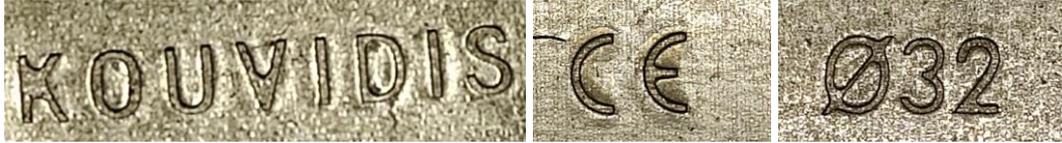


Test Report issued under the responsibility of:



<b>TEST REPORT</b> <b>IEC 61386-25</b> <b>Conduit systems for cable management</b> <b>Part 25: Particular requirements - Conduit fixing devices</b>	
Report Number .....	321958-TL6-1
Date of issue .....	2024-11-19
Total number of pages .....	11
Name of Testing Laboratory preparing the Report .....	<b>VDE</b> Prüf- und Zertifizierungsinstitut GmbH
Applicant's name .....	EMM. KOUVIDIS SA Manufacture of Electrical Materials
Address .....	Viopa Tylissos; 71500 Heraklio, Crete; Greece
<b>Test specification:</b>	
Standard .....	DIN EN 61386-25 (VDE 0605-25):2012-06; EN 61386-25:2011
Test procedure .....	---
Non-standard test method .....	N/A
Test Report Form No .....	IEC61386_25B
Test Report Form(s) Originator .....	OVE
Master TRF .....	Dated 2018-12-21
<b>General disclaimer:</b>	
<p>The test results presented in this report relate only to the object tested.  This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.</p>	
Test item description .....	Conduit systems, conduit fixing devices
Trade Mark .....	
Manufacturer .....	EMM. KOUVIDIS SA Manufacture of Electrical Materials; Viopa Tylissos; 71500 Heraklio, Crete; Greece
Model/Type reference .....	Metal clamp / metal clip for drywall
Ratings .....	16 – 20 – 25 – 32

<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/>	<b>CB Testing Laboratory:</b>	VDE Prüf- und Zertifizierungsinstitut GmbH
<b>Testing location/ address .....</b>		Merianstraße 28, 63069 Offenbach, Germany
<input type="checkbox"/>	<b>Associated CB Testing Laboratory:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name, function, signature).....:</b>		O. Gaedicke (Authorization of test report) Testing engineer 
<b>Approved by (name, function, signature) ..:</b>		P. Hühner Technical Certification Officer 
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 1:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name, function, signature).....:</b>		(Authorization of test report) Testing engineer
<b>Approved by (name, function, signature) ..:</b>		Technical Certification Officer
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 2:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name + signature).....:</b>		Testing engineer
<b>Witnessed by (name, function, signature) ..:</b>		(Authorization of test report) Witnessed
<b>Approved by (name, function, signature) ..:</b>		Technical Certification Officer
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 3:</b>	
<input type="checkbox"/>	<b>Testing procedure: CTF Stage 4:</b>	
<b>Testing location/ address .....</b>		
<b>Tested by (name, function, signature).....:</b>		
<b>Witnessed by (name, function, signature) ..:</b>		
<b>Approved by (name, function, signature) ..:</b>		
<b>Supervised by (name, function, signature) :</b>		

<b>List of Attachments (including a total number of pages in each attachment):</b> ---	
<b>Summary of testing:</b> <input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail	
<b>Tests performed (name of test and test clause):</b> See following pages	<b>Testing location:</b> VDE Prüf- und Zertifizierungsinstitut GmbH Merianstrasse 28, 63069 Offenbach, Germany
<b>Summary of compliance with National Differences (List of countries addressed):</b> ---	
<b>Copy of marking plate:</b> (for example)	
	
<b>Test item particulars:</b> Classification of installation and use..... : 2-1-2-1-1-1-0	
<b>Possible test case verdicts:</b> - test case does not apply to the test object..... : N/A - test object does meet the requirement..... : P (Pass) - test object does not meet the requirement..... : F (Fail)	
<b>Testing:</b> Date of receipt of test item ..... : 2024-08-01 Date (s) of performance of tests ..... : 2024-10-02 – 2024-11-15	

**General remarks:**

"(See Enclosure #)" refers to additional information appended to the report.  
"(See appended table)" refers to a table appended to the report.

Throughout this report a  comma /  point is used as the decimal separator.

