



(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 09 ATEX 1108

(4) Equipment: Connection and Junction Box Type 8150/1-..... and 8150/2-.....

(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 assessment and test report PTB Ex 09-18161.

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

EN 60079-0:2009 EN 60079-1:2007 EN 60079-7:2007 EN 60079-11:2007
EN 60079-18:2004 EN 60079-31:2009

(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, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

(12) The marking of the equipment shall include the following:

II 2 G Ex db eb ia/ib mb IIA,IIB,IIC T6, T5, T4 **or**

II 2 G Ex d e ia/ib mb IIA,IIB,IIC, T6,T5,T4 Gb

II 2 D Ex tb IIIC IP66 T80°C, T95°C, T130°C **or**

II 2 D Ex t IIIC IP66 T80°C, T95°C, T130°C Db

Zertifizierungssektor Explosionsschutz

Braunschweig, December 10, 2009

By order

Dr.-Ing. M. Thedens
Oberregierungsrat



sheet 1/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

SCHEDULE

(13)

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1108**

(15) Description of equipment

The Connection and Junction Box type 8150/1-...-...-... and 8150/2-...-...-... consists of enclosures out of steel or stainless steel in the type of protection Increased Safety "e" and Protection by enclosures "tD", which may be provided with flanges. Several boxes can be combined with each other.

The Connection and Junction box is equipped with terminals for circuits in the type of protection Increased Safety "e" or Intrinsic Safety "i" or combinations of both. It may optionally be provided with disconnect terminals and fuses. The components for intrinsically safe circuits are marked, e.g. in light blue.

Connection is by means of Ex-type cable entries.

The empty enclosures as well as all mounted and attached components have been tested and certified under a separate examination certificate.

Technical data

Rated voltage*	up to	1100 V
Rated current*	max.	630 A
Rated cross section*	max.	300 mm ²

*) depending on type of terminal and ex-components used

Ambient temperature depending on the temperature class

Type 8150/1-...-...-...
-60 °C to +70 °C, T4
-60 °C to +55 °C, T5
-60 °C to +40 °C, T6

Type 8150/2-...-...-...
-60 °C to +75 °C, T6

Protection against contact,
foreign bodies and water IP66 according to IEC 60529

The rated values are maximum values, the actual electrical values depend on the electrical equipment incorporated. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility.

The maximum permissible ambient temperature range of the connection and junction box can be limited by the maximum permissible ambient temperature ranges of the separately certified equipment.

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

(16) Assessment and test report PTB Ex 09-18161

(17) Special conditions for safe use

None

Notes for manufacture and operation

The maximum number of conductors for the housing size in dependence on the section and the permissible continuous current rating are to be taken from the data sheets.

Equipment of the type of protection intrinsic safety "i" is to be installed in such a way that the distances required according EN 60079-14 and the creepage distances und clearances between intrinsically safe circuits and non-intrinsically safe circuits are complied with.

When more than one intrinsically safe circuit is used, the rules for interconnection are to be observed

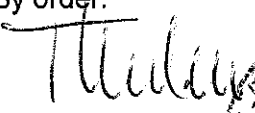
The connection and junction box with a coating of polyester powder must not be used in areas affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Zertifizierungssektor Explosionsschutz

By order:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, December 10, 2009



1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1108

(Translation)

Equipment: Terminal Box, type 8150/1-.....-.....-..... and 8150/2-.....-.....-.....

Marking:  II 2 G Ex db eb ia/ib mb IIA,IIB,IIC T6, T5, T4 or
Ex d e ia/ib mb IIA,IIB,IIC, T6,T5,T4 Gb
 II 2 D Ex tb IIIC T80°C, T95°C, T130°C IP66 or
Ex tb IIIC T80°C, T95°C, T130°C Db IP66

Manufacturer: R. STAHL Schaltgeräte GmbH

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

Description of supplements and modifications

The terminal box, type 8150/1-.....-.....-..... and 8150/2-.....-.....-..... is modified as listed below:

- 1) The type designation changes to type 8150/1-.....-.....-..... and 8150/2-.....-.....-.....
- 2) The terminal box can be provided with different gaskets.

Technical data

Rated voltage* up to 1100 V
Rated current* max. 630 A
Rated cross section* max. 300 mm²

*) depending on type of terminal and ex-components used

Ambient temperature dependent on the gasket

Gasket 1 -60 °C to +85 °C
Gasket 2 -58 °C to +85 °C
Gasket 3 -25 °C to +76 °C

Protection against contact,
Foreign bodies and water IP66 according to EN 60529

The rated values are maximum values, the actual electrical values depend on the electrical equipment installed. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility.

The maximum permissible ambient temperature range of the terminal housing can be limited by the maximum permissible ambient temperature ranges of the separately certified equipment.

