



K-BUS

D A _V2.3

KA/D 0103.1

KA/D 0203.1

KA/D 0403.1

KA/D 04.T1.1

ADTV-04/16.2

KA/D 04.L1.1

ADLD-04/03.1

... ..

KNX/EIB



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		0~10V DC	0/1~10V DC	350mA LED
4A LED	4	2 5A	2 4	
				500W
		500W	400W	
0~10V DC		DC 0-10V	4	
	23	ECG	23 ECG/18W, 14 ECG/36W, 11	
ECG/58W	23 ECG-T5/24W		230VAC	
0/1~10V DC		DC 0/1-10V	4	
	23	ECG	23 ECG/18W, 14 ECG/36W, 11	
ECG/58W	23 ECG-T5/24W			
350mA LED	LED	LED	4	
2				
350mA/700mA	700mA/1050mA			
4A LED	LED	LED	4	
12V~24V DC	LED			

4

2 5A

4

2 2 5A

1000W

2 4

300W

35 DIN

1-100%

VD4

ETS

ETS3

1.1.

LED

KNX

230V AC

15

5

1.2. 0 10V DC

0~10V DC

DC 0-10V

0~10V

0~10V

LED

0~10V DC

4

23

ECG

23 ECG/18W, 14 ECG/36W, 11 ECG/58W

23 ECG-T5/24W

KNX

230V AC

15

5

KA/D 0403.1

1.3. 0/1 10V DC

0/1~10V DC

DC 0/1-10V

1~10V

0-10V

1~10V

0-10V

LED

0/1~10V DC

4

23

ECG

23 ECG/18W, 14 ECG/36W, 11 ECG/58W

23 ECG-T5/24W

KNX

15

/

5

ADTV-04/16.2

0-10V

1-10V

/

/

5

KA/D 04.L1.1

/

1.5. 4A LED

4A LED

LED

LED

4

LED

LED

KNX

12V~24V DC

LED

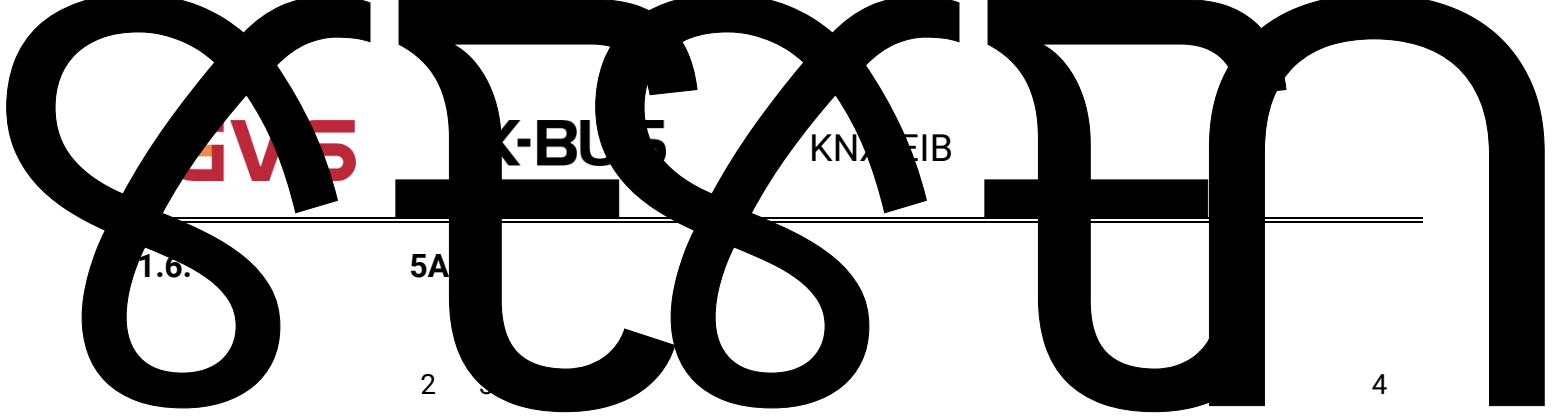
15

/

5

ADLD-04/03.1

/



AV5

K-BUS

KNX EIB

1.6.

5A

2

5

4

2

2

5A

1000W

LED

KNX

KNX

15

/

LED

5

KA/D 0403.1

4.9 5.2

/

1.7.

2 4

300W

LED

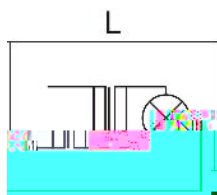
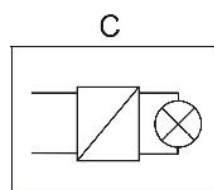