**Conformity statement:**

The VDE decision rule for the statement of conformity is in accordance with IEC Guide 115:2023

**When differences exist; they shall be identified in the General product information section.**

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**General product information and other remarks:**

Conduit fixing devices made of galvanized steel for mounting conduits on dry walls, wooden walls, and chipboards

**Pictures:**

IEC 61386-25			
Clause	Requirement + Test	Result - Remark	Verdict
<b>7</b>	<b>MARKING AND DOCUMENTATION</b>		<b>P</b>
7.1	Conduit fixing devices marked on the product with a trade mark or a name identifying the manufacturer or responsible vendor .....		P
	Conduit fixing devices marked in addition in such a way that it can be identified in the manufacturer's, or responsible vendor's, literature .....		P
7.1.1	Manufacturer indicates the compatibility within the conduit system in accordance with IEC 61386 series:		P
7.1.2	Manufacturer provides in his literature the classification and all necessary information for transport, storage, installation and use		P
7.2	Conduit fixing device is marked in accordance with 7.1, on		P
	- the product .....		P
	- a label attached to the product, or on the box or carton containing the fittings (if the marking on the product is impractical) .....		N/A
7.3	Flame propagating material is orange in colour		N/A
	Sub-clause of part 1 not applicable		—
7.4	Earthing facilities are indicated by the symbol for protective earth in accordance with IEC 60417, symbol 60417-IEC-5019-a		N/A
	Sub-clause of part 1 not applicable		—
7.5	Compliance with 7.1 to 7.2 checked by inspection		P
7.6	Marking is durable and clearly legible		N/A
	Compliance checked by inspection and by rubbing the marking by hand for 15 s with a piece of cloth soaked with water, and again for 15 s with a piece of cloth soaked with petroleum spirit		N/A
<b>8</b>	<b>DIMENSIONS</b>		<b>P</b>
	Conduit fixing devices are capable of accommodating the size or range of conduit diameters as declared by the manufacturer		P
<b>9</b>	<b>CONSTRUCTION</b>		<b>P</b>
9.1	There are no sharp edges, burrs or surface projections which damage the conduit system		P
	Or inflict injury on the installer or user		P
9.2	Fixing means designed to withstand the mechanical stresses occurring during installation and use		P
	Screws, if any, used for assembly of the fixing device, do not cause damage to the conduit system components when correctly assembled		N/A

<b>IEC 61386-25</b>			
Clause	Requirement + Test	Result - Remark	Verdict
	Screw fixing using preformed threads checked by clause 9.3		N/A
	Screw fixing using thread-forming screw as checked by clause 9.4 and inspection		N/A
	Reusable fixing other than screws checked by assembly and removal ten times		N/A
	Non-reusable fixing checked by assembly		N/A
9.3	Test for screw fixing using preformed threads		N/A
	After the test: no damage sustained by the screw or nut, such as breakage of the screw or damage to the head or thread		N/A
9.4	Test for screw fixing using thread-forming screws		N/A
	After the test: no damage, such as breakage of the screw or damage to the head or thread		N/A
<b>10</b>	<b>MECHANICAL PROPERTIES</b>		<b>P</b>
<b>10.1</b>	<b>Mechanical strength</b>		<b>P</b>
10.1.1	Conduit fixing devices have adequate mechanical strength		<b>P</b>
10.1.2	Compliance of 10.1.1 checked by the tests specified in 10.3, 10.101 and 10.102		<b>P</b>
<b>10.2</b>	<b>Compression test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.3</b>	<b>Impact test</b>		<b>P</b>
	12 assemblies of the conduit fixing device and a steel mandrel or conduit are subjected to an impact test using the apparatus shown in figure 2	See appended table 10.3	<b>P</b>
10.3.3	At least 9 of the 12 samples passed the test		<b>P</b>
<b>10.4</b>	<b>Bending test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.5</b>	<b>Flexing test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.6</b>	<b>Collapse test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.7</b>	<b>Tensile test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.8</b>	<b>Suspended load test</b>		<b>N/A</b>
	Sub-clause of part 1 not applicable		—
<b>10.101</b>	<b>Lateral load test</b>		<b>P</b>

<b>IEC 61386-25</b>			
Clause	Requirement + Test	Result - Remark	Verdict
10.101.1	Two conduit fixing devices mounted as shown in Figure 101 Or Figure 102		P
	Conduit fixing devices can be used with any type of conduit – steel mandrel		N/A
	Conduit fixing devices can only be used with a specific type of conduit as declared by the manufacturer		P
10.101.2	Metallic conduit fixing devices tested at ambient temperature, load applied without shock 300 s +10/0 s	See appended table 10.101	P
10.101.3	Non-metallic conduit fixing devices tested at declared maximum temperature, load applied without shock 60 min +5/0 min		N/A
10.101.4	Conduit is still supported by fixing device		P
<b>10.102</b>	<b>Axial load test</b>		N/A
10.102.1	Conduit fixing devices can be used with any type of conduit – steel mandrel		N/A
	The mandrel and the conduit fixing device is mounted in accordance with the manufacturer's instructions and figure 103		N/A
	Conduit fixing devices can only be used with a specific type of conduit as declared by the manufacturer		N/A
	A sample conduit and the conduit fixing device is mounted in accordance with the manufacturer's instructions and figure 103		N/A
	Metallic conduit fixing devices tested at ambient temperature, load applied without shock 300 s +10/0 s		N/A
	Non-metallic conduit fixing devices tested at declared maximum temperature, load applied without shock 300 s +10/0 s		N/A
10.102.2	After the test the conduit remain properly assembled to the conduit fixing device, have no displacement more than 2 mm through the fixing device and no visible damage		N/A
<b>11</b>	<b>ELECTRICAL PROPERTIES</b>		N/A
	<b>Clause of part 1 not applicable</b>		—
<b>12</b>	<b>THERMAL PROPERTIES</b>		N/A
	<b>Clause of part 1 not applicable</b>		—
<b>13</b>	<b>FIRE HAZARD</b>		P
13.1	Reaction to fire		P

