degree	2	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage Ui (V)	500 V	—
	- minimum creepage distances (mm)	2,5 mm	—
	- measured creepage distances (mm)	> 4 mm	—
8.4.2	Verification of clearances and creepage distances (<i>type 255-512</i>)		
	Conductor type and conductor cross-section	2,5 mm² rigid	—
	Conductor end length (mm)	5 – 6 mm	—
	Type of support	Printed Circuit Board	—
8.4.2.2	Clearances		
	Case A (mm)	5,5 mm	P
	Case B (mm)	2 mm	
	Measured (mm)	> 6 mm	
	Rated impulse withstand voltage Uimp (kV)	6 kV	P
8.4.2.3	Creepage distances:		
	- pollution degree	3	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage Ui (V)	400 V	—
	- minimum creepage distances (mm)	5 mm	—
	- measured creepage distances (mm)	> 6 mm	—
8.4.2.3	Creepage distances:		
	- pollution degree	2	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage Ui (V)	800 V	—
	- minimum creepage distances (mm)	4 mm	—
	- measured creepage distances (mm)	> 6 mm	—
8.4.2	Verification of clearances and creepage distances (<i>type 255-612</i>)		

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	Conductor type and conductor cross-section	2,5 mm² rigid	—
	Conductor end length (mm)	5 – 6 mm	—
	Type of support	Printed Circuit Board	—
8.4.2.2	Clearances		
	Case A (mm)	5,5 mm	P
	Case B (mm)	2 mm	
	Measured (mm)	> 7 mm	
	Rated impulse withstand voltage U _{imp} (kV)	6 kV	P
8.4.2.3	Creepage distances:		
	- pollution degree	3	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage U _i (V)	500 V	—
	- minimum creepage distances (mm)	6,3 mm	—
	- measured creepage distances (mm)	> 7 mm	—
8.4.2.3	Creepage distances:		
	- pollution degree	2	—
	- comparative tracking index (V)	600 V	—
	- material group	I	—
	- rated insulation voltage U _i (V)	1000 V	—
	- minimum creepage distances (mm)	5 mm	—
	- measured creepage distances (mm)	> 7 mm	—
8.4.3	Dielectric tests (type 255-412)		
	Dielectric test, U _{imp} indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm)	2,5 mm², rigid, 5 - 6 mm	—
	- rated impulse withstand voltage (kV)	4 kV	—
	- test U _{imp} main circuits (kV)	4,8 kV	P
	Dielectric test, U _{imp} not indicated:		

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm) :	2,5 mm², rigid, 5 - 6 mm	—
	- rated insulation voltage (V)	500 V	—
	- test voltage for 5 sec (V)	1890 V	P
8.4.3	Dielectric tests (type 255-512)		
	Dielectric test, Uimp indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm)	2,5 mm², rigid, 5 - 6 mm	—
	- rated impulse withstand voltage (kV)	6 kV	—
	- test Uimp main circuits (kV)	7,3 kV	P
	Dielectric test, Uimp not indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm) :	2,5 mm², rigid, 5 - 6 mm	—
	- rated insulation voltage (V)	800 V	—
	- test voltage for 5 sec (V)	2000 V	P
8.4.3	Dielectric tests (type 255-612)		
	Dielectric test, Uimp indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm)	2,5 mm², rigid, 5 - 6 mm	—
	- rated impulse withstand voltage (kV)	6 kV	—
	- test Uimp main circuits (kV)	7,3 kV	P
	Dielectric test, Uimp not indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length (mm) :	2,5 mm², rigid, 5 - 6 mm	—
	- rated insulation voltage (V)	1000 V	—
	- test voltage for 5 sec (V)	2200 V	P
8.4.5	Temperature-rise test		

