

Mokveld Valves by

DETAILS OF ORDER / UMF	ANG DER LIEFERUNG	•	Doc	nr.: 34987.423	
customer Besteller Lurgi GmbH	customer order no. and additi Bestell Nr. und zusätzliche Ke	onal marking ennzeichnung	Wer	works no. Werks Nr. 14/34987	
	Tag no.: PV101331				
amount Stückzahl 1			ZD-RQX 16" Class 3	300 with	
requirements Anforderungen ASME B16.34 ASME/FCI 70.2 class VI			face to face dim. in m Einbaulänge in mm 838	m	
max. working pressure max. Betriebsdruck 0/51 bar(at 100°C) 52 bar(at -29°/ 93°C)	max. working temper max. Betriebstemper -29° / 100°C		body material Gehäuse Werkstoff ASTM A 487 CA61	NM class B	
TEST/DRUCKPRÜFUNGEN					
Type of test Art der Druckprüfung	medium Prüfmedium		test pressure Prüfdruck bar	· · · · · · · · · · · · · · · · · · ·	
body Gehäuse	water		78		
seat Sitz	water		57		
seat Sitz	air		6		
TEST RESULTS		· · · · · · · · · · · · · · · · · · ·	ERGEBNIS DER PR	ÜFUNG	
The results of the testing did not give rise to object	ons		Die gestellten Anfo erfüllt	orderungen sin	
remarks Bemerkungen					
				· •:	
customers inspector Beauftragter des Bestellers			quality department Qualitätsstelle		
SH- Kholili	D. Duin	24.07.03	Mokvolci Valva G.A. Departmen Petro Simons	- 3 2	
date 171 24.07 Datum	The super	(-	24-07-1	ు తకి	

Duderstädter Straße 17 D-37412 Herzberg am Harz Telefon (05521)83-0 Telefax (05521)83-203



Abnahmeprüfzeugnis Inspection certificate Certificat de réception

Nr: 13317

No.:

(gem. DIN – EN 10204 – Bescheinigung über Werkstoffprüfung 3.1 B) (acc. to European Standard DIN – EN 10204 – 3.1 B, testing of material) (selon Norme Européenne DIN – EN 10204 – 3.1 B, essai des matériaux)

sesteller		•	Projekt:			
Customer: Client:	Mokveld Valve	B.V.	303614			
Bestell-Nr.		Pleissner Auftrag:	Prüfgegenstand: Elektrostahlguss			
Order No: No de la	vom	109443	Test specimen: Pièce d'essail:	electric stee		
command	e: 03.03.2003		Piece d'essail:			
Qualität:	ASTM A 487	Werkstoff-Nr.: entsprechend	i:	Aus	gabe:	
Material: Matériau:		Material No: CA6NMCI. acc. To Matériau No: B	ASTM-Stand	ards Edit Edit		
Inforderu	ngen:		Zeichen des Liefe			
lequireme xigences:		/IS 00058 Rev. 00	Sign of the manui Marque du produ			
os. Nr. os. No.	Stückzahi	Gegenstand		Schmelze	Probe-Nr.	
os. No. os. No.	Number of pieces Nombre de pièces	Item Objet		Heat No No Coulée	Sample No. No. D'essai	
	· · · · · · · · · · · · · · · · · · ·			1		
		RZD 16" Class 300 m.Fl.	* **			
		ModelInr./pattern no. 2-112729,1-104874E	3			
	•	Stückgewicht piece weight: 810 kg		• .		
				·		
I	1	14 / 1		63302	02LD	
	'			03302	UZLD	
			•			
		·				
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Ergebnis der Prüfung: Results of inspection: Résulat d'examination:

Die gestellten Anforderungen sind It. Anlage erfüllt. The requirements are accomplished as per enclosure. Les resulats ont été trouvés satisfaisants suivant annexe.

37412 Herzberg am Harz 14.05.2003/kā

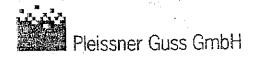
Werkssachverständiger: Surveyor to manufacturer: Expert d'usine:

Cica

Lakemann

Anlage - Enclosure - Annexe 2

Duderstädter Straße 17 D-37412 Herzberg am Harz Telefon (05521)83-0 Telefax (05521)83-203



Abnahmeprüfzeugnis nach DIN – EN 10204 – 3.1 B Inspection certificate acc. To DIN – EN 10204 – 3.1 B Certificat de récepton selon DIN – EN 10204 – 3.1. B Anlage Zum Zeugnis
Enclosure 1 To certificate
Annexe Au certificat

Vom:
Dated: 14.05.2003 13317

Projekt: 303614

	The state of the s	1 30	/3014
Besteller – Customer – Client:		Pleissner Auftrag:	
Mokveld Valves B.V.		109443	
Besichtigung und Abmessungen	teine Beanstandung no objection	Kerbschlagbiegevers Impact test: Essai de résilience:	uch: ASTM A 370 Charpy-V at +20°C
Zugversuch	ASTM A 370	Faltversuch: Bend test: Essai de pliage:	

Mechanische Eigenschaften – Mechanical Properties – Propriétés mécaniques:

Mechanische Eigenschafte Probe-Nr. Streckgrenze Sample No. Yield point No d'essal Limite d'elasticité		Zugfestigkeit Tensile strength Résistance à la Traction	Dehnung Elongation Allongement	Einschnürung Reduction of area Striction	Kerbschlagarbeit Impact Value Valeur de la Résilience	Materialvorschrift Specification of Material Specification des matériaux
	MPa	MPa	18	35	60/45	CA6NMCI.B
Sollwerte: Requirements: Exigences:	520	690 880	10	33		
02LD	652	803	23	70	129 / 102 / 125	
· •		:				
,	·					
ie						

Chemische Analyse in % - Chemical analysis % - Analyse chimique %:

Charge Heat No	С	Si	Mn	P	s	Cr	Ma	Ni	v	Cu	w	
No. Coulée 63302	0.02	0.48	0.64	0.018	0.002	12.67	0.53	4.48	0.050	0,09	0,018	
		<u> </u>					i i				Ì	
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Wärmebehandlung – Heat treatment – Traitement Thermique:

Normalisiert : Normalized: Normalisé:	Temperatur: Temperature: Température:	Madina
Vergütet: Tempered: Revenu:	Härtetemperatur: Hardening temperature: 1050 Température de trempe:	Medium: Medium: Luft/air Milieu:
	Anlasstemperatur: Anealing temperature: 1.680°C 2. 620 Température de recuit:	0°C
Lösungsgeglüht: Solution heat treatment: Traitement thermique de mise en solution:	Lösungsglühtemperatur: Solution treatment temperature: Température de traitement de mise en solution:	Medium: Medium: Milieu:

37412 Herzberg am Harz 14.05.2003/kä

Werkssachverständiger: Surveyor to manufacturer: Expert d'usine:



Duderstädter Straße 17 D-37412 Herzberg am Harz Teiefon (05521)83-0 Telefax (05521)83-203



Abnahmeprüfzeugnis nach DIN – EN 10204 – 3.1 B Inspection certificate acc. To DIN – EN 10204 – 3.1 B Certificat de récepton selon DIN – EN 10204 – 3.1. B Anlage
Enclosure
Annexe

Vom:
Dated:
Date:

Zum Zeugnis
To certificate
Au certificat

14.05.2003

Au certificat

14.05.2003

		Date:	14.03.2003	1,33,7	
(Ergebnis der Prüfung) (Test results)	Projekt:	303614			
(Résultats des tests) Besteller - Customer - Client:	leissner Auftrag	;			
Mokveld Valves B.V.	09443			•	

Wir bescheinigen, daß der/die vorgenannte(n) Abguß/Abgüsse einer Oberflächenrißprüfung mittels Farbeindringverfahren unterzogen wurde(n). Die Bewertung erfolgte nach MSS-SP 93/ANSI B 16.34 Annex D. Unzulässige Anzeigen wurden nicht festgestellt.

