

Operating Instructions in accordance with IECEx Scheme rules, IECEx 02



aluKOM



Product group:	Empty enclosures	aluKOM
	Terminal enclosures	aluKOM

The basic safety and health requirements are met in conformity with:

IEC 60079-0:	2004	Equipment General Requirements
IEC 60079-7:	2006	Increased Safety "e"
IEC 60079-11:	2006	Equipment protection by intrinsic safety "i"
IEC 61241-0:	2004	General Requirements "Dust"
IEC 61241-1:	2004	Protection by Enclosure "tD"

The low voltage regulations apply to enclosures with insertions.

Description of the Enclosure

IECEX Certificate of Conformity No.:	IECEX KEM 08.0003U	Ex empty enclosure
	IECEX KEM 08.0004	Increased Safety "e"
		Intrinsic Safety « i »
		Dust explosion protection

The aluminium enclosure types AK 061 to AK 312 as operating material for areas with explosion hazards fulfill the requirements of IEC 60079-0, IEC 60079-7 for Increased Safety, and IEC 61241-0 and IEC 61241-1 for Protection by enclosure of group II. It is an electrical operating material made from aluminium die casting or, respectively, chilled casting alloy. Cover and bottom part are screwed together by means of captive lid screws from VA. AK 061 – AK 084 min. 2,0Nm max. 2,5Nm and AK 120 – AK 312 min. 3,0Nm – max. 3,5Nm. The sealing type is a key and slot system with a silicone sealing. For the internal installation there are fixing screw threads in the bottom ribs to which the carrying rails for clamps will be screw fastened. Fastening is also possible by inserting a mounting plate. Screw fastening channels outside the sealing space are provided for supporting the enclosure.

Technical data for enclosures

Enclosure dimensions	see type tag
Protection against contact, foreign particles, and water	IP66 i.a.w. IEC 60529
Operating temperature range	max: – 20 °C ... + 60 °C

Technical data for terminal enclosures

Rated voltage	max. 1000 V (depending on terminal type)
Cross section for connection	max. 240 mm ²
PE cross section	max. 120 mm ²
Protection against contact, foreign particles, and water	IP66 i.a.w. IEC 60529
Ambient temperature range	max : – 20 °C ... + 40 °C

Terminal Insertion

The maximum insertion into the distributing and dividing box, depending from the conductor cross section and the permissible permanent current can be taken from the diagrams below.

For the type of protection "e", increased safety, only such terminals will be used, for which an IECEX Certificate of Conformity has been issued by a recognized testing institution. The clearances and creepage distances of the build-in electrical equipment in type of explosion protection increased safety "e" shall satisfy the requirements of Clause 4.4 and Clause 4.5 (Table 1) of IEC 60079-7.

Connection of PE conductor

Per each inserted line, one PE conductor terminal is provided. The width of the PE conductor bus or brackets depends on the size of the terminal straps. As from 10 mm² onward a PE conductor terminal strip must be inserted, or respectively, a bracket clamp on a PE conductor bus. An external strap serving as output connection is screwed on by means of bolts. Internal connection facilities for earthing or bonding conductors shall satisfy the requirements of Clause 15 of IEC 60079-0.

Installation instructions

The degree of ingress protection of IP66 to IEC 60529 is only achieved if certified IP66 cable entries are used that that are suitable for the application and correctly installed. There are only cable entries used, for which an IECEX Certificate of Conformity has been issued by a recognized testing institution. There are the manufacturer's specifications to be considered.

Identification

The identification will be made in accordance with IEC 60079-0, IEC 60079-26 and IEC 61241-0. The type tag consists of a self-adhesive polyester foil. Areas for intrinsically safe power circuits will be identified separately with light blue colour. Covers on the enclosure enabling the access to live, not intrinsically safe circuitry, will be identified by a tag showing the text "Switch off supply before removing cover".