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

Applied standards

EN 60079-0:2009
EN 60079-18:2009

EN 60079-1:2007
EN 60079-31:2009

EN 60079-7:2007

EN 60079-11:2007

Assessment and test report: PTB Ex 11-10333

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, March 18, 2011


Dr.-Ing. U. Klausmeyer
Direktor und Professor





2nd SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1108

(Translation)

Equipment: Terminal box type 8150/1-****-****-***-**** and
type 8150/2-****-****-***-****

Marking:  II 2 G Ex db eb ia/ib mb IIA, IIB, IIC T6, T5, T4 or
Ex d e ia/ib mb IIA, IIB, IIC, T6, T5, T4 Gb
 II 2 D Ex tb IIIC T80 °C, T95 °C, T130 °C IP66 or
Ex tb IIIC T80 °C, T95 °C, T130 °C Db IP66

Manufacturer: R. STAHL Schaltgeräte GmbH

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

Description of supplements and modifications


The terminal box, type 8150/5-****-****-***-**** is modified in the following respects:

- 1) The ambient temperature is extended to a range of -60 °C to +135 °C.
- 2) The temperature class T3 is added.
- 3) The terminal box has been re-assessed on the basis of standards EN 60079-0:2012.
- 4) The marking therefore changes to:

 II 2 G Ex d e ia ib mb IIA, IIB, IIC T6, T5, T4, T3 Gb

or

 II 2 G Ex db eb ia ib mb IIA, IIB, IIC T6, T5, T4, T3

 II 2 D Ex tb IIIC T80 °C, T95 °C, T130 °C, T135 °C Db

or

 II 2 D Ex tb IIIC T80 °C, T95 °C, T130 °C, T135 °C

Technical data

Rated voltage*	up to	1100 V
Rated current*	max.	630 A
Rated cross section*	max.	300 mm ²

*) depending on type of terminal and ex-components used

Ambient temperature dependent on the gasket

Gasket 1	-60 °C to +135 °C
Gasket 2	-58 °C to +85 °C
Gasket 3	-25 °C to +76 °C

Protection against contact,
Foreign bodies and water IP66 according to EN 60529

The rated values are maximum values, the actual electrical values depend on the electrical equipment installed. Within the scope of these maximum permissible values and with due regard to the standards, the manufacturer specifies the final rated values dependent on the system conditions, mode of operation, utilization category, etc. The characteristic values of the intrinsically safe circuits are to be given by the manufacturer on his own responsibility.

The maximum permissible ambient temperature range of the terminal housing can be limited by the maximum permissible ambient temperature ranges of the separately certified equipment.

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

Notes for manufacturing and operation

The maximum number of conductors for the housing size in dependence on the section and the permissible continuous current rating are to be taken from the specifications.

Equipment of type of protection Intrinsic Safety "i" shall be installed such that the clearance and creepage distances that are required according to EN 60079-14 between intrinsically safe and non-intrinsically safe circuits are duly complied with.

When connecting more than one intrinsically safe circuit, the rules and regulations for interconnection have to be observed.

Terminal boxes with a coating of polyester powder finish must not be used in areas affected by charge-producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust.

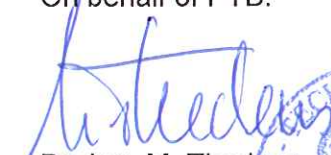
Applied standards

EN 60079-0:2012, EN 60079-1:2007, EN 60079-7:2007, EN 60079-11:2007,
EN 60079-18:2009, EN 60079-31:2009

Test report: PTB Ex 12-11244

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, November 28, 2012


Dr.-Ing. M. Thedens
Oberregierungsrat





SUPPLEMENTARY SHEET 1 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0200-0200-100
 Enclosure size in mm L,B = 200 B,H = 200 H,T = 100

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	57																
16	19	38	147								additional conductors optional						
20	8	22	42														
25		10	24	46													
35			7	18	45												
50				2	14	37											
63					5	17	61										
80						6	19	69									
100							8	18									
125								7	18								
160									6	16							
200										5	14	43					
225	to be specified by the manufacturer (including temperature rise test)								2	8	17						
250										4	10	21					
315											2	6	13				
400													2	9	26		
500															5		
	84	84	56	42	20	16	13	0	0	0	0	0	0	0	0	0	
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 2 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0250-0180-120
 Enclosure size in mm L,B = 180 B,H = 250 H,T = 120

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	63																
16	21	42	163								additional conductors optional						
20	9	24	47														
25		11	26	51													
35			7	20	50												
50				3	16	41											
63					5	19	68										
80						7	21	76									
100							9	20									
125								8	20								
160									7	18							
200										6	15	48					
225		to be specified by the manufacturer									2	9	19				
250		(including temperature rise test)										4	11	24			
315												2	7	14			
400														3	9	28	
500																5	
	108	108	75	36	36	21	18	9	0	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 3 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0200-0300-100
 Enclosure size in mm L,B = 300 B,H = 200 H,T = 100

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																			
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300				
6																				
10	61																			
16	21	41	158								additional conductors optional									
20	8	24	46																	
25		11	26	50																
35			7	19	49															
50				2	16	40														
63					5	18	66													
80						7	20	74												
100							9	19												
125								8	20											
160									6	17										
200										6	15	47								
225		to be specified by the manufacturer (including temperature rise test)								2	8	18								
250														4	11	23				
315															2	6	14			
400														3	9	28				
500																5				
	140	140	112	66	40	32	22	11	7	0	0	0	0	0	0	0				
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																				

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 4 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0200-0300-150
 Enclosure size in mm L,B = 300 B,H = 200 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	75																
16	26	50	195								additional conductors optional						
20	10	29	56														
25		14	32	61													
35			9	24	60												
50				3	19	49											
63					6	23	81										
80						8	25	91									
100							11	24									
125								9	24								
160									8	21							
200										7	18	57					
225		to be specified by the									3	10	22				
250		manufacturer										5	13	28			
315		(including temperature rise test)											2	8	17		
400														3	11	34	
500																6	
	140	140	112	66	40	32	22	11	7	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 5 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0200-0300-155
 Enclosure size in mm L,B = 300 B,H = 200 H,T = 155