Die Anschnitt- und Speisertechnik ist auf eine Qualität entsprechend A3,B3,C3 ausgelegt.

Der/die Abguß/Abgüsse wurden einer visuellen Kontrolle nach MSS-SP 55 unterzogen. Keine Beanstandungen.

We herewith testify that the casting(s) has/have been submitted to a liquid penetrant inspection. The evaluation was made acc. to MSS-SP 93/ANSI B 16.34 Annex D. There have been detected no inadmissible defects.

The riser technique has a quality which conforms to A3,B3,C3.

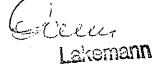
The casting(s) has/have been submitted to a visual inspection acc. to MSS-SP 55. No objection.

HRC-Werte/hardness HRC: 14/1 21,8-21,4-20,8 HRC

37412 Herzberg am Harz

14.05.2003

Werkssachverständiger: Surveyor to manufacturer: Expert d'usine:



Zertifiziertes Qualitätsmanagement-System ISO 9001:2000 SQS Reg.Nr. 10537-05



Herstellerzeichen Manufacturer's stamp Mokveld Vaire



Zulassungen/Approved by:

ED 97/23/EC Annex I - Bureau Veritas ; _ D 3/P TÜV nach AD 2000 W 0 / TÜV nach AD 2000 W 0 / TRD 100 / PED 97/23/EC Annex I - Bureau Veritas | Controlled: DET NORSKE VERITAS - Germanischer Lloyd - Lloyd's Register of Shipping Controlled: Controlled: <<Zustimmungsschreiben des TÜV Südwest liegt vor.>> <<Auf Gegenzeichnung wird verzichtet,>>

ORIGINAL

Abnahmeprüfzeugnis

EN 10 204 3.1.B

Inspection certificate

Kunde Customer	SMEPRO BENELUX	(BV, NL-6662	NG ELS	T (MOKVE	LD VALVE	S BV)
Kd.Bestell Nr. Cust.Order no.	108366 / 10300293		Position Item	32	unsere Ref. Job no./Certij	ficute 11053 H11
Bezeichnung Designation	Ring			Wasan 37	Anzahl Quantity	1
Kd. Material Cust. Material	1,4006	10013.			Charge Nr. Heat no.	84 991
Lieferzustand condition of delivery	unmachined	34987	457		Probe Nr. Test no.	12642
Kd, Zeichn. Nr. Cust. Drawing			\simeq	Section for the last the	Dimension Dimension	FS d 426/358 x 113 mm
Artikel No. Part no	0063129	SEAT RETA	หมาผล	BUSH	Erschmelzur Steelmaking	•
Liefergewicht						
Weight of delivery						
Kd. Spezifikation Cust. Specification	MS 03123 (V) Rev.	01				
Stempelung Marking	11053H11 – 1.4006	<u> – 84991 - 108</u>	366 / 10	300 <u>293 —</u> 0	<u> 1063129 – S</u>	ST 12642 QI – item: 32

Wärmbehandlung / Heat treatment:

980°C/3h/air//710°C/6h/furnace//660°C/6h/air

Chemische Zusammensetzung gem. Hersteller / Chemical composition acc. to manufacturer:

Heat no. 84991 BGH

0.001

12.25

0.08 0.028

Nb 0.006 N 0.0395

Mech. Werkstoffprüfung / Mechanical testing

Zugversuch / tensile test shlaabiaaayareych / Imnact test EN 10002 EN 10045

	Rp 0,2 %	Rp 0,2 %	Rp 1 %	Rm	A 5 d	Z	A _v Joule ISO-V		Probenlage Orientation of specimen
	°C	N/mm²	N/mm²	N/mm²	%	%	+20 °C	°C	
Sollwerte/ Requirements		450		600-800	18	, 35	single 23 average 28		
12642		503		658	20	70	140/111/87		tangential
	-			1				·	

Härteprüfung / Hardness test:

200, 204, 203 HB (HRc < 22)

Visuelle Prüfung / Visual inspection

in Ordnung / accepted

Masskontrolle / dimension

in Ordnung / accepted

Es wird bestätigt, dass die Lieferung den Vereinbarungen bei der Bestellannahme entspricht. We confirm that the test results are in acc. to the order.

Beilagen / Enclosure:

3 heat treatment charts

Hedingen, 25. April 2003/sk

Werksachverständige / Inspector:

Seite 1 von 1

FO 62-09

m. 102 / 40 (#15 / 10 G

SCHMIEDEWERK STO

FUNCTIONAL INSPECTION CERTIFICATE ABNAHMEPRÜFZEUGNIS FUNKTIONSPRÜFUNGEN acc to/nach EN 10204 3.1B



Mokveld Valves by

DETAILS OF ORDER / UN	IFANG DER	LIEFERUNG
-----------------------	-----------	-----------

works no. customer order no. and additional marking

customer Bestell Nr. und zusätzliche Kennzeichnung Werks Nr. Besteller

14/34987 Lurgi GmbH Tag no.: PV101331

serial no. object amount Gegenstand Serien Nr. Stückzahl

Shut-Off valve, type RZD-RQX 16" Class 300 with 34987-001

actuator M575-1VS-4

TEST RESULTS / PRÜFERGEBNISSE:

Input signal open / close

Eingangssignal öffnen und schliessen

Output signal open / close

Ausgangssignal öffnen und schliessen

Hand operation

Handbetätigung

4. Measured opening time: 2,3*sec./closing time: 2,5 sec.

Stellzeit öffnen: 7,3*sec. und schließen: 7,5 sec.

5. Setting of limit switch(es)

Einstellung der Endtaster

6. Verification of actuator marking

Prüfung der Kennzeichnung

acc./ not-acc./ not appl

ohne Beanstandungen/ nieht zutreffend

Doc nr.: 34987.421

ace./-not-acc./ not appl

ohne-Beanstandungen/ nicht zutreffend

-acc./not-ace./not appl

ohne Beanstandungen/ nicht zutreffend

acc./ not acc./ not appl

ohne Beanstandungen/ nicht zutreffend

acc./ not-acc./ not-appl

ohne Beanstandungen/ nicht-zutreffend

acc./ not acc./-not-appl-

ohne Beanstandungen/ nicht-zutreffend

We herewith certify that the above mentioned results of the functional test are in compliance with the requirements.

Wir bescheinigen hiermit daß obengenannte Ergebnisse der Funktionsprüfung übereinstimmen mit den Anforderungen aus die Prozedur.