Marking Plate

Terminal Boxes Series aluKOM

Ex e II T6
Ex tD A21 IP66 T80 °C

IECEX KEM 08.0004



 Operating temperature range: -20 °C...+40°C
 Switch off before removing cover

ROLEC Ge hä use-Systeme GmbH 
 Kreuzbrä te 2, D-317 37 Rinteln 

Ex e ia IIC T6
Ex tD A21 IP66 T80 °C

IECEX KEM 08.0004



 Operating temperature range: -20 °C...+40°C
 Switch off before removing cover

ROLEC Ge hä use-Systeme GmbH 
 Kreuzbrä te 2, D-317 37 Rinteln 

Ex ia IIC T6
Ex tD A21 IP66 T80 °C

IECEX KEM 08.0004

 Operating temperature range: -20 °C...+40°C
 Switch off supply before removing cover



ROLEC Ge hä use-Systeme GmbH 
 Kreuzbrä te 2, D-317 37 Rinteln 

Enclosure Series aluKOM

Ex e II
Ex tD A21 IP66

IECEX KEM 08.0003 U

 Ambient temperature range: -20°C ...+60°C

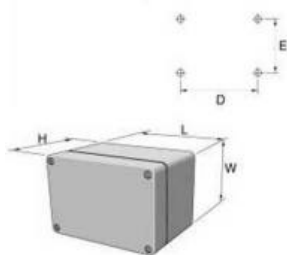
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 Kreuzbrä te 2, D-317 37 Rinteln 

Conductor and terminal insertion

AK-EX 061

Dimension / mm

L	58
W	64
H	34
D	46
E	36



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L	PG 7	1 1
	M16	PG9	1 1
		PG11	1
	M20	PG13,5	
		PG16	
	M25	PG21	
	M32	PG29	
	M40	PG36	
	M50	PG42	
	M63	PG48	
Nutzbare Tragschienenlänge 19mm		Usable length of mounting rail 19mm	

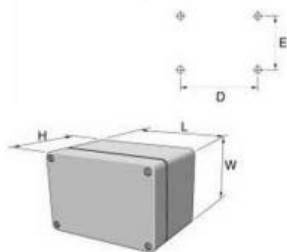
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors									
	Querschnitt in mm ² Cross section in sqmm									
	1,5	2,5	4	6	10	16	25	35	50	70
10	18									
16	6	12								
20	2	7								
22		3								
35										
50										
63										
80										
100										
125										
160										
*	3	3								

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 062

Dimension / mm

L	90
W	64
H	34
D	86
E	36



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L	PG 7	3 1
	M16	PG9	3 1
		PG11	2
	M20	PG13,5	
		PG16	
	M25	PG21	
	M32	PG29	
	M40	PG36	
	M50	PG42	
	M63	PG48	
Nutzbare Tragschienenlänge 70mm		Usable length of mounting rail 70mm	

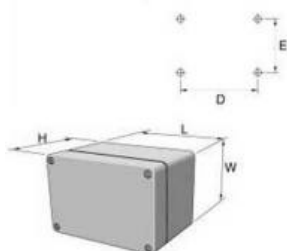
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors									
	Querschnitt in mm ² Cross section in sqmm									
	1,5	2,5	4	6	10	16	25	35	50	70
10	20									
16	7	13								
20	2	7								
22		3								
35										
50										
63										
80										
100										
125										
160										
*	6	6								

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 063

Dimension / mm

L	150
W	64
H	34
D	138
E	36



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L	PG 7	6 1
	M16	PG9	5 1
		PG11	4 1
	M20	PG13,5	
		PG16	
	M25	PG21	
	M32	PG29	
	M40	PG36	
	M50	PG42	
	M63	PG48	
Nutzbare Tragschienenlänge 95mm		Usable length of mounting rail 95mm	