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	Temperature-rise conditions:		
	- test current (A)	24 A	—
	- cross-section of the conductor (mm ²)	2,5 mm²	—
	- torque (Nm)	-	—
	- temperature-rise does not exceed 45 K	28 K – 35 K	P
	Voltage drop before and after temperature-rise test:		
	- test current (A) d.c.	2,4 A	—
	- voltage drop (mV) before temperature-rise test not exceeding 3,2 mV	0,59 mV – 0,78 mV	P
	If the measured value exceeds 3,2 mV, the voltage drop is determined on each individual clamping unit separately, which shall not exceed 1,6 mV		N
	- voltage drop (mV) after temperature-rise test not exceeding 150% of the value measured before temperature-rise test	0,63 mV – 0,79 mV	P
8.4.6	Short-time withstand current test		
	- rated cross-section of the conductor (mm ²)	2,5 mm²	—
	- torque (Nm)	-	—
	- test current (A)	300 A	—
	- duration of the test current (s)	1 s	—
	At the end of the test, continuity shall exist on the test sample assembly and the terminal blocks shall not show any cracking, breakage or other critical damage		P
	Voltage drop before and after short-time withstand current test		
	- test current (A) d.c.	2,4 A	—
	- voltage drop (mV) before short-time withstand current test not exceeding 3,2 mV	0,69 mV	P
	If the measured value exceeds 3,2 mV, the voltage drop is determined on each individual clamping unit separately, which shall not exceed 1,6 mV		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- voltage drop (mV) after short-time withstand current test not exceeding 150% of the value measured before short-time withstand current test	0,75 mV	P
8.4.7	Ageing test (for screwless-type terminal blocks only)		
	Maximum ambient temperature (°C)	40 °C	—
	Rated cross-section rigid or stranded < 10 mm ² solid, > 10 mm ² stranded (mm ²)	2,5 mm²	—
	Test current (A) according 8.4.5	24 A	—
	Heating cabinet is increased, in each cycle to (°C)	65 °C	—
	Test current (A) d.c. for measurement of the voltage drop	2,4 A	—
	Voltage drop after 0 cycles:		
	- requirement: ≤ 3,2 mV (mV)	0,70 mV – 1,08 mV	P
	If the measured value exceeds 3,2 mV, the voltage drop is determined on each individual clamping unit separately, which shall not exceed 1,6 mV		N
	Voltage drop after the 24th cycle:		
	- requirement: 4,8 mV (mV)	0,70 mV – 1,08 mV	P
	Voltage drop after the 48th cycle		
	- requirement: ≤ 4,8 mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Voltage drop after the 72th cycle:		
	- requirement: ≤ 4,8 mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Voltage drop after the 96th cycle:		
	- requirement: ≤ 4,8 mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Voltage drop after the 120th cycle:		
	- requirement: ≤ 4,8 mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	Voltage drop after the 144th cycle:		
	- requirement: $\leq 4,8$ mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Voltage drop after the 168th cycle:		
	- requirement: $\leq 4,8$ mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Voltage drop after the 192th cycle:		
	- requirement: $\leq 4,8$ mV or 1,5 times the value measured after the 24th cycle (mV)	0,70 mV – 1,07 mV	P
	Pull-out test		
	force (N)	50 N	—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		P
8.5	Verification of thermal characteristics are checked by the needle flame test.		
	Before the test, the terminal blocks are stored for 24 h in an atmosphere having a temperature between 15°C and 35°C and a relative humidity between 45% and 75%		P
	The flame is applied for 10 s. for insulation walls <1 mm and / or an area < 100 mm ² , the flame is applied for 5 s.		P
	The terminal blocks are considered to have passed the test if the duration of burning is < 30s in case of ignition. Moreover, the tissue paper on the pinewood board shall not ignite if burning or glowing particles fall from the terminal block.		P
8.6	Verification of EMC characteristics		
	Subclause 8.4 of EN 60947-1 applies with the following addition:		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
8.6.1	Immunity		
	Terminal blocks within the scope of this standard are not sensitive of electromagnetic disturbances and therefore no immunity tests are necessary.		N
8.6.2	Emission		
	Terminal blocks within the scope of this standard do not generate electromagnetic disturbances and therefore no emission tests are necessary.		N
Annex A	vacant		
Annex B	informative		
	Items subject to agreement between manufacturer and user		
Annex C	vacant		
Annex D	ADDITIONAL REQUIREMENTS FOR TEST DISCONNECT TERMINALBLOCKS		
D5	Product information		
	- service life in number of cycles		N
D6.	Normal service, mounting and transport conditions		
	Clause 6 applies.		N
D7	Construction and performance conditions		
	Clause 7 applies with the following additions		
D7.1	Constructional requirements		
D7.1.3	Clearances and creepages are not required to be measured over the open disconnect contacts (Gap). However, the rated impulse withstand voltage (Uimp) stated by the manufacturer according to table 13 of EN 60947-1, without using the altitude correction factor, shall be verified across the open disconnect contacts (gap) (see D.7.2.2)		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
D7.1.7	Disconnect unit		
	For longitudinal and perpendicular disconnection, test disconnect terminal blocks may be equipped with disconnect units, for instance of the following type: - plug - knife - slide (with or without busbar)		N
	the position of the disconnect unit shall be recognizable in normal use and shall not be changed unintentionally		N
D.7.2.2	Dielectric properties		
	Dielectric test, Uimp indicated:		
	- five terminal blocks connected with unfavourable cross-section (mm ²) / type / conductor end length tested over open disconnect contacts (gap) (mm) :		—
	- rated impulse withstand voltage (kV)		—
	- test Uimp without altitude correction factor (kV) :		N
D.8.4.5	Temperature-rise test		
	Temperature-rise conditions:		
	- test current (A)		—
	- cross-section of the conductor (mm ²)		—
	- torque (Nm)		—
	- torque disconnect unit (Nm)		—
	- temperature-rise does not exceed 45 K		N
	Voltage drop before and after temperature-rise test:		
	- test current (A) d.c.		—
	- voltage drop (mV) before temperature-rise test not exceeding 1,6 mV times the total of conductor clamping unit and disconnect unit contact points		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	If the measured value exceeds this calculated value, the voltage drop is measured on each individual conductor clamping unit and disconnect unit contact point. it shall not exceed 1,6 mV on any conductor clamping unit and disconnect unit contact point		N
	- voltage drop (mV) after temperature-rise test not exceeding 150% of the value measured before temperature-rise test		N
D.8.4.6	Short-time withstand current test		
	- rated cross-section of the conductor (mm ²)		—
	- torque (Nm)		—
	- torque disconnect unit (Nm)		—
	- test current (A)		—
	- duration of the test current (s)		—
	At the end of the test, continuity shall exist on the test sample assembly and the terminal blocks shall not show any cracking, breakage or other critical damage		N
	Voltage drop before and after short-time withstand current test		
	- test current (A) d.c.		—
	- voltage drop (mV) before temperature-rise test not exceeding 1,6 mV times the total of conductor clamping unit and disconnect unit contact points		N
	If the measured value exceeds this calculated value, the voltage drop is measured on each individual conductor clamping unit and disconnect unit contact point. it shall not exceed 1,6 mV on any conductor clamping unit and disconnect unit contact point		N