* Remark: Stroking time open to Cv 1157<1 sec. Stellzeit öffnen bis Cv 115721 sec.

customers inspector Beauftragter des Bestellers quality department Qualitätsstelle

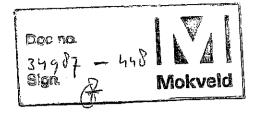
date Datum

(Doc.: form421ED Rev.:03 Date:07.03.00)



Braunschweig und Berlin





(1) EC-TYPE-EXAMINATION CERTIFICATE

(Translation)

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:



PTB 01 ATEX 1016

(4) Equipment:

Terminal box, type 8146/1...-.. and type 8146/2...-..

(5) Manufacturer:

R. STAHL Schaltgeräte GmbH

(6) Address:

Am Bahnhof 30, 74638 Waldenburg (Württ.), Germany

- (7) This equipment and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 01-11019.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014:1997 + A1 + A2

EN 50018:1994

EN 50019:1994

EN 50020:1994

EN 50028:1987

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.
- (12) The marking of the equipment shall include the following:

(Ex) II 2 G EEx edm ia/ib [ia] IIC/IIB/IIA T6, T5 or T4

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 13, 2001

Dr.-Ing. U. Klausmeyer Regierungsdirektor

By or<u>de</u>r

sheet 1/3



Braunschweig und Berlin

(13) SCHEDULE

(14) EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

(15) Description of equipment

The terminal box of types 8146/1...-.. and 8146/2...-.. is a polyester-resin housing designed to type of protection increased safety "e". It is used to house terminals for intrinsically safe and non-intrinsically safe circuits and may optionally be provided with disconnect terminals and fuses. The box area intended for intrinsically safe circuits will be marked by a special colour (e.g. light-blue). Connection will be made by means of explosion-proof cable entries.

The enclosure as well as any installed and attached components have been tested and certified under a separate test certificate.

Technical data

Rated voltage*	up to	1100	٧
Rated current*		500	
Rated cross section*	max.	300	mm²

^{*)} depending on type of terminal and explosion-proof components used

Ambient temperature

depending on temperature class and sealing used

-20°C to +40°C, T6 -40°C to +40°C, T6 -20°C to +55°C, T5 -40°C to +55°C, T5

The ratings specified are maximum values, actual values will be subject to the electrical equipment used from case to case. Depending on the system conditions, the mode of operation, the utilisation category, etc., the manufacturer will define the definitive ratings which will be within the range of these limiting values and will comply with the relevant standards.

The composition of the protection symbol will be based on the types of protection of the components actually used.

(16) Test report PTB Ex 01-11019

sheet 2/3



Braunschweig und Berlin SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

(17) Special conditions for safe use

None;

Notes for installation and use

For the maximum number of conductors, which for each size of enclosure is determined by the cross section and the admissible continuous current, reference is made to the specification sheets.

Equipment of the type of protection Intrinsic Safety "i" shall be installed in such a way that the clearances and creepage distances between intrinsically safe and non-intrinsically safe circuits as set forth in 60079-14 are duly accounted for.

If the clearance requirements for the connectors as specified in EN 50020 cannot be safeguarded with the system installation and layout, wiring that meets the quality criteria increased Safety "e" shall be used, or the wiring shall be of the fail-safe type.

When using more than one intrinsically safe circuit, the rules and regulations for interconnection shall duly be observed.

This EC type-examination certificate as well as any future supplements thereto shall at the same time be regarded as supplements to Certificate of Conformity PTB No. Ex-90.C.3145.

(18) Essential health and safety requirements

The tests and the favourable results these have produced reveal that the terminal box of types 8146/1...-.. and 8146/2...-.. meets the requirements of directive 94/9/EC as well as those of the standards quoted on the cover sheet.

Zertifizierungsstelle Explosionsschutz

Braunschweig, June 13, 2001

Dr.-Ing. U. Klausmeyer Regierungsdirektor

Bv orde

sheet 3/3



Braunschweig und Berlin

1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

(Translation)

Equipment:

Terminal box, type 8146/1...-.. and type 8146/2...-..

Marking:

II 2 G EEx edm ia/ib [ia] IIC/IIB/IIA T6, T5 or T4

Manufacturer: R. STAHL Schaltgeräte GmbH

Address:

Am Bahnhof 30

D-74638 Waldenburg (Württ.), Germany

Description of supplements and modifications

The terminal box, type 8146/1...-.., may also be fitted with bolt-type screw terminals connected with busbars.

Technical data

Rated voltageup to 750 V
Rated currentmax. 315 A for T6

400 A for T5

Rated short-circuit current.....max.

70 kA

Rated cross section

max.

185 mm², connection with cable lug

Notes for manufacture and operation

The line-side fuse or protective device shall be selected so as to provide for safe interruption of the max. rated current, the max. rated short-circuit current, and the max. rated short-time current (1 s). The supplement for the EC type-examination certificate shall at the same time be regarded as a supplement for Certificate of Conformity PTB No. Ex-94.C.3147.

Test report:

By order:

PTB Ex 01-11145

Zertifizierungsstelle Explosionsschutz

Dr. Ing. U. Klausmeye Regierungsdirektor Braunschweig, January 30, 2002

.

Sheet 1/1

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1031

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A		cross section / mm ²							
	1,5	2,5	4						
3					The North				
6			li phridrospear est alla spearent libration		2)				
10	42								
16	14	28	108						
20	6	16	31		4)				
25	经期间排	7	17		٠,				
35	100	142000	5						
50	强制体组	ALC: N	10000		a dan k				
	14	14	14	是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就 第一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就是一个人,我们就	and Janes				
	max. nun the cross terminals	nber of ter section res	minals de sp. max. pe	epending of the above mentioned enclosure size and ermissible conductor cross section of the built-in					

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1041

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sec	ion / mr	n ²		
	1,5	2,5	4	6	10	16		
3			erviaria Residir				vers er sammel by Avance of the Avident	
6						Maring.		
10	44	hiidi		ifetail.				
16	15	29	114	15, 04 ligh 126 15 og 1961 ist 19				2)
20	6	17	33	1514 - 7415 16 241 - 1005 1516				
25	李德士	8	18	36				g Garani
35		Y ALFREM	5	14	35			
50			物均生物	2	11	29		
63					3	13		4)
80					19.44 K.0	5		
100		1. 化油油		647E 89		Parti Malain	SALVA STATES	- (3)
	28	28	28	10	10	8		
							d enclosure size and on of the built-in	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1241

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sec	tion / mr	n ²			
	1,5	2,5	4	6	10	16	25	35	
3									
6								Mary State	
10	45		4,-9.7, Let					Kijini ji	
16	15	29	116		n et medellin den Eren Venne 116			1-14/4/21/10 - 1/20 (6 1784 (3-10) - 1/20 (6)	2)
20	6	17	33					Idisel	life Light H
25	第二种规模	8	19	36					
35			5	14	35				
50	生物特别	age of the sa	的基础	2	11	29			
63	非正理 。		西斯坦斯		3	13	48		
80			经净证	COLUMN SA	12.46.546	5	15	54	
100	强制制制	Page 3	经事项的	超新型網頭		(A)	6	14	4)
125		77.71	111111111	1.00		Siberial C		5	,
150	24.5		200		Late at the			Lachta.	i (33) i d
	56	56	33	20	10	8	6	5	
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1242