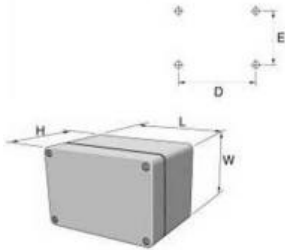
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors									
	Querschnitt in mm ² Cross section in sqmm									
	1,5	2,5	4	6	10	16	25	35	50	70
10	20									
16	7	13								
20	3	8								
22		3								
35										
50										
63										
80										
100										
125										
160										
*	10	10								

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 081

Dimension / mm

L 75
W 80
H 57
D 63
E 52



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L		
	PG 7	3	2
M16	PG9	3	2
	PG11	2	1
M20	PG13,5	1	1
	PG16	1	1
M25	PG21		
M32	PG29		
M40	PG36		
M50	PG42		
M63	PG48		
Nutzbare Tragschienen- länge 49mm	Usable length of mounting rail 49mm		

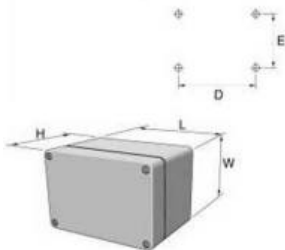
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors										
	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	27										
16	9	18									
20	3	10									
22		5									
35											
50											
63											
80											
100											
125											
160											
*	7	7									

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 082

Dimension / mm

L 125
W 80
H 57
D 113
E 52



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L		
	PG 7	6	2
M16	PG9	5	2
	PG11	4	1
M20	PG13,5	3	1
	PG16	3	1
M25	PG21		
M32	PG29		
M40	PG36		
M50	PG42		
M63	PG48		
Nutzbare Tragschienen- länge 99mm	Usable length of mounting rail 99mm		

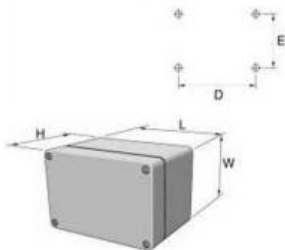
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors										
	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	29										
16	10	19	76								
20	4	11	22								
25			12								
35			3								
50											
63											
80											
100											
125											
160											
*	10	10	8								

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 083

Dimension / mm

L 175
W 80
H 57
D 163
E 52



Max. Kabelverschraubungen Max. Cable glands		L/L	W/W
W	L		
	L		
	PG 7	9	2
M16	PG9	8	2
	PG11	6	1
M20	PG13,5	5	1
	PG16	4	1
M25	PG21		
M32	PG29		
M40	PG36		
M50	PG42		
M63	PG48		
Nutzbare Tragschienen- länge 149mm	Usable length of mounting rail 149mm		

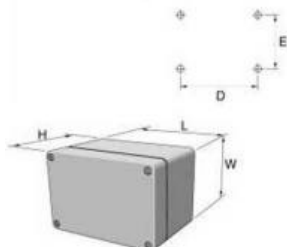
Strom in A Power in A	Max. Leiteranzahl Max. Number of conductors										
	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	29										
16	10	19	77								
20	4	11	22								
25			12								
35			3								
50											
63											
80											
100											
125											
160											
*	24	24	16								

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 084

Dimension / mm

L 250
W 80
H 57
D 238
E 52



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	W		
	L	W		
M16	PG 7	12	2	
	PG11	8	1	
M20	PG13,5	7	1	
	PG16	6	1	
M25	PG21			
M32	PG29			
M40	PG36			
M50	PG42			
M63	PG48			
Nutzbare Tragschienen- länge 224mm	Usable length of mounting rail 224mm			

Max. Leiteranzahl

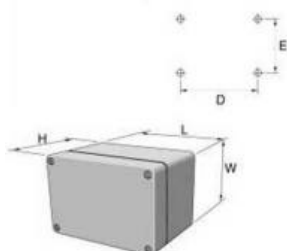
Max. Number of conductors

Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	29										
16	10	19	77								
20	4	11	22								
25			12								
35			3								
50											
63											
80											
100											
125											
160											
*	36	36	24								
* Max. montierbare Klemmenanzahl im Gehäuse * Max. number of terminals in the enclosure possible											