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict

	- voltage drop (mV) after temperature-rise test not exceeding 150% of the value measured before temperature-rise test		N
D.8.4.7	Ageing test for test disconnect terminal blocks with screwless-type clamping units		
	Maximum ambient temperature (°C)	40 °C /	—
	Rated cross-section rigid or stranded < 10 mm ² solid, > 10 mm ² stranded (mm ²)		—
	Test current (A) according D.8.4.5		—
	Torque disconnect unit (Nm)		—
	Heating cabinet is increased, in each cycle to (°C)		—
	Test current (A) d.c. for measurement of the voltage drop		—

	Voltage drop after 0 cycles:		
	- requirement: ≤ 1,6 mV (mV)	1 - 2 - 3 - 4 - 5 -	N
	the voltage drop is determined on each individual clamping unit separately		
	Voltage drop after the 24th cycle:		
	- requirement: 2,4 mV (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 48th cycle		
	- requirement: ≤ 2,4 mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 72th cycle:		

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 96th cycle:		
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N

	Voltage drop after the 120th cycle:		
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 144th cycle:		
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 168th cycle:		
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Voltage drop after the 192th cycle:		

EN 60947-7-1			
Clause	Requirement – Test	Result - Remark	Verdict
	- requirement: $\leq 2,4$ mV or 1,5 times the value measured after the 24th cycle, whichever is the lower (mV)	1 - 2 - 3 - 4 - 5 -	N
	Pull-out test		
	force (N)		—
	1 min, the conductor shall neither slip out of the terminal nor break near the clamping unit		N
D.8.5.1	Service life		
	- rated cross-section of the conductor (mm ²)		—
	- torque (Nm)		—
	- torque disconnect unit (Nm)		—
	- number of operating cycles		—
	Entire test apparatus is stored for 168 h in dry heat at a temperature of 85 °C		N
	Voltage drop before and after service life		
	- test current (A) d.c.		—
	- voltage drop (mV) before service life test not exceeding 1,6 mV times the total of conductor clamping unit and disconnect unit contact points :		N
	If the measured value exceeds this calculated value, the voltage drop is measured on each individual conductor clamping unit and disconnect unit contact point. it shall not exceed 1,6 mV on any conductor clamping unit and disconnect unit contact point		N
	- voltage drop (mV) after service life test not exceeding 150% of the value measured before service life test		N
D.8.4.5	Emission		

EN 60947-7-1			
Clause	Requirement - Test	Result - Remark	Verdict
	Terminal blocks within the scope of this standard are not sensitive of electromagnetic disturbances and therefore no immunity tests are necessary.		N
8.6.2	Emission		
	Terminal blocks within the scope of this standard do not generate electromagnetic disturbances and therefore no emission tests are necessary.		N

Remarks

Description of types

product data-type 255-... (5/5,08 mm)

- rated voltage : 250 V material group I pollution degree 3
500 V material group I pollution degree 2
- rated impulse withstand voltage : 4 kV
- description : PCB terminal block, provided with 1 screwless clamping unit with push-button and 2 solderpins

- types : 255-... with suffixes -401, -740, -742, -743, -744, -746, -747
- description : 1-pole

- types : 255-... with suffixes -402 up to and including -410, -412, -416, -424, -436, -448
- description : last 2 digits correspondent with pole number

product data-type 255-...(7,5/7,62 mm)

- rated voltage : 400 V material group I pollution degree 3
800 V material group I pollution degree 2
- rated impulse withstand voltage : 6 kV
- description : PCB terminal block, provided with 1 screwless clamping unit with push-button and 2 solderpins per pole

- types : 255- ... with suffixes -501, -750, -752, -753, -754, -756, -757
- description : 1-pole

- types : 255-... with suffixes -502 up to and including -510, -512, -516, -524
- description : last 2 digits correspondent with pole number

product data-type 255-...(10/10,16 mm)

- rated voltage : 500 V material group I pollution degree 3
1000 V material group I pollution degree 2
- rated impulse withstand voltage : 6 kV
- description : PCB terminal blocks, provided with 1 screwless clamping unit with push-button and 2 solderpins per pole

- types : 255-... with suffixes -601, -760, -762, -763, -764, -766, -767
- description : 1-pole

- types : 255-... with suffixes -602 up to and including -610, -612, -616, -624
- description : last 2 digits correspondent with pole number

Remarks