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sec	tion / mr	n ²				
	1,5	2,5	4	6	10	16	25	35		
3			5 Cara				K. Land			
6				aluzy vagogial veda: Televidi						
10	55			esta, o Mila Etaphiculti						
16	19	37	143		rii i i i				2)	
20	8	21	41	Association of the National of the State of the						
25	是可能够	10	23	45		Park	Ng Lyyen			
35	A. The state of		7	17	44					
50	400			2	14	36				
63			A COL		4	17	60			
80	E-chile dia				ar delete	6	19	67		
100					NAME OF		8	17	4)	
125	(1. \$)(4.14)	14.984	跨海州沿	2000年		为数本。如		7		
160								(Estate)	(3)	
	56	56	33	20	10	8	6	5		
	max. nun the cross terminals	nax. number of terminals depending of the above mentioned enclosure size and ne cross section resp. max. permissible conductor cross section of the built-in erminals								

<u>Notes</u>

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1051

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sect	tion / mr	n^2		
	1,5	2,5	4	6	10	16	1	
3								
6								
10	50		Action	viiik				
16	17	33	129		ang dalah dalah dalah Distribution dalah d			2)
20	7	19	37					
25		9	21	41				
35			6	16	39			
50	李俊宇动		in March	2	13	33		
63	建设计划	LA SE		ECS. 2#	4	15		4)
80					SAME NO	5		,
100	斯特克斯	i i salam	物學多病			市 海疫切除	4.76年46年4月8日以	14:3)4
•	46	46	46	17	17	13		
							d enclosure size and on of the built-in	

<u>Notes</u>

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
	•		total	= 98 % < 100 %
			total	- 30 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1052

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A		cross section / mm²							
	1,5	2,5	4	6	10	16			
3			And Application	us trouvers a rec Beginn for really					
6			持以其具			lie Kokie, igan	ki jaga kan eng		
10	61								
16	21	41	159	Type dag general 197 ag nostrolen av 198 ag nostrolen av 198				2)	
20	8	24	46		. Allandi			Sala	
25		11	26	50				u salvinesii	
35			7	19	49		intermetalist policinas del p Introducio elles Vienes del		
50	指动与排列	经营业的	分量到据	2	16	40			
63			最性數量		5	18		4)	
80				4644	A A A B O A A	7		,	
100	经排出物		排导性的	fr in all had				3)	
	46	46	46	17	17	13			
	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1061

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A	}		cr	oss sect	tion / mn	n²				
	1,5	2,5	4	6	10	16	25	35		
3							ary gy			
6	dig (Albert									
10	53									
16	18	35	137						2)	
20	7	20	39							
25	建设设施	9	22	43						
35	机械制品	海溢水线	6	17	42	armen oceanii k Maraetaeli ja 144	A De Stibles			
50	计数 流生	电光电弧性	法共為性	2	13	35				
63				Sitsish	4	16	57		hicaratan Samuritan	
80	eran i	ari di ind	April 18	les American Artis	ner vari	6	18	64		
100		1 1 1 1	经规则		MANN.	學學問題	7	17	4)	
125		7 4 3 3 4						6		
160	Control of	publikes.	原物污染	August ha		数据证据	中心操作物	310 /640	(3)法	
	92	92	66	34	24	19	11	9		
	max. nur	max, number of terminals depending of the above mentioned enclosure size and								
1	the cross	the cross section resp. max. permissible conductor cross section of the built-in								
	terminals									

Notes

- Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(general)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
				20.0/ + 400.0/
			totai	± 98 % < 100 %
			total	= 98 % < 100 %

Ķ,

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1062

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A	1		cr	oss sect	ion / mn	n^2			·
	1,5	2,5	4	6	10	16	25	35	
3			u to	y White					
6								richte für Geberg. Artik Farink ist in	
10	64								
16	22	42	166						2)
20	9	25	48						
25		11	27	52			inguálas, s John Kunda		a Martin Trong I Pilota y nas
35	动流组物		8	20	51				
50				3	16	42			11464
63					5	19	69		
80	48.50.44.50		推销设置	brims in s	阿尔纳	7	21	78	
100	性质的性			医肾髓的	海水油桶	学儿学科	9	20	4)
125	Lie Lie	a a di ta	4	a wallakin	i i i i ka	1000	制成均衡	8	
160	网络	5种产约4	artista y	8. 多种	red come	建砂林间		3.3.3.666	.r₁:3)r
	92	92	66	34	24	19	11	9	
	max. nun	nber of ter	minals de	epending o ermissible	f the above conductor (e mentione cross secti	d enclosure on of the b	e size and uilt-in	

- Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(general)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

'to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1071 and Type 8146/1S71

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sect	ion / mn	n ²			
	1,5	2,5	4	6	10	16	25	35	
3		404			Part Part I	History)			
6									
10	55				16 5 5 5 6,				
16	19	36	142					British 54	2)
20	7	21	41						
25	学业数型	10	23	45	Pakalandin di B			Miletanerinea Herrand Merzu	
35	以中国国	er finisa	6	17	44				
50			排音拍击	2	14	36		ili teknologi Politika	1710) (1621) 31 - 1814 - 1
63	M. A. D				4	17	60		
80	推送問題	Millipa		加速的時	Kara Biri	6	18	67	1
100	CHARLE			SAMPLE TO SET			8	17	4)
125		131639						7	
160	(2) All officers	2.0 银矿	侧侧身的	S. Carrier		t is it is		化型对性	3)%
	138	138	104	51	38	30	22	9	
	max. nun the cross terminals	nber of ter section res	minals de sp. max. pe	epending o	the above conductor of	mentione cross section	d enclosure on of the b	e size and uilt-in	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(90110101)	2,5	16	10 (of 30)	= 33 %
	16 [.]	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1072 and Type 8146/1S72

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sect	ion / m	ım²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3			MARKET STATE								
6											
10	66										
16	22	44	170								
20	9	25	49	61/2009				in Eu			
25		12	28	54				1963, GM 1961 Mariada 187			2)
35		har tillik	8	21	52						
50	4 E 1 (5) 10) 11	THEFT		3	17	43					
63				de anila	5	20	71				
80	學學到	神性病		River 1	Assessment of the second	7	22	80		# Gira	
100	時間間		Warth T	が影響			9	21			
125		经后属		da a da	75.4%		有要 毛症	8	21		
160		地級原聯	7/17/11/6	李峥 忆	(化)	BUTTON		們想解	7	19	
200										6	4)
225		uaca n	No.	动并真。	, No. 23				NEC 13	2	
250		神學家	引导协议			College State	Toyking		物的混淆	ENGINES	(3)
	138	138	104	51	38	30	22	9	6	6	
	max. no the crost termina	s section	f termina n resp. m	als deper ax. perm	nding of 1 issible co	he above inductor o	mention cross sec	ed enclo	sure size ne built-in	and	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(9,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			_	
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1073 and Type 8146/1S73