AK-EX 120

Dimension / mm

L 122
W 120
H 81
D 106
E 82



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	W		
	L	W		
M16	PG 7	8	6	
	PG9	6	4	
	PG11	6	3	
M20	PG13,5	5	3	
	PG16	3	2	
M25	PG21	2	1	
M32	PG29	1		
M40	PG36			
M50	PG42			
M63	PG48			
Nutzbare Tragschienen- länge 84mm	Usable length of mounting rail 84mm			

Max. Leiteranzahl

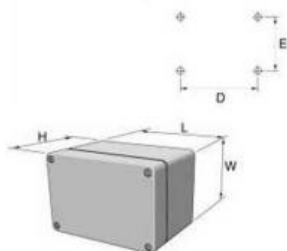
Max. Number of conductors

Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	40										
16	13	26	104								
20	5	15	30								
25			17	33							
35			5	12							
50											
63											
80											
100											
125											
160											
*	12	12	11	8							
* Max. montierbare Klemmenanzahl im Gehäuse * Max. number of terminals in the enclosure possible											

AK-EX 121

Dimension / mm

L 122
W 120
H 91
D 106
E 82



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	W		
	L	W		
M16	PG 7	8	6	
	PG9	6	4	
	PG11	6	3	
M20	PG13,5	5	3	
	PG16	3	2	
M25	PG21	2	1	
M32	PG29	1		
M40	PG36			
M50	PG42			
M63	PG48			
Nutzbare Tragschienen- länge 84mm	Usable length of mounting rail 84mm			

Max. Leiteranzahl

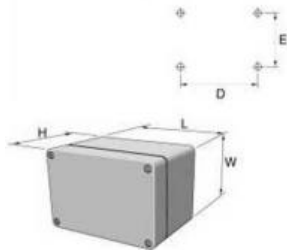
Max. Number of conductors

Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	43										
16	14	20	111								
20	6	16	32								
25			18	35							
35			5	13							
50				2							
63											
80											
100											
125											
160											
*	12	12	11	8							
* Max. montierbare Klemmenanzahl im Gehäuse * Max. number of terminals in the enclosure possible											

AK-EX 122

Dimension / mm

L	220
W	120
H	81
D	204
E	82



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	20	6
M16	PG9	15	4
	PG11	14	3
M20	PG13,5	11	3
	PG16	7	2
M25	PG21	4	1
M32	PG29	3	
M40	PG36		
M50	PG42		
M63	PG48		
Nutzbare Tragschienenlänge 182mm	Usable length of mounting rail 182mm		

Max. Leiteranzahl

Max. Number of conductors

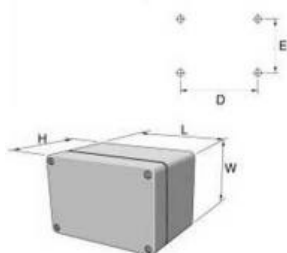
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	43										
16	14	28	112								
20	6	16	32								
25			18	35							
35			5	13	34						
50				2	11	28					
63					3	13	47				
80						5	14	52			
100							6	13			
125								5			
160											
*	31	31	27	20	10	8	-	-			

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 123

Dimension / mm

L	220
W	120
H	91
D	204
E	82



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	20	6
M16	PG9	15	4
	PG11	14	3
M20	PG13,5	11	3
	PG16	7	2
M25	PG21	4	1
M32	PG29	3	
M40	PG36		
M50	PG42		
M63	PG48		
Nutzbare Tragschienenlänge 182mm	Usable length of mounting rail 182mm		

Max. Leiteranzahl

Max. Number of conductors

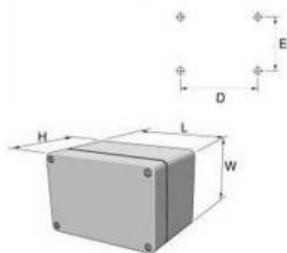
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	43										
16	15	28	112								
20	6	18	34								
25			19	37							
35			5	14	36						
50				2	12	30					
63					4	14	50				
80						5	15	56			
100							6	14			
125								6			
160											
*	31	31	27	20	10	8	-	-			