IEC 61386-25			
Clause	Requirement + Test	Result - Remark	Verdict
13.1.1	Initiation of fire (not applicable)		—
13.1.2	Contribution to fire (under consideration)		—
13.1.3	Spread of fire		P
	Non-flame propagating conduit systems have adequate resistance to flame propagation	metallic	P
13.1.3.1	Non-metallic and composite conduit fixing devices subjected to glow-wire test of IEC 60695-2-1/1 (IEC 60695-2-11) at 750 °C		N/A
	No visible flame or sustained glowing,		N/A
	Flames and glowing extinguished within 30 s of the removal of the glow-wire (s).....:		N/A
13.1.3.2	Non-metallic and composite conduits subjected to 1 kW flame of IEC 60695-2-4/1 (IEC 60695-11-2), according to the arrangement of figure 7, applied for the period given in table 11		N/A
	Sub-clause of part 1 not applicable		—
13.1.4	Additional reaction to fire characteristics (under consideration)		—
13.2	Resistance to fire (not applicable)		—
<b>14</b>	<b>EXTERNAL INFLUENCES</b>		<b>P</b>
14.1	Degree of protection provided by enclosure		N/A
	Conduit systems, when assembled in accordance with the manufacturer's instructions, have adequate resistance to external influences according to the classification declared by the manufacturer		N/A
14.1.1	Degree of protection – Ingress of foreign solid objects		N/A
	Sub-clause of part 1 not applicable		—
14.1.2	Degree of protection – Ingress of water		N/A
	Sub-clause of part 1 not applicable		—
14.2	Resistance against corrosion		P
14.2.1	Resistance to corrosion classification for painted and zinc coated steel and steel composite conduit fixing devices (table 10) .....	1	—
	For non-ferrous metallic and composite conduit fixing devices, the manufacturer provided information about its protection against corrosion		N/A
14.2.2	Tests for resistance to corrosion for painted and zinc coated steel and steel composite conduit fixing devices		P
14.2.2.1	Low protection conduit fixing devices inspected for completeness of covering by the protective coating, both inside and outside		P

<b>IEC 61386-25</b>			
<b>Clause</b>	<b>Requirement + Test</b>	<b>Result - Remark</b>	<b>Verdict</b>
14.2.2.2	Test for medium protection conduit fixing devices: after completion of the test, the samples showed no more than two blue coloured spots on each square centimetre of the surface, and no blue spot had a dimension larger than 1,5 mm		N/A
14.2.2.3	Test for high protection conduit fixing devices: after the test, the sample showed no precipitation of copper which cannot be scrubbed off in running water, if necessary after immersion for 15 s in a 10% solution of hydrochloric acid in water		N/A
<b>15</b>	<b>ELECTROMAGNETIC COMPATIBILITY</b>		N/A
	Products covered by this standards are, in normal use, passive in respect of electromagnetic influences (emission and immunity)		N/A

IEC 61386-25							
Clause	Requirement + Test			Result - Remark		Verdict	
10.3	<b>TABLE: Impact test</b>						
	Test temperature (table 1) (°C) .....			-5 °C		—	
	Mass of hammer (table 5) (kg) .....			0,5 kg		—	
	Fall height (table 5) (mm) .....			100 mm		—	
	Test performed with .....			conduit		—	
Rating	N° of sample	Mandrel or conduit remain inside the fixing device		No sign of disintegration / No visible cracks		Total n° of samples which passed the test	Verdict
		N° of samples which passed the test	N° of samples which failed the test	N° of samples which passed the test	N° of samples which failed the test		
16	1-12	12	0	12	0	12	P
32	1-12	12	0	12	0	12	P
Supplementary information:							
Tested with conduit type SUPERFLEX PLUS 16 mm and SUPERFLEX PLUS 32 mm							

10.101	<b>TABLE: Lateral load test</b>						
	Temperature during the test (°C) .....			+23 °C		—	
	Test duration .....			300 s		—	
Rating	N° of sample	Test performed with (conduit / mandrel)	Minimum diameter of size (mm)	Load (kg)	Mounting (wall / ceiling)	Conduit / Mandrel still supported by the fixing device (P/F)	Verdict
16	1-3	conduit	---	0,8	wall	P	P
	4-6	conduit	---	0,8	ceiling	P	P
32	1-3	conduit	---	3,3	wall	P	P
	4-6	conduit	---	3,3	ceiling	P	P
Supplementary information:							
Tested with conduit type SUPERFLEX PLUS 16 mm and SUPERFLEX PLUS 32 mm							

<b>LIST OF TEST EQUIPMENT USED AT THE TESTING LABORATORY</b>			
<b>Test clause</b>	<b>Name of test</b>	<b>Description of test equipment</b>	<b>Inventory-Nr.</b>
10	Mechanical properties	Digital caliper	2040095
		Measuring tape	2040722
		Balance	2300418
		Stop-watch	1600224
		Device for the impact test	5210279

END OF REPORT