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sect	ion / m	nm²			-	
	1,5	2,5	4	6	10	16	25	35	50	70	
3							6.86.8	Na Gree	tan b		this i
6											
10	71				Popular, LGA Security		MUSI			1.34	
16	24	47	184	E. Chique S	filologija.			#Um			
20	10	27	53								
25	M. A. M.	13	30	58		Mari					2)
35			8	22	56			la kun			
50	特制 化 基	逐步期	的数学	3	18	47					
63					6	21	77	H. W. L.			
80		推進推	经单的特	計劃學議	建	8	24	86			
100							10	22			
125	動作連載		700 11 462					9	23		
160		14411111111		N P 10 S	电影的		数件机能	化制品	8	20	
200										7	4)
225	5044 10°51.		以 特别报	6-69-2	848	e Chie	经经济基		z igrafia na	2	
250	定類制度			5 William	福學報	Lalingue.			1,211.5		據3)進
	138	138	104	51	38	30	22	9	6	6	
	max. number of terminals depending of the above mentioned enclosure size and										
	the cros termina		resp. m	ax. perm	issible co	nductor o	cross sec	tion of th	e built-in	<u>.</u>	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(0)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %
				4

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1075 and Type 8146/1S75

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sec	tion / m	ım²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3	n Spill Shilis	arayana Kalibut I						ri Grad			
6				ling Staid				Kildini			Medi
10	82							rei III. Salari di Presidenti			
16	28	54	212								
20	11	32	61	da Kalend				Hukhiji.	Jaks Gris		
25		15	35	67							
35			10	26	65		i yatar				2)
50	心场也	电影激		3	21	54			Alian in		
63		開始課		20 A	7	25	89				Kiti
80			Z-13, 4-60	2.3.10	10 C. 10	9	28	99			
100	排作制度	16 3 7		建设的	1611年	常品等	12	26	FireNaz Lā		
125			计划逐渐		10	1111		10	26		
160	建 电影	Marint.	A STAN	1.40-66	表音序	非型值 数	Shan, A	建	9	23	
200	物源域	學性質	排泄 6頭	100	5.4	V Privile		113 124	7077	8	4)
225	想為能				134.16				Sale 1914	3	
250		建筑形	Step Artis	交通条件	建筑管	東西機能		多电路	制制制	9 al 16 9	3)
	138	138	104	51	38	30	22	9	6	6	
	max. nu the cros terminal	s section	termina resp. ma	is deper ax. permi	nding of t ssible co	he above nductor c	mention	ed enclo tion of th	sure size e built-in	and	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1081

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A			cr	oss sect	ion / mn	n ²				
	1,5	2,5	4	6	10	16	25	35		
3										
6					maan.					
10	74									
16	25	49	192				Abdulak	deline e	2)	
20	10	29	55					finant		
25		13	31	61			July 1982 IP Tre P Die Rose Ville Collin			
35	2. 100 100 100 100 100 100 100 100 100 10	医基础剂	9	23	59			5/4/4/4		
50			神學研究	3	19	49		garana y		
63					6	22	80		Crebberd/Cree Naccostranii	
80			数の関係する	为 。2013	医多型型	8	25	90		
100		# 15 F				Participant	10	23	4)	
125			Library and	L maritime and the	STATE OF THE		医海底器	9		
160	030-8404-0	建层层层	Territoria	推动。对商		(thirtie	25-11-11-11	建设的基础	i3)	
	312	312	208	117	76	60	50	20		
	max. nun the cross terminals	max. number of terminals depending of the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals								

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(5)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	≈ 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1082

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sec	tion / m	nm²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3				#USA					Lagrania (1967) Lagrania (1967)		
6		Haliz, as	attivity.								
10	86			ichsbiddig Armier Ang		he Selleta tair Referensia			etteraliser Bud fälgelin		
16	29	57	221		-10-10-10-10-10-10-10-10-10-10-10-10-10-						
20	12	33	64							alaya	4:1:4
25	温料料 3	15	36	70				排門盟院			
35	SHEE	建建设	10	27	68						2)
50	學情報	Mir Josephia	原生的 。提	4	22	56		lindelig		i, that	
63				第 图 6 3	7	26	93			aledik saledik Side istologia	0 / 249 W 45 145 W
80	山城市	ALC: AL	1000基基	i indi	g man	10	29	104			
100		10.14		10	性性的	HISTORY.	12	27	appoly	Market P	
125			11/16		19/3/11	H affe	医光电路	11	28		
160		dia Se	机制制管	CHAILS.	\$1.0		il datas	使制度	9	24	
200		Halifallula	rivel (200	19 1981.24		e la la vie	N CHINE	10 内层		8	4)
225	海瓜酸		t No e		3.5			ni heli		3]
250	5			高速開始	电微数	Silver (C.)			2776.4	S	43)
	312	312	208	117	76	60	50	20	14	14	
	max. ni	ımber of s section	termina	is deper	nding of t	he above	mention cross sec	ed enclo	sure size		

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1083

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sect	ion / m	ım²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3							i i i	gagaris)			
6						NETHON		int di	ki silang		
10	91										
16	31	60	235				tulij.			机压挡槽	
20	13	35	68								
25		16	38	74				ist leefile			
35	3. 引起的	後越来	11	29	72						2)
50	建造 原	40.5	的說明	4	23	60					
63	建设建筑		多為服務		8	28	99				
80	湖南东	44 年期	\$ 25.4	神机污痕	阿斯姆	10	31	111		William)	
100	地位的			ELEC		TEPRE	13	29			
125	A.M. Ex	84.0					建建设	11	29		
160	建建设		主動療法	湖岛湖南	t all think	独东地	多种树脂	植物的	10	26	
200					Jan.	10 To 10	t was			9	4)
225	基本。	July 4	注意证明			10 10 10				3	
250	医肾髓	特制度	ar 150 P	器制的	Q.A. 66	内脏物	知识的問	排射器	精制量		(3)
	312	312	208	117	76	60	50	20	14	14	
	max. no	umber of s section	termina	i ls deper	nding of t	he above nductor o	mention cross sec	ed enclo	sure size le built-in	and	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(0	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1084

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sect	ion / m	ım²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3		3,4134		i Pari		alling.					
6						(M) (112) (32)		firit:			
10	97	a (bdi bili				tir järlirinist Palji läitäti araanisti				en vierthiub Electronica	
16	33_	64	251								
20	14	37	73								
25		18	41	79		arestantikaitada Talifataitan esa					
35	沙泽市州		12	31	77						-2)
50		排電量1	特別數值	4	25	64		44.74			
63					8	29	105		degral al al Nagarka	transferi Historyken	
80	自傳播時期	操作中的	的增加	Jan 3	學的技術	11	33	118			A. Livin
100	工作出版	74.5	1870	119		加工的	14	31			
125		经基础	ont the state	6466	BAAL		H. W. P. B	12	31	Teler Settle Beriteri	
160	电影图	香港州	11 15 15 15					強制的	11	27	
200				34.0	M. Mark					10	4)
225		排尿病毒			的最多能				100	3	
250	here's	和尼西	的傾落	建開放 等	*	, William		操作的概	A Dr. S	Man 19	3)
	312	312	208	117	76	60	50	20	14	14	
	max. no the cros	nax. number of terminals depending of the above mentioned enclosure size and ne cross section resp. max. permissible conductor cross section of the built-in erminals									

- Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

cross section / mm²	current / A	number of conductors	utilization
2,5	16	10 (of 30)	= 33 %
16	50	12 (of 48)	= 25 %
25	63	36 (of 90)	= 40 %
		total	= 98 % < 100 %
	2,5 16	2,5 16 16 50	2,5 16 10 (of 30) 16 50 12 (of 48) 25 63 36 (of 90)