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 124

Dimension / mm

L	360
W	120
H	81
D	344
E	82



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	40	5
M16	PG9	30	3
	PG11	24	2
M20	PG13,5	22	2
	PG16	18	2
M25	PG21	10	1
M32	PG29	7	
M40	PG36	5	
M50	PG42		
M63	PG48		
Nutzbare Tragschienenlänge 322mm	Usable length of mounting rail 322mm		

Max. Leiteranzahl

Max. Number of conductors

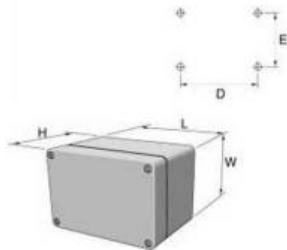
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	43										
16	15	29	113								
20	6	17	32								
25			18	35							
35			5	14	34						
50				2	11	28					
63					3	13					
80						5					
100											
125											
160											
*	60	60	60	37	20	16					

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 161

Dimension / mm

L 160
W 160
H 90
D 140
E 110



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	15	9
M16	PG9	14	8
	PG11	9	6
M20	PG13,5	8	6
	PG16	6	3
M25	PG21	2	2
M32	PG29	2	1
M40	PG36	1	
M50	PG42	1	
M63	PG48		
Nutzbare Tragschienenlänge 119mm	Usable length of mounting rail 119mm		

Max. Leiteranzahl

Max. Number of conductors

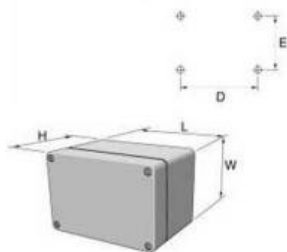
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	48										
16	16	32	125								
20	6	18	36								
25			20	39							
35			6	15	38						
50				2	12	31					
63					4	14					
80						5					
100											
125											
160											
*	20	20	16	13	10	8					

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 162

Dimension / mm

L 260
W 160
H 90
D 240
E 110



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	30	9
M16	PG9	27	8
	PG11	18	6
M20	PG13,5	15	6
	PG16	12	3
M25	PG21	4	2
M32	PG29	3	1
M40	PG36	3	
M50	PG42	1	
M63	PG48		
Nutzbare Tragschienenlänge 219mm	Usable length of mounting rail 219mm		

Max. Leiteranzahl

Max. Number of conductors

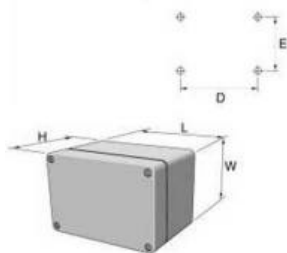
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	52										
16	18	34	135								
20	7	20	39								
25			22	42							
35			6	16	41						
50				2	13	34					
63					4	16					
80						6					
100											
125											
160											
*	39	39	30	24	20	16					

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 163

Dimension / mm

L 360
W 160
H 90
D 340
E 110



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	45	9
M16	PG9	32	8
	PG11	26	6
M20	PG13,5	21	6
	PG16	17	3
M25	PG21	7	2
M32	PG29	5	1
M40	PG36	4	
M50	PG42	2	
M63	PG48		
Nutzbare Tragschienenlänge 319mm	Usable length of mounting rail 319mm		

Max. Leiteranzahl

Max. Number of conductors

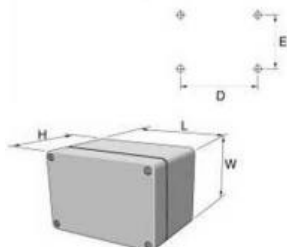
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	53										
16	18	35	138								
20	7	20	40								
25			22	43							
35			6	17	42						
50				2	13	35					
63					4	16					
80						6					
100											
125											
160											
*	58	58	50	37	30	24					