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²															
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
6																
10	77															
16	26	51	198								additional conductors optional					
20	11	30	57													
25		14	32	62												
35			9	24	61											
50				3	20	50										
63					6	23	83									
80						9	26	93								
100							11	24								
125								10	25							
160									8	22						
200										7	19	58				
225	to be specified by the									3	11	23				
250	manufacturer										5	14	29			
315	(including temperature rise test)											3	8	17		
400														3	12	35
500																7
	140	140	112	66	40	32	22	11	7	0	0	0	0	0	0	0
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 6 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0300-0300-100
 Enclosure size in mm L,B = 300 B,H = 300 H,T = 100

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	71																
16	24	47	184								additional conductors optional						
20	10	27	53														
25		13	30	58													
35			9	22	56												
50				3	18	47											
63					6	21	77										
80						8	24	86									
100							10	22									
125								9	23								
160									8	20							
200										7	17	54					
225		to be specified by the									2	10	21				
250		manufacturer										5	13	27			
315		(including temperature rise test)											2	7	16		
400															3	11	32
500																	6
	225	225	180	99	64	52	22	17	12	0	0	0	0	0	0	0	0
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 7 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0300-0300-150
 Enclosure size in mm L,B = 300 B,H = 300 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
6																		
10	85																	
16	29	57	221								additional conductors optional							
20	12	33	64															
25		15	36	70														
35			10	27	68													
50				4	22	56												
63					7	26	92											
80						10	29	103										
100							12	27										
125								11	27									
160									9	24								
200										8	21	65						
225		to be specified by the									3	12	25					
250		manufacturer										6	15	32				
315		(including temperature rise test)											3	9	19			
400														4	13	39		
500																7		
	225	225	180	99	64	52	22	17	12	0	0	0	0	0	0	0		
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 8 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Bestückung der Gehäuse- und Schrank-Verteiler Typ 8150/1-0380-0300-155
 Enclosure size in mm L,B = 300 B,H = 380 H,T = 155

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																		
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
6																			
10	91																		
16	31	60	236								additional conductors optional								
20	13	35	68																
25		16	38	74															
35			11	29	72														
50				4	23	60													
63					8	28	99												
80						10	31	111											
100							13	29											
125								11	29										
160									10	26									
200										9	22	69							
225		to be specified by the									3	13	27						
250		manufacturer										7	16	34					
315		(including temperature rise test)											3	10	20				
400														4	14	41			
500															2	8			
	315	315	232	132	96	68	44	23	15	12	7	0	0	0	0	0			
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																		

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 9 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0380-0300-210
 Enclosure size in mm L,B = 300 B,H = 380 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	107																
16	36	71	276								additional conductors optional						
20	15	41	80														
25		19	45	87													
35			13	34	85												
50				5	27	70											
63					9	32	116										
80						12	36	130									
100							15	34									
125								13	34								
160									12	30							
200										11	26	81					
225		to be specified by the manufacturer									4	15	32				
250		(including temperature rise test)										8	19	40			
315												4	11	24			
400														5	16	48	
500															2	9	
	315	315	232	132	96	68	44	23	15	12	7	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 10 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0300-0400-150
 Enclosure size in mm L,B = 400 B,H = 300 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	90																
16	31	60	234											additional conductors			
20	13	35	68											optional			
25		16	38	74													
35			11	29	72												
50				4	23	59											
63					8	27	98										
80						10	30	110									
100							13	29									
125								11	29								
160									10	26							
200										9	22	69					
225		to be specified by the									3	13	27				
250		manufacturer										6	16	34			
315		(including temperature rise test)											3	10	20		
400															4	14	41
500																2	9
	360	360	244	138	96	72	44	24	16	12	7	7	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 11 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0300-0400-210
 Enclosure size in mm L,B = 400 B,H = 300 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²															
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
6																
10	107															
16	37	71	278								additional conductors optional					
20	15	42	80													
25		20	45	88												
35			13	34	85											
50				5	28	71										
63					9	33	116									
80						12	34	130								
100							15	34								
125								14	35							
160									12	30						
200										11	26	82				
225	to be specified by the									4	15	32				
250	manufacturer										8	19	41			
315	(including temperature rise test)											4	11	24		
400														5	17	49
500															2	9
	360	360	244	138	96	72	44	24	16	12	7	7	0	0	0	0
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals															

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 12 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0300-0400-215
 Enclosure size in mm L,B = 400 B,H = 300 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
6																		
10	109																	
16	37	72	281								additional conductors optional							
20	15	42	81															
25		20	46	89														
35			13	35	86													
50				5	28	71												
63					9	33	118											
80						12	37	132										
100							16	35										
125								14	35									
160									12	31								
200										11	27	83						
225		to be specified by the manufacturer								4	15	32						
250		(including temperature rise test)									8	20	41					
315												4	20	41				
400														4	12	24		
500															2	9		
	360	360	244	138	96	72	44	24	16	12	7	7	0	0	0	0		
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 13 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0380-0380-210
 Enclosure size in mm L,B = 380 B,H = 380 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	114																
16	39	76	294								additional conductors optional						
20	16	44	85														
25		21	48	93													
35			14	36	90												
50				5	29	75											
63					10	35	123										
80						13	38	138									
100							16	36									
125								14	37								
160									12	32							
200										11	28	87					
225		to be specified by the manufacturer								4	16	34					
250		(including temperature rise test)									8	21	43				
315											4	12	26				
400														5	18	52	
500															2	10	
	406	406	290	172	126	68	56	23	15	15	9	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 14 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0400-150
 Enclosure size in mm L,B = 400 B,H = 400 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300					
6																					
10	100																				
16	34	66	257								additional conductors optional										
20	14	38	74																		
25		18	42	81																	
35			12	32	79																
50				4	26	65															
63					8	30	108														
80						11	34	121													
100							14	32													
125								13	32												
160									11	28											
200										10	24	76									
225	to be specified by the manufacturer (including temperature rise test)									3	14	30									
250															7	18	38				
315																	3	11	22		
400																				5	15
500															2	9					
	488	488	305	184	135	72	60	24	16	16	10	10	0	0	0	0					
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																					