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1085

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sect	ion / m	ım²				
ļ	1,5	2,5	4	6	10	16	25	35	50	70	
3									Lauria.		
6											
10	102	galla fati									
16	35	68	265				ned 4				2)
20	14	40	77					-tdl:, -237	refine Sin	74623	
25		19	43	84	Parking a 18 Sept. Sancian S	Signification (1996) Distriction (1996)		BULLEY			
35		使出纳	12	33	81						
50	4.特特里			4	26	67					NG 4
63					9	31	111		A ARMEDI, GRAD AT AMERICAN	h de Radorio Enan Se en	
80		集沙鄉	a Remitte	Daniel		12	35	124	10,125-112	Medick	
100	4.6.15.13		清洁的		11 76 ETA	應兩額	15	33			4)
125	145.613					Also Un	a tar i	. 13	33		
160	a that the	傳動機構	的数据的	多數集员	grafijits.	结束数	is time th	may di	11	29	
200			112 (6.80)	Topolis				Heliote.	700-170-01-140	10	
225		d Gal		Leva	3.通路(流為臘	in filleria	最高期		4	Ì
250		P. British	型主流	执行外 型	37.66.09.0	行作品	a falls #	和特别	19 16 184	h or d	再3)對
	312	312	208	117	76	60	50	20	14	14	
	max. no the crost termina	ss section	f termina n resp. m	ils deper ax. perm	nding of t issible co	he above nductor (mention cross sec	ed enclo tion of th	sure size ne built-in	and	

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(8	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			_	
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1086

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A				cro	ss sec	tion / m	nm²				
	1,5	2,5	4	6	10	16	25	35	50	70	
3	BUNG	evillenii sul.	SO EK							properties Tuescale Militar	
6			HAD V							lates:	
10	114										
16	39	76	294				AD TH	8401			
20	16	44	85								
25		21	48	93							
35			14	36	90						2)
50	hung.		和能力的	5	29	75		ir Guil			
63	研究即		斯拉拉巴	建学学 的	10	35	123			Bishirka Bishirka	
80				1 1 1 1 1 1		13	38	138			
100	神经 建设	提用網	1000	机汽车用		No. of the	16	36			
125			附级		HAE S			14	37		
160	胡桃藻科	al Ikén	P. Balance	heas	AND THE	1041	N Oak	el ella	12	32	
200	沙群岛位	illi yes	174	排物可料	all against					11	4)
225						7				4	·!
250	B Disk		化正序度	ign tell	H DG.				15.30	e de la company	献3)崇
	312	312	208	117	76	60	50	20	14	14	
		imber of s section	termina	i ls deper	nding of t	he above	mention cross sec	ed enclo		and	

<u>Notes</u>

- Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1091

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current / A		-	cr	oss sec	ion / mn	n ²		·		
	1,5	2,5	4	6	10	16	25	35		
3								a e come		
6							- Prof. 18		nj.4444	
10	86								Mari	
16	29	57	222						2)	
20	12	33	64				The College	115 1 1 W	科学项	
25		16	36	70						
35	犯物的被引	国际基础	10	27	68					
50	計劃相關	南江州西		4	22	56			r Comania	
63				建二国总	7	26	93		langa prajekt Ngazuwa Kal	
80		杂选系数	kath di	Nasi Panja	张校拉 带	10	29	104		
100 、	海肠沟顶	小 计 44篇		POTS FIRE	能性收拾	的學習的是	12	27	4)	
125		电影电路		erat k	4.连进。2		過去性子	11		
160		推構結構	a energy		9156		经线数 线	ac said	1.3)	
	676	676	468	273	190	128	106	60		
		ax. number of terminals depending of the above mentioned enclosure size and e cross section resp. max. permissible conductor cross section of the built-in rminals								

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1092

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current				.,,,,	-	ı	cross	sect	ion /	mm²							
Α	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
3		1456						(#7.1859*) 165 E.H.	eregrouser Street System		grafika na Zelosta b						
6							Awi	. iyy, 164								INST	
10	97																144
16	33	64	250		sireta 149. Ni ostania												
20	13	37	72						5347			W.M.					
25	李位为	18	41	79													
35		加强官	12	31	_77												
50		Phillips	最多 意	4	25	63							Augeldogi Literatus				
63		物化		HATE	8	29	105										2)
80		制模式	Na desp	ille-sta	到达许	11	33	117				, Julije					
100				Mark		透傳導	14	31									
125		医第二						12	31								
160		排戶標		w W				L die	10	27	AllFid		Hilita		Filh	li - d	
200		8.19	理點質		He to			Maria da M	100	10	24	74			ent		
225	7,12,13		Tales.		5 10 5					3	13	29					
250	Kill B	SUGNE	JI 98 4	ushku	i cassili		# 161			Baba	7	17	36	115401			
315	學是學								n d History	111111		3	10	22	E-11.15		
400				304					State of	115.12				4	15	44	4)
500	A AP LIV					\$ 10 A	\$ 690				最高	His All		10/45	2	8	ACCUME.
						予表認	7000			1000				SILE CONTRACTOR	Her.	100000	.3)
	676	676	468	273	190	128	106	60	29	29	8	8	6	6	6	6	
ĺ	max.	numb	er of t	ermina	is dep	ending	of the	above	menti	oned e	nclosu	re size	and th	ie cros	s secti	on	
1	resp.	max.	permiss	sible co	nducto	r cross	section	on of th	e built-	in term	ninals						

- 1) Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(90,,0,0,,	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1093

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current			•			-	cross	sect	ion /	mm²							
Α	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
3			F7 LDV (0401) - 4 059 - 0764 - 10 0 0 0	Section 1			745U.5A										
6		diain-tegli ake da ayu												o Bardanii Bardanii			
10	102				îti								Fuld				N at 1
16	35	68	263						李锋的								
20	14	39	76										Keu				ß.
25	8.24	18	43	83													
35			12	32	81							igrafia Bulkasi					
50			02.50	4	26	67											
63	作化 大	[前/南约]	uda gir		9	31	110	4.75									2) .
80						12	34	123									
100	11.14		虚抗		道图構		15	32				Nige I					
125		HAMILY		FIG	沙沙道	香制作	湯學	13	33								lok
160					电视 内	II II I		A sec	11	29							
200	装护 线	New P	173337		海南湖	编制法	12.00	财务	是的是	10	25	78					
225		100000	机等模型	建學	は原物	表情。	特別	Post	1.01	4	14	30					
250									5.18	Billia	_ 7	18	38_				
315	Paris						可增	福安	10 E		dr. A.	4	11	23	£ West		
400				性質	制量制				計划量		10 150			5	16	46	4)
500	Su Paul			a Landel		1.66		1524	3.标道						2	9	3 340 4344
					学型 像		(1)		With B	ELECT.	的數			1012			(3)
	676	676	468	273	190	128	106	60	29	29	8	8	6	6	6	6	
	max. resp.	numb	er of to	ermina	als der	pending	g of the	e above	e menti ne built	oned e in tern	enciosu ninals	ıre size	and the	ne cros	s sect	ion	