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 164

Dimension / mm

L 560
W 160
H 90
D 540
E 110



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	90	8
M16	PG9	60	8
	PG11	50	5
M20	PG13,5	40	4
	PG16	32	3
M25	PG21	28	2
M32	PG29	12	2
M40	PG36	8	
M50	PG42	4	
M63	PG48		
Nutzbare Tragschienenlänge 519mm	Usable length of mounting rail 519mm		

Max. Leiteranzahl

Max. Number of conductors

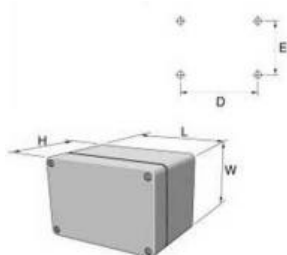
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	53										
16	18	35	138								
20	7	20	40								
25			22	43							
35			6	17	42						
50				2	13	35					
63					4	16					
80						6					
100											
125											
160											
*	97	97	84	61	50	41					

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 231

Dimension / mm

L 200
W 230
H 110
D 180
E 180



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	32	30
M16	PG9	26	21
	PG11	18	14
M20	PG13,5	15	14
	PG16	11	10
M25	PG21	6	5
M32	PG29	3	3
M40	PG36	2	2
M50	PG42	1	2
M63	PG48	1	1
Nutzbare Tragschienenlänge 159mm	Usable length of mounting rail 159mm		

Max. Leiteranzahl

Max. Number of conductors

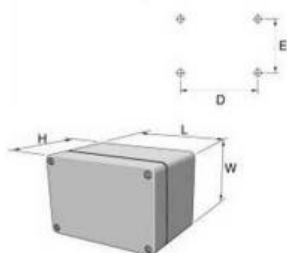
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	61										
16	21	41	159								
20	8	24	46								
25			26	50							
35			7	19	49						
50				2	16	40					
63					5	18	67				
80						7	21	75			
100							9	19			
125								8			
160											
*	56	56	44	34	13	11	9	9			

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 232

Dimension / mm

L 280
W 230
H 110
D 260
E 180



Max. Kabelverschraubungen
Max. Cable glands

L		L/L	W/W
W	W		
L	PG 7	48	30
M16	PG9	38	21
	PG11	27	14
M20	PG13,5	24	14
	PG16	17	10
M25	PG21	10	3
M32	PG29	4	2
M40	PG36	3	2
M50	PG42	2	1
M63	PG48	1	1
Nutzbare Tragschienenlänge 239mm	Usable length of mounting rail 239mm		

Max. Leiteranzahl

Max. Number of conductors

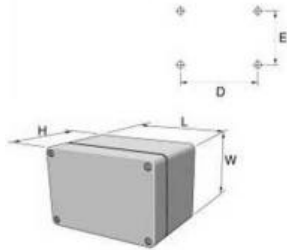
Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	67										
16	23	44	133								
20	9	26	50								
25			28	54							
35			8	21	53						
50				3	17	44					
63					5	20	72				
80						7	22	81			
100							9	21			
125								8			
160											
*	84	84	70	52	21	17	14	14			

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-EX 233

Dimension / mm

L 330
W 230
H 110
D 310
E 180



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	PG 7	70	22
	M16	PG9	45	18
		PG11	40	12
	M20	PG13,5	30	8
		PG16	24	6
	M25	PG21	16	3
	M32	PG29	10	2
	M40	PG36	4	2
	M50	PG42	2	1
	M63	PG48	2	1
Nutzbare Tragschienen- länge 289mm	Usable length of mounting rail 289mm			

Max. Leiteranzahl

Max. Number of conductors

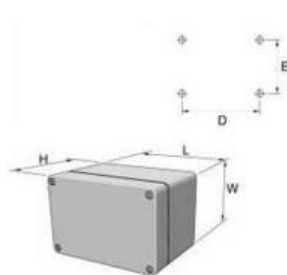
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	69										
16	23	45	178								
20	9	26	51								
25			29	56							
35			8	22	54						
50				3	18	45					
63					6	21	74				
80						8	23	83			
100							10	22			
125								9	22		
160									7		
*	104	104	86	66	26	22	17	17	9		