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 15 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0400-210
 Enclosure size in mm L,B = 400 B,H = 400 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	117																
16	40	77	302								additional conductors optional						
20	16	45	87														
25		21	49	95													
35			14	37	93												
50				5	30	77											
63					10	35	126										
80						13	39	142									
100							17	37									
125								15	38								
160									13	33							
200										12	29	89					
225		to be specified by the manufacturer									4	16	35				
250		(including temperature rise test)										8	21	44			
315																	4
400														6	18	53	
500															2	10	
	488	488	305	184	135	72	60	24	16	16	10	10	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 16 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0400-215
 Enclosure size in mm L,B = 400 B,H = 400 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																		
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
6																			
10	118																		
16	40	78	305								additional conductors optional								
20	17	46	88																
25		22	50	96															
35			14	38	94														
50				5	30	78													
63					10	36	128												
80						14	40	143											
100							17	38											
125								15	38										
160									13	34									
200										12	29	90							
225		to be specified by the manufacturer (including temperature rise test)								4	17	35							
250														9	21	45			
315															4	13	29		
400														6	18	53			
500															2	10			
	488	488	305	184	135	72	60	24	16	16	10	10	0	0	0	0			
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																		

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.
 They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 17 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0550-230
 Enclosure size in mm L,B = 550 B,H = 360 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	125																
16	43	83	322								additional conductors optional						
20	17	48	93														
25		23	53	102													
35			15	40	99												
50				6	32	82											
63					11	38	135										
80						14	42	151									
100							18	40									
125								16	40								
160									14	35							
200										12	31	95					
225		to be specified by the									4	17	37				
250		manufacturer										9	23	47			
315		(including temperature rise test)											4	13	28		
400															6	19	56
500																2	11
	605	605	385	205	160	100	84	42	23	23	9	9	7	7	7	7	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 18 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0380-0600-210
 Enclosure size in mm L,B = 600 B,H = 380 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	123																
16	42	82	318								additional conductors optional						
20	17	48	92														
25		22	52	100													
35			15	39	98												
50				5	32	81											
63					10	37	133										
80						14	42	149									
100							18	39									
125								16	40								
160									13	35							
200										12	30	94					
225		to be specified by the								4	17	37					
250		manufacturer									9	22	47				
315		(including temperature rise test)										4	13	28			
400														6	19	56	
500															2	11	
	696	696	475	284	207	136	92	46	30	25	16	9	7	7	7	7	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 19 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0600-150
 Enclosure size in mm L,B = 600 B,H = 400 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																			
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300				
6																				
10	109																			
16	37	72	281								additional conductors optional									
20	15	42	81																	
25		20	46	89																
35			13	35	86															
50				5	28	71														
63					9	33	118													
80						12	37	132												
100							16	35												
125								14	35											
160									12	31										
200										11	27	83								
225	to be specified by the manufacturer (including temperature rise test)									4	15	32								
250															8	20	41			
315																4	12	24		
400																			5	17
500															2	9				
	760	760	488	284	207	144	92	48	32	25	16	16	8	8	8	8				
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																				

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 20 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0600-210
 Enclosure size in mm L,B = 600 B,H = 400 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	126																
16	43	83	325								additional conductors optional						
20	18	49	94														
25		23	53	103													
35			15	40	100												
50				6	32	83											
63					11	38	136										
80						14	42	152									
100							18	40									
125							2	16	41								
160									14	36							
200										13	31	96					
225		to be specified by the									5	18	37				
250		manufacturer										9	23	48			
315		(including temperature rise test)											4	14	28		
400															6	19	57
500																2	11
	760	760	488	284	207	144	92	48	32	25	16	16	8	8	8	8	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 21 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0400-210
 Enclosure size in mm L,B = 400 B,H = 600 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²															
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
6																
10	126															
16	43	83	325								additional conductors optional					
20	18	49	94													
25		23	53	103												
35			15	40	100											
50				6	32	83										
63					11	38	136									
80						14	42	152								
100							18	40								
125							2	16	41							
160									14	36						
200										13	31	96				
225	to be specified by the									5	18	37				
250	manufacturer										9	23	48			
315	(including temperature rise test)											4	14	28		
400														6	19	57
500															2	11
	760	760	488	284	207	144	92	48	32	25	16	16	8	8	8	8
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 22 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0400-0600-215
 Enclosure size in mm L,B = 600 B,H = 400 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	127																
16	43	84	328								additional conductors optional						
20	18	49	95														
25		23	54	104													
35			16	40	101												
50				6	33	83											
63					11	39	138										
80						15	43	154									
100							18	40									
125							2	16	41								
160									14	36							
200										13	31	97					
225		to be specified by the manufacturer									5	18	38				
250		(including temperature rise test)										9	23	48			
315												5	14	29			
400														6	20	58	
500															2	11	
	760	760	488	284	207	144	92	48	32	25	16	16	8	8	8	8	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 23 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0750-230
 Enclosure size in mm L,B = 750 B,H = 360 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	127																
16	43	84	328								additional conductors optional						
20	18	49	95														
25		23	54	104													
35			16	41	101												
50				6	33	84											
63					11	39	138										
80						15	43	154									
100							18	41									
125								2	16	41							
160										14	36						
200											13	31	97				
225		to be specified by the manufacturer									5	18	38				
250		(including temperature rise test)										9	23	48			
315													5	14	29		
400															6	20	58
500																2	11
	840	840	550	328	240	160	118	63	32	32	9	9	7	7	7	7	7
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 24 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0900-230
 Enclosure size in mm L,B = 900 B,H = 360 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300					
6																					
10	127																				
16	44	85	329								additional conductors optional										
20	18	49	95																		
25		23	54	104																	
35			16	41	101																
50				6	33	84															
63					11	39	138														
80						15	43	155													
100							18	41													
125								2	16	41											
160										14	36										
200											13	31	97								
225		to be specified by the manufacturer (including temperature rise test)									5	18	38								
250																9	23	48			
315																	5	14	29		
400																				6	20
500																	2	11			
	1008	1008	648	369	280	192	142	84	42	39	18	18	14	14	7	7	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals				