- Each incoming conductor and each internal connection wire is counted as a conductor. Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(general)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

to EC TYPE-EXAMINATION CERTIFICATE PTB 01 ATEX 1016

Fitting of terminal boxes Type 8146/1095

Max. number of conductors 1) depending on cross section and the permissible continuous current:

current							cross	sect	ion /	mm²							
Α	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
3	0.746	Trans.		ji ili Taka Kalenta k				grade i mariji Mulit kazari	tine prome Skiroskik								
6														Mag			
10	113																
16	38	75	291	HUNITERN Paration									Elgiple(Self) DifferenceSelf				
20	16	44	84						NEG.							61.37	
25	测验	20	48	92													
35			14	36	89											i Gartara North	
50		W.	a wa	5	29	74									lhi	Duji	2)
63					10	34	122										
80	a files			15, 15,010	wa Ka	13	38	137									
100		ş10(m)	1454 1757 1757	异胸	知 题 结构		16	36								100	
125						T de Cri		14	36		ARA						
160			L64		90.00	油流量			12	32							
200	1911	7 6 10		No.	事影	學才有	机制		物理	11	28	86					
225	The state of				建計					4_	16	33					
250	452			植物	artholic.	satatik	對歐洲	wea	Gid.	e kint	8	20	43	Historija 1			
315	111	精學的	制度		100	MAN A		100			1617.713	4	12	25			HE CO
400			2.0			A Transaction		1091 1 2 4 5 4 5 4 5	147.73	10				5	17	51	4)
500	希特	17/5-15	40000		4,44,			# Park	indi.		2140	No. 14	PARTIE	ic sales	2_	10	W02498
		2 2 125						對對於		No.	PANT N	製物理	3,440	(2) (E)	Theren	197000	∖3)≀
	676	676	468	273	190	128	106	60	29	29	8	8	6	6	6	6	
	max.	numb	er of t	ermina	als de	pending	of the	above	e menti	oned e	enclosu cipals	re size	and th	ne cros	s secti	on	
	resp.	max.	permis	sidie co	onaucto	or cross	secue	וז נט חכ	ie buiir	-ııı tem	midis						

- Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.
- 2) additional conductors optional
- 3) to be specified by the manufacturer (including temperature rise test)
- 4) When applying the values of this table simultaneous factors or load factors to IEC 439 may be considered. Mixed equipment with circuits of different cross sections and currents is possible if the various values of the table are applied proportionally:

Example: (general)	cross section / mm²	current / A	number of conductors	utilization
(general)	2,5	16	10 (of 30)	= 33 %
	16	50	12 (of 48)	= 25 %
	25	63	36 (of 90)	= 40 %
			total	= 98 % < 100 %

EG-Konformitätserklärung

EC-Declaration Of Conformity

CE-Déclaration De Conformité



PTB 01 ATEX 1016

Wir (we; nous)

R. STAHL Schaltgeräte GmbH, Am Bahnhof 30, D-74638 Waldenburg

erklären in alleiniger Verantwortung, daß das Produkt

hereby declare in our sole responsibility, that the product

déclarons de notre seule responsabilité, que le produit

Klemmenkasten Typ 8146/1 und 8146/2 Terminal box Type 8146/1 and 8146/2

Boîtier de raccordement Type 8146/1 et 8146/2

auf das sich diese Erklärung bezieht, mit der/den folgenden Norm(en) oder normativen Dokumenten übereinstimmt

which is the subject of this declaration, is in conformity with the following standard(s) or normative documents

auquel cette déclaration se rapporte, est conforme aux norme (s) ou aux documents normatifs suivants

	Titel und/oder Nr. sowie Ausgabedatum der Norm title and/or No. and date of issue of the standard titre et/ou No. ainsi que date d'émission des normes

94/9 EG: Geräte und Schutzsysteme zur bestimmungsgemäßen Verwendung in explosionsgefährdeten Bereichen

94/9 EC: Equipment and protective systems intended for use in potentially

explosive atmospheres

94/9 CE: Appareils et systèmes de protection destinés á êtré utilisés en

atmosphéres explosibles

EN 50014:1997

EN 50018:1994

EN 50019:1994

EN 50020:1994

EN 50028:1987

89/336 EWG:

Elektromagnetische Verträglichkeit

89/336 EEC:

Electromagnetic compatibility

89/336 CEE:

Compatibilité électromagnétique

EN 60947-1:1999

Waldenburg, 03.09.2001

Ort und Datum Place and date

lieu et date

efter Marketing und Entwicklung Head of Marketing and Development Directeur Marketing et Développment

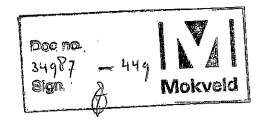
Leiter Qualitäts/management Head of quality management dept.

Chef du dept.assurance de qualité



Braunschweig und Berlin





EC-TYPE-EXAMINATION CERTIFICATE (1)

(Translation)

- Equipment and Protective Systems Intended for Use in (2)Potentially Explosive Atmospheres - Directive 94/9/EC
- EC-type-examination Certificate Number: (3)



PTB 00 ATEX 2049 X

- (4)Equipment:
- SN-sensors, types NJ... and SJ...
- (5)Manufacturer:
- Pepperl + Fuchs GmbH

(6)Address:

- D-68307 Mannheim
- This equipment and any acceptable variation thereto are specified in the schedule to this certificate and (7)the documents therein referred to.
- The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the (8) Council Directive 94/9/EC of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 00-29268.

Compliance with the Essential Health and Safety Requirements has been assured by compliance with: (9)

EN 50014:1997

EN 50020:1994

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the schedule to this certificate.
- (11) This EC-type-examination Certificate relates only to the design and construction of the specified equipment in accordance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment.
- (12) The marking of the equipment shall include the following:

II 2 G EEx ia IIC T6

Zertifizierungsstelle Explosionsschut

By order;

Braunschweig, October 05, 2000

Dr.-Ing. U. Johannsmeyer

Regierungsdirektor

sheet 1/4



Braunschweig und Berlin

(13)

SCHEDULE

EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2049 X (14)

(15) Description of equipment

The SN-sensors, types NJ... and SJ... are used to convert displacements into electrical signals.

The SN-sensors, types NJ... and SJ... may be operated with intrinsically safe circuits certified for categories and explosion groups [EEx ia] IIC or IIB resp. [EEx ib] IIC or IIB. The category as well as the explosion group of the SN-sensors depends on the connected supplying intrinsically safe

Electrical data

Evaluation and

supply circuit......type of protection Intrinsic Safety EEx ia IIC/IIB resp. EEx ib IIC/IIB

only for connection to certified intrinsically safe circuits maximum values:

type 1	type 2	type 3	type 4
U _i = 16 V	U _i = 16 V	U _i = 16 V	U _i = 16 V
l _i = 25 mA	$l_i = 25 \text{ mA}$	l _i = 52 mA	$I_i = 76 \text{ mA}$
$P_i = 34 \text{ mW}$	$P_i = 64 \text{ mW}$	$P_i = 169 \text{ mW}$	$P_1 = 242 \text{ mW}$