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-Ex 234

Dimension / mm

L 400
W 230
H 110
D 380
E 180



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	PG 7	72	30
	M16	PG9	62	21
		PG11	39	14
	M20	PG13,5	35	14
		PG16	26	10
	M25	PG21	16	5
	M32	PG29	8	3
	M40	PG36	5	2
	M50	PG42	3	1
	M63	PG48	1	1
Nutzbare Tragschienen- länge 359mm	Usable length of mounting rail 359mm			

Max. Leiteranzahl

Max. Number of conductors

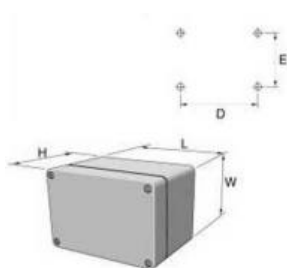
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	70										
16	24	47	182								
20	10	27	52								
25			30	57							
35			8	22	56						
50				3	18	46					
63					6	21	76				
80						8	24	85			
100							10	22			
125								9	22		
160									7	20	
200										7	
225										3	
250											
*	130	130	110	82	66	27	22	22	9	9	

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-Ex 235

Dimension / mm

L 600
W 230
H 110
D 580
E 180



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	L	PG 7	125	22
	M16	PG9	90	18
		PG11	64	12
	M20	PG13,5	56	8
		PG16	46	6
	M25	PG21	26	3
	M32	PG29	20	2
	M40	PG36	10	2
	M50	PG42	5	1
	M63	PG48	3	1
Nutzbare Tragschienen- länge 559mm	Usable length of mounting rail 559mm			

Max. Leiteranzahl

Max. Number of conductors

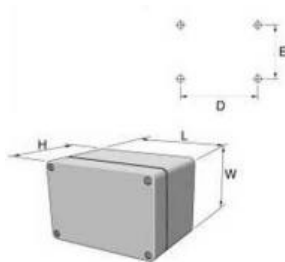
Strom in A Power in A	Querschnitt in mm ² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	72										
16	24	47	185								
20	10	28	54								
25			30	58							
35			9	23	57						
50				3	18	47					
63					6	22	78				
80						8	24	87			
100							10	23			
125								9	23		
160									8	20	
200										7	
225										2	
250											
*	208	208	174	130	53	44	35	35	18	9	

* Max. montierbare Klemmenanzahl im Gehäuse
* Max. number of terminals in the enclosure possible

AK-Ex 311

Dimension / mm

L	402,5
W	310
H	110
D	382
E	180



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	PG 7	72	33	
M16	PG9	62	28	
	PG11	39	24	
M20	PG13,5	35	20	
	PG16	26	14	
M25	PG21	16	6	
M32	PG29	8	4	
M40	PG36	5	3	
M50	PG42	3	2	
M63	PG48	2	1	
Nutzbare Tragschienen- länge 361mm	Usable length of mounting rail 361mm			

Max. Leiteranzahl

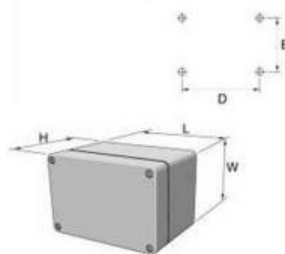
Max. Number of conductors

Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	80										
16	27	53	208								
20	11	31	60								
25			34	66							
35			10	25	64						
50				3	21	53					
63					7	24	87				
80						9	27	98			
100							11	25			
125								10	26		
160									9	23	
200										8	20
225										3	11
250											6
*	195	195	162	138	99	54	22	22	16	12	7
* Max. montierbare Klemmenanzahl im Gehäuse * Max. number of terminals in the enclosure possible											