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 25 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0600-150
 Enclosure size in mm L,B = 600 B,H = 600 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	128																
16	44	85	331								additional conductors optional						
20	18	50	96														
25		23	54	105													
35			16	41	102												
50				6	33	84											
63					11	39	139										
80						15	43	155									
100							18	41									
125								2	16	41							
160										14	36						
200											13	31	98				
225	to be specified by the manufacturer										5	18	38				
250	(including temperature rise test)											9	23	48			
315													5	14	29		
400															6	20	58
500																3	13
	1140	1140	760	426	276	220	138	74	50	25	16	16	12	12	12	12	
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 26 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0600-210
 Enclosure size in mm L,B = 600 B,H = 600 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	145																
16	50	97	375								additional conductors optional						
20	20	56	109														
25		27	62	119													
35			18	46	115												
50				6	37	95											
63					12	44	157										
80						17	49	176									
100							21	46									
125								2	19	47							
160										16	41						
200											15	36	111				
225		to be specified by the manufacturer									5	20	43				
250		(including temperature rise test)										11	26	55			
315												5	16	33			
400															7	22	66
500																3	13
	1140	1140	760	426	276	220	138	74	50	25	16	16	12	12	12	12	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 27 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0600-215
 Enclosure size in mm L,B = 600 B,H = 600 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300					
6																					
10	147																				
16	50	97	379								additional conductors optional										
20	21	57	110																		
25		27	62	120																	
35			18	47	116																
50				7	38	96															
63					13	45	159														
80						17	50	178													
100							21	47													
125								2	19	47											
160										16	42										
200											15	36	112								
225	to be specified by the manufacturer (including temperature rise test)									5	21	44									
250															11	27	56				
315																	5	16	33		
400																				7	23
500																3	13				
	1140	1140	760	426	276	220	138	74	50	25	16	16	12	12	12	12					
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																					

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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				= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 28 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0480-0787-230
 Enclosure size in mm L,B = 787 B,H = 480 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	146																
16	50	97	378								additional conductors optional						
20	21	57	109														
25		27	62	119													
35			18	47	116												
50				7	38	96											
63					13	45	158										
80						17	49	177									
100							21	47									
125								2	19	47							
160										16	42						
200											15	36	111				
225		to be specified by the manufacturer									5	21	44				
250		(including temperature rise test)										11	26	55			
315												5	16	33			
400														7	23	66	
500															3	13	
	1200	1200	825	470	324	222	144	98	40	40	24	21	16	16	16	16	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 29 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-1100-230
 Enclosure size in mm L,B = 1100 B,H = 360 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	127																
16	43	85	329								additional conductors optional						
20	18	49	95														
25		23	54	104													
35			16	41	101												
50				6	33	84											
63					11	39	138										
80						15	43	154									
100							18	41									
125								2	16	41							
160										14	36						
200											13	31	97				
225		to be specified by the									5	18	38				
250		manufacturer										9	23	48			
315		(including temperature rise test)											5	14	29		
400														6	20	58	
500															2	11	
	1246	1246	810	492	320	224	174	105	48	48	18	18	14	14	14	14	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 30 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0760-210
 Enclosure size in mm L,B = 760 B,H = 600 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	154																
16	53	103	399								additional conductors optional						
20	22	60	116														
25		28	65	126													
35			19	49	123												
50				7	40	101											
63					13	47	167										
80						18	52	187									
100							22	49									
125								2	20	50							
160										17	44						
200											16	38	118				
225		to be specified by the manufacturer									6	22	46				
250		(including temperature rise test)										11	28	58			
315												6	17	35			
400															7	24	70
500																3	14
	1452	1452	968	568	414	284	184	111	66	50	32	20	16	16	16	16	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 31 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-1300-230
 Enclosure size in mm L,B = 1300 B,H = 360 H,T = 230

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	127																
16	43	84	328											additional conductors optional			
20	18	49	95														
25		23	54	104													
35			16	40	101												
50				6	33	83											
63					11	39	137										
80						15	43	154									
100							18	40									
125								2	16	41							
160										14	36						
200											13	31	97				
225		to be specified by the									5	18	38				
250		manufacturer											9	23	48		
315		(including temperature rise test)												5	14	29	
400															6	20	57
500																2	11
	1477	1477	972	574	400	256	206	126	57	57	27	27	21	14	14	14	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 32 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0787-0600-150
 Enclosure size in mm L,B = 600 B,H = 787 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	138																
16	47	92	358								additional conductors optional						
20	19	54	104														
25		25	59	113													
35			17	44	110												
50				6	36	91											
63					12	42	150										
80						16	47	168									
100							20	44									
125								2	18	45							
160										15	39						
200											14	34	105				
225		to be specified by the manufacturer									5	19	41				
250		(including temperature rise test)										10	25	52			
315												5	15	31			
400															7	21	63
500																3	12
	1520	1520	1045	568	414	296	186	111	68	50	32	21	16	16	16	16	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 33 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0787-0600-210
 Enclosure size in mm L,B = 600 B,H = 787 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	155																
16	53	103	401									additional conductors optional					
20	22	60	116														
25		28	66	127													
35			19	50	123												
50				7	40	102											
63					13	47	168										
80						18	53	189									
100							22	50									
125								2	20	50							
160										17	44						
200											16	38	118				
225		to be specified by the									6	22	46				
250		manufacturer										11	28	59			
315		(including temperature rise test)											6	17	35		
400															8	24	70
500																3	14
	1520	1520	1045	568	414	296	186	111	68	50	32	21	16	16	16	16	16
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 34 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0800-150
 Enclosure size in mm L,B = 800 B,H = 600 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300					
6																					
10	139																				
16	47	92	359								additional conductors optional										
20	20	54	104																		
25		25	59	113																	
35			17	44	110																
50				6	36	91															
63					12	42	151														
80						16	47	169													
100							20	44													
125							2	18	45												
160									15	40											
200										14	34	106									
225	to be specified by the manufacturer (including temperature rise test)									5	15	31									
250											10	25	53								
315												5	15	31							
400														7	21	63					
500															3	12					
	1536	1536	1034	576	414	300	186	111	68	50	32	32	17	17	17	17					
max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																					

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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				= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 35 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0600-0800-215
 Enclosure size in mm L,B = 800 B,H = 600 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	157																
16	54	105	406											additional conductors			
20	22	61	118											optional			
25		29	67	128													
35			19	50	125												
50				7	41	103											
63					14	48	171										
80						18	53	191									
100							23	50									
125							2	20	51								
160									17	45							
200										16	39	120					
225		to be specified by the								6	22	47					
250		manufacturer									12	29	60				
315		(including temperature rise test)										6	17	36			
400														8	24	71	
500															3	14	
	1536	1536	1034	576	414	300	186	111	68	50	32	32	17	17	17	17	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 36 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0760-0760-300
 Enclosure size in mm L,B = 760 B,H = 760 H,T = 300

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	194																
16	66	129	501											additional conductors			
20	27	75	145											optional			
25		36	82	158													
35			24	62	154												
50				9	50	127											
63					17	59	210										
80						23	66	235									
100							28	62									
125							3	25	63								
160									21	55							
200										20	48	148					
225		to be specified by the									7	27	58				
250		manufacturer										14	35	74			
315		(including temperature rise test)											7	21	44		
400															9	30	88
500																4	17
	1815	1815	1210	728	534	355	236	144	66	66	40	20	16	16	16	16	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 37 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0787-0787-210
 Enclosure size in mm L,B = 787 B,H = 787 H,T = 210

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																	
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300		
6																		
10	172																	
16	59	114	144															
20	24	67	129															
25		32	73	140														
35			21	55	137													
50				8	44	113												
63					15	52	186											
80						20	58	209										
100							25	55										
125								2	22	56								
160										19	49							
200											17	42	131					
225											6	24	51					
250												13	31	65				
315													6	19	39			
400																8	27	
500																		3
	2016	2016	1386	752	552	370	248	147	68	68	42	21	16	16	16	16		
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																	

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 38 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-0800-150
 Enclosure size in mm L,B = 800 B,H = 800 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	157																
16	54	104	405											additional conductors optional			
20	22	61	117														
25		29	66	128													
35			19	50	124												
50				7	40	103											
63					13	48	170										
80						18	53	190									
100							23	50									
125							2	20	51								
160									17	45							
200										16	39	119					
225		to be specified by the									6	22	47				
250		manufacturer										12	28	59			
315		(including temperature rise test)											6	17	35		
400															8	24	71
500																3	14
	2048	2048	1408	768	558	375	248	150	68	68	42	42	17	17	17	17	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 39 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-0800-215
 Enclosure size in mm L,B = 800 B,H = 800 H,T = 215

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	175																
16	60	116	453										additional conductors optional				
20	25	68	131														
25		32	74	143													
35			22	56	139												
50				8	45	115											
63					15	53	190										
80						20	59	213									
100							25	56									
125							2	22	57								
160									19	50							
200										18	43	134					
225	to be specified by the manufacturer										6	25	52				
250	(including temperature rise test)											13	32	66			
315												6	19	40			
400														9	27	79	
500															4	16	
	2048	2048	1408	768	558	375	248	150	68	68	42	42	17	17	17	17	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 40 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-1000-150
 Enclosure size in mm L,B = 1000 B,H = 800 H,T = 150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	168																
16	58	112	435									additional conductors optional					
20	24	65	126														
25		31	71	138													
35			21	54	134												
50				8	44	111											
63					15	51	182										
80						20	57	204									
100							24	54									
125								2	22	54							
160										19	48						
200											17	41	128				
225		to be specified by the									6	24	50				
250		manufacturer										12	31	64			
315		(including temperature rise test)											6	18	38		
400															8	26	76
500																3	15
	2576	2576	1792	968	744	470	372	200	102	102	54	54	34	34	34	34	34
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 41 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-1000-300
 Enclosure size in mm L,B = 1000 B,H = 800 H,T = 300

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	211																
16	72	40	545											additional conductors optional			
20	30	82	158														
25		39	90	172													
35			26	67	168												
50				10	55	139											
63					18	64	229										
80						25	71	256									
100							31	67									
125							2	27	68								
160									23	60							
200										21	52	161					
225		to be specified by the									8	30	63				
250		manufacturer										16	38	80			
315		(including temperature rise test)											8	23	48		
400															10	33	96
500																4	19
	2576	2576	1792	968	744	470	372	200	102	102	54	54	34	34	34	34	34
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 42 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-1200-300
 Enclosure size in mm L,B = 1200 B,H = 800 H,T = 300

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																				
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300					
6																					
10	218																				
16	75	145	563											additional conductors optional							
20	31	85	163																		
25		40	93	178																	
35			27	70	173																
50				10	56	143															
63					19	67	236														
80						25	74	265													
100							32	70													
125							3	28	71												
160									24	62											
200										22	54	166									
225		to be specified by the manufacturer (including temperature rise test)									8	31	65								
250															16	40	83				
315																8	24	49			
400																			11	34	99
500															5	19					
	3200	3200	2176	1248	852	600	434	250	136	103	66	66	34	34	34	34					
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																				

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 43 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-1000-1200-300
 Enclosure size in mm L,B = 1200 B,H = 1000 H,T = 300

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																			
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300				
6																				
10	240																			
16	82	160	620											additional conductors optional						
20	34	93	180																	
25		44	102	196																
35			30	77	191															
50				11	62	158														
63					21	73	260													
80						28	81	291												
100							35	77												
125							3	31	78											
160									27	69										
200										24	59	183								
225		to be specified by the manufacturer (including temperature rise test)								9	34	72								
250														18	44	91				
315															9	26	54			
400														12	37	109				
500															5	21				
	4025	4025	2737	1573	1136	752	570	315	176	159	81	81	50	50	50	50				
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																			

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 44 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0800-1600-300
 Enclosure size in mm L,B = 1600 B,H = 800 H,T = 300

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²															
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
6																
10	225															
16	77	150	582											additional conductors optional		
20	32	88	169													
25		41	96	184												
35			28	72	179											
50				10	58	148										
63					20	69	244									
80						26	76	274								
100							33	72								
125							3	29	73							
160									25	64						
200										23	56	172				
225		to be specified by the								8	32	67				
250		manufacturer									17	41	86			
315		(including temperature rise test)										8	25	51		
400														11	35	102
500															5	20
	4224	4224	2871	1632	1209	765	558	350	170	142	88	88	51	51	51	51
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals															

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 45 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0116-0176-091
 Enclosure size in mm L,B = 176,5 B,H = 116,5 H,T = 91

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	45																
16	15	30	116														
20	6	17	33														
25		8	19	36													
35			5	14	35												
50				2	11	29											
63					4	13	48										
80						5	15	54									
100							6	14									
125								5	14								
160									5	12							
200										4	11	34					
225		to be specified by the									6	13					
250		manufacturer									3	8	17				
315		(including temperature rise test)											5	10			
400														2	7	20	
500																	4
	42	42	28	18	10	8	7	0	0	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 46 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0176-0176-091
 Enclosure size in mm L,B = 176,5 B,H = 176,5 H,T = 91

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section in mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	51																
16	17	34	132											additional conductors optional			
20	7	19	38														
25		9	21	41													
35			6	16	40												
50				2	13	33											
63					4	15	55										
80						6	17	62									
100							7	16									
125								6	16								
160									5	14							
200										5	12	39					
225		to be specified by the									2	7	15				
250		manufacturer										3	9	19			
315		(including temperature rise test)											2	5	11		
400															2	8	23
500																	4
	72	72	48	18	17	14	12	0	0	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. Max. permissible conductor cross section of the built in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 47 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0176-0236-091
 Enclosure size in mm L,B = 236,5 B,H = 176,5 H,T = 91

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	54																
16	18	36	140									additional conductors optional					
20	7	21	40														
25		10	23	44													
35			6	17	43												
50				2	14	35											
63					4	16	58										
80						6	18	65									
100							7	17									
125								7	17								
160									6	15							
200										5	13	41					
225		to be specified by the									2	7	16				
250		manufacturer										4	9	20			
315		(including temperature rise test)											2	6	12		
400															2	8	24
500																	4
	102	102	72	36	25	20	16	9	0	0	0	0	0	0	0	0	0
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 48 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0176-0236-150
 Enclosure size in mm L,B = 236,5 B,H = 176,5 H,T =150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²															
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300
6																
10	71															
16	24	47	183									additional conductors optional				
20	10	27	53													
25		13	30	58												
35			8	22	56											
50				3	18	46										
63					6	21	76									
80						8	24	86								
100							10	22								
125								9	23							
160									8	20						
200										7	17	54				
225		to be specified by the								2	10	21				
250		manufacturer									5	13	27			
315		(including temperature rise test)										2	7	16		
400														3	11	32
500																6
	102	102	72	36	25	20	16	9	0	0	0	0	0	0	0	0
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals															

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example:	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 49 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0176-0360-091
 Enclosure size in mm L,B = 360 B,H = 176,5 H,T =91

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	56																
16	19	37	146											additional conductors optional			
20	8	22	42														
25		10	24	46													
35			7	18	45												
50				2	14	37											
63					5	17	61										
80						6	19	68									
100							8	18									
125								7	18								
160									6	16							
200										5	14	43					
225		to be specified by the									2	8	17				
250		manufacturer										4	10	21			
315		(including temperature rise test)											2	6	12		
400															2	8	25
500																	5
	168	168	110	54	40	32	27	9	0	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 50 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0176-0360-150

Enclosure size in mm L,B = 360 B,H = 176,5 H,T =150

Max. Number of conductors depending on cross section and the permissible continuous current:

Each incoming conductor and each internal connection wire is counted as a conductor.

Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	72																
16	24	48	187											additional conductors optional			
20	10	28	54														
25		13	30	59													
35			9	23	57												
50				3	18	47											
63					6	22	78										
80						8	24	88									
100							10	23									
125								9	23								
160									8	20							
200										7	18	55					
225		to be specified by the									2	10	21				
250		manufacturer										5	13	27			
315		(including temperature rise test)											2	8	16		
400															3	11	33
500																	6
	168	168	110	54	40	32	27	9	6	6	0	0	0	0	0	0	0
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).



SUPPLEMENTARY SHEET 51 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0360-091
 Enclosure size in mm L,B = 360 B,H = 360 H,T =91

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	77																
16	26	51	199											additional conductors optional			
20	11	30	58														
25		14	32	63													
35			9	24	61												
50				3	20	50											
63					6	23	83										
80						9	26	93									
100							11	24									
125								10	25								
160									8	22							
200										8	19	59					
225		to be specified by the									3	11	23				
250		manufacturer										5	14	29			
315		(including temperature rise test)											3	8	17		
400															3	12	35
500																	7
	385	385	220	123	80	64	54	21	0	0	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 52 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0360-150
 Enclosure size in mm L,B = 360 B,H = 360 H,T =150

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300	
6																	
10	94																
16	32	62	243											additional conductors optional			
20	13	36	70														
25		17	40	77													
35			11	30	74												
50				4	24	62											
63					8	28	102										
80						11	32	114									
100							13	30									
125								12	30								
160									10	27							
200										9	23	71					
225		to be specified by the									3	13	28				
250		manufacturer										7	17	35			
315		(including temperature rise test)											3	10	21		
400														4	14	42	
500															2	8	
	385	385	220	123	80	64	54	21	15	15	0	0	0	0	0	0	
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 53 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0360-190
 Enclosure size in mm L,B = 360 B,H = 360 H,T =190

Max. Number of conductors depending on cross section and the permissible continuous current:
 Each incoming conductor and each internal connection wire is counted as a conductor.
 Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																		
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
6																			
10	5																		
16	36	70	272							additional conductors optional									
20	15	41	79																
25		19	45	86															
35			13	33	84														
50				5	27	69													
63					9	32	114												
80						12	36	128											
100							15	33											
125								13	34										
160									11	30									
200										10	26	80							
225		to be specified by the									4	15	31						
250		manufacturer										8	19	40					
315		(including temperature rise test)											4	11	24				
400															5	16	48		
500																2	9		
	385	385	220	123	80	64	54	21	15	15	0	0	0	0	0	0	0		
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																		

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).

SUPPLEMENTARY SHEET 54 - 54
to EC Type Examination Certificate PTB 09 ATEX 1108

Fitting of the terminal box Type 8150/1-0360-0727-150

Enclosure size in mm L,B = 727 B,H = 360 H,T =150

Max. Number of conductors depending on cross section and the permissible continuous current:

Each incoming conductor and each internal connection wire is counted as a conductor.

Bridges and earthing conductors are not counted.

current /A	cross section / mm ²																		
	1,5	2,5	4	6	10	16	25	35	50	70	95	120	150	185	240	300			
6																			
10	105																		
16	36	70	272							additional conductors optional									
20	15	41	79																
25		19	45	86															
35			13	34	84														
50				5	27	69													
63					9	32	114												
80						12	36	128											
100							15	34											
125								13	34										
160									11	30									
200										10	26	80							
225		to be specified by the									4	15	31						
250		manufacturer										8	19	40					
315		(including temperature rise test)											4	11	24				
400															5	16	48		
500																2	9		
	812	812	550	287	200	136	114	63	31	31	9	9	7	7	7	7			
	max. number of terminals depending on the above mentioned enclosure size and the cross section resp. max. permissible conductor cross section of the built-in terminals																		

Notes:

For selection of the permissible constant currents for the cross sections, please observe the maximum load currents of the terminals that are used and of the cables and wires that are connected. Wires inside the enclosures, fitted according to the above table, have to be suitable for a temperature ranging from 70 to 80 degrees Celsius. Simultaneity factors and load factors may be taken into account according to IEC 439 when the table values are applied. Mixed assembly of circuits with different cross sections and currents are possible with a proportionate use of the table values.

Example: (general)	cross section/mm ²	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	= <u>98 %</u> < 100 %

Assembly variants having smaller or larger cross sections than the ones stated in this supplementary sheet have not been measured.

They require special consideration in connection with the permissible constant currents and they require measurement in many cases (heating analysis).