The assignment of the type of the connected circuit to the maximum permissible ambient temperature and the temperature class as well as the effective internal reactances for the individual types of SN-sensors is shown in the following table:

sheet 2/4



Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2049 X

		Ī	1	type 1			type 2			type 3		1	ype 4	
<u>types</u>	Ci	Li	maximum permissible ambient temperature in °C for application in temperature class											
	[nF]	[µH]	Т6	T5	T4- T1	Т6	T5	T4- T1	Т6	T5	T4- T1	Т6	T5	T4- T1
NJ 2-11-SN	50	150	73	88	100	66	81	100	45	60	89	30	45	74
NJ 2-11-SN-G	50	150	76	91	100	73	88	100	62	77	81	54	63	63
NJ 2-12GK-SN	50	150	73	88	100	69	84	100	51	66	80	39	54	61
NJ 3-18GK-S1N	70	200	73	88	100	69	84	100	51	66	80	39	54	61
NJ 4-12GK-SN	70	150	73	88	100	69	84	100	51	66	80_	39	54	61
NJ 5-18GK-SN	120	200	73_	88	100	69	84	100	51	66	80	39_	54	61
NJ 5-30GK-S1N	100	200	73	88	100	69	84	100	51	66	80	39	54	61
J 6-22-SN	110	150	73	88	100	69	84	100	51	66	80	39	54	61
NJ 6-22-SN-G	110	150	76	91	100	73	88	100	62	77	81	54	63	63
NJ 6S1+U.+N	180	150	73	88	100	69	84	100	51	66	80	39	54	61
NJ 8-18GK-SN	120	200	73	88	100	69	84	100	51	66	80	39	54	61
NJ 10-30GK-SN	120	150	73	88	100	69	84	100	51	66	80	39	54	61
NJ 15-30GK-SN	. 120	180	73	88	100	69	84	100	51	66	80	39	54	61
NJ 15S-UN	180	150	73	88	100	66	81	100	45	60	89	30	45	74
NJ 20S-UN	200	150	73	88	100	66	81	100	45	60	89	30	45	74
NJ 40-FP-SN	370	300	73	88	100	66	81	100	45	60	89	30	45_	74
SJ 2-SN	30	100	73	88	100	66	81	100	45	60	78	30	45	57
SJ 2-S1N	30	100	73	88	100	66	81	100	45	60	78	30	45	57
SJ 3,5-S1N	30	100	73	88	100	66	81	100	45	60	89	30	45	74
SJ 3,5-SN	30	100	73	88	100	66	81	100	45	60	89	30	45	74

(16) Test report PTB Ex 00-29268

(17) Special conditions for safe use

- 1. For the application within a temperature range of -60 °C to -20 °C the SN-sensors, types NJ... and SJ... must be protected against damage due to impact by mounting into an additional housing.
- 2. The connection facilities of the SN-sensors, types NJ... and SJ... shall be installed as such that at least a degree of protection of IP20 according to IEC-publication 60529:1989 is met.
- The assignment of the type of the connected circuit to the maximum permissible ambient temperature and the temperature class as well as the effective internal reactances for the individual types of SN-sensors is shown in the table given under item (15) of this EC-typeexamination certificate.

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Braunschweig und Berlin

SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2049 X

4. With the application in group IIC inadmissible electrostatic charge of the plastic housing has to be avoided for following types of SN-sensors (warning label on the device).:

NJ 40-FP-SN...

5. Inadmissible electrostatic charge of parts of the metal houising has to be avoided for the following types of SN-sensors. Dangerous electrostatic charges of parts of the metal housing can be avoided by grounding of these parts whereas very small parts of the metal housing (e.g. screws) don't need to be grounded:

> NJ 2-11-SN-G... NJ 6-22-SN-G... NJ 6S1+U3+N... NJ 6S1+U4+N... NJ 15S+U3+N... NJ 15S+U4+N... NJ 20S+U3+N... NJ 20S+U4+N... NJ 40-FP-SN-P3... NJ 40-FP-SN-P4...

(18) Essential health and safety requirements

Met by the standards mentioned above

Zertifizierungsstalle Explosionssohutz

By order:

Dr.-Ing. U. Johannsmey Regierungsdirektor Braunschweig, October 05, 2000

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Braunschweig und Berlin

1. ERGÄNZUNG

gemäß Richtlinie 94/9/EG Anhang III Ziffer 6

zur EG-Baumusterprüfbescheinigung PTB 00 ATEX 2038

Gerät:

Stellungsregler Typ 3780 - 1...

Kennzeichnung: 🖾 II 2 G EEx ia IIC T6

Hersteller:

Samson AG Mess- und Regeltechnik

Anschrift:

Weismüllerstr. 3. D-60314 Frankfurt

Beschreibung der Ergänzungen und Änderungen

Der Stellungsregler Typ 3780 – 1... darf künftig entsprechend den im zugehörigen Prüfbericht aufgeführten Prüfungsunterlagen gefertigt werden.

Die Ankoppelschaltung, die Schaltung der Logikplatine und die Schaltung für den Wegaufnehmer wurden auf Grund geänderter EMV-Grenzwerte modifiziert.

Die Änderungen betreffen den inneren und äußeren Aufbau.

Die elektrischen Daten ändern sich wie folgt:

Elektrische Daten

(Klemmen 11/12)

Signalstromkreisin Zündschutzart Eigensicherheit EEx ia IIC nur zum Anschluss an einen bescheinigten

eigensicheren Stromkreis

Höchstwerte:

 $U_i = 28$

W 1

 $C_i = 5.3 \text{ nF}$

 $L_i = 45$

Alle übrigen Angaben gelten unverändert auch für diese 1. Ergänzung.

Prüfbericht: PTB Ex 00-20260

Zertifizierungstelle Explosionsschutz

Im Auftrag

Dr.-ing. U. Johannsmeyer

Regierungsdirektor

Braunschweig, 10. Oktober 2000

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TRANSLATION

ADDENDUM No.: 1

in compliance with Directive 94/9/EC Annex III Clause 6 to the EC Type Examination Certificate PTB 98 ATEX 2038

Equipment:

Model 3780-1... Positioner

Marking:

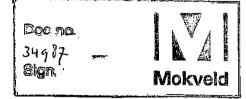
 $\langle \mathcal{E}_{\mathbf{x}} \rangle$ II 2 G EEx ia IIC T6

Manufacturer:

SAMSON AG

Address:

Weismüllerstr. 3, D-60314 Frankfurt, Germany



Description of the additions and modifications

In future the Model 3780-1... Positioner may be manufactured in compliance with the certification documents identified in the associated test report.

The coupling circuit, the wiring of the logic board and the wiring of the displacement transducer were modified because of changed EMC limit values.

The modifications relate to the design and construction.

PTB

Braunschweig und Berlin

The electrical data are changed as follows:

Electrical data:

Signal circuit (terminals 11/12)

Type of protection. Intrinsic safety EEx ia IIC only for connection to a certified intrinsically safe circuit

Maximum values:

 $U_{i} = 28 \text{ V}$ $I_{i} = 115 \text{ mA}$ $P_{i} = 1 \text{ W}$

 $Ci = 5.3 \text{ nF, Li} = 45 \mu\text{H}$

All the other data apply without change also to this Addendum No. 1

Test report: PTB Ex 00-20260

Zertifizierungsstelle Explosionsschutz By order Braunschweig, 10. October 2000

(Signature)

(Seal)

Dr. Ing. U. Johannsmeyer Regierungsdirektor