AK-Ex 312

Dimension / mm

L	600
W	310
H	110
D	580
E	261



Max. Kabelverschraubungen
Max. Cable glands

W	L		L/L	W/W
	L	W		
	PG 7	140	33	
M16	PG9	90	28	
	PG11	70	24	
M20	PG13,5	52	20	
	PG16	46	14	
M25	PG21	30	6	
M32	PG29	20	4	
M40	PG36	10	3	
M50	PG42	5	2	
M63	PG48	4	1	
Nutzbare Tragschienen- länge 559mm	Usable length of mounting rail 559mm			

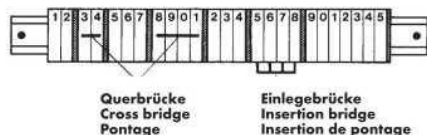
Max. Leiteranzahl

Max. Number of conductors

Strom in A Power in A	Querschnitt in mm² Cross section in sqmm										
	1,5	2,5	4	6	10	16	25	35	50	70	95
10	85										
16	29	56	220								
20	12	33	64								
25			36	69							
35			10	27	68						
50				4	22	56					
63					7	26	92				
80						10	26	103			
100							12	27			
125								11	27		
160									9	24	
200										8	21
225										3	12
250											6
*	309	309	261	136	106	88	35	35	25	12	7
* Max. montierbare Klemmenanzahl im Gehäuse * Max. number of terminals in the enclosure possible											

Brücken

Wenn Querbrücken eingesetzt werden, ist darauf zu achten, daß sich die Kriechstrecken und Sicherheitsabstände nicht verringern. Dies bedeutet, daß zwischen benachbarten Querbrücken eine Trennwand einzusetzen ist. Jede Klemmstelle darf nur mit einem Leiter belegt werden.



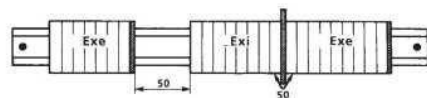
Bridges

When using cross-bridges leakage and safety distances must not be decreased. A wall has to be inserted between two cross-bridges. Each contact point may be used with one conductor.

Mischbestückung Ex e / Ex i Anschlußklemmen

Es ist möglich Ex e und Ex i Klemmen zusammen in einem Gehäuse zu verwenden, wenn:

- ein Mindestabstand von 50 mm zwischen „e“ und „i“ Klemmen,
- der Luftweg zwischen eigensicheren Stromkreis und metallischen Teilen mindestens 3 mm ist,
- der eigensichere Stromkreis gekennzeichnet ist, wenn farblich, dann hellblau.



Mixed insertion Ex e / Ex i connection terminals

It is possible to use Ex e and Ex i terminals together in one enclosure if:

- a minimum distance of 50 mm is kept between the e" and „i“ terminals,
- the air-route between the intrinsic circuit and metal parts is a minimum of 3 mm,
- the intrinsic circuit can be recognised by the blue colour.

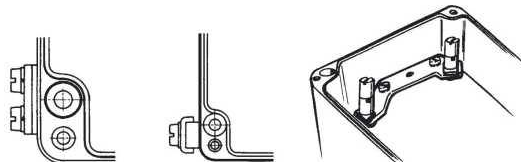
Schutzleiteranschluß

Im explosionsgefährdeten Bereich ist, gemäß den Vorschriften bei metallischen Gehäusen, eine Außen-erde vorgeschrieben.

ROLEC Aluminiumgehäuse haben standardmäßig eine Außen-erde. Alle ROLEC Gehäuse können mit Schutzleiter-Sammelschienen oder Schutzleiterhaltewinkel ausgerüstet werden.

Earth conductor connection

An external earth is prescribed for metal enclosures in explosive atmospheres, according to regulations. The ROLEC Aluminium enclosures have an external earth as standard. All ROLEC enclosures can be equipped with earth conductor bus bars or earth conductor holding brackets.



Certification body

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Manufacturer

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Ex-authorized person: Jürgen Müller

i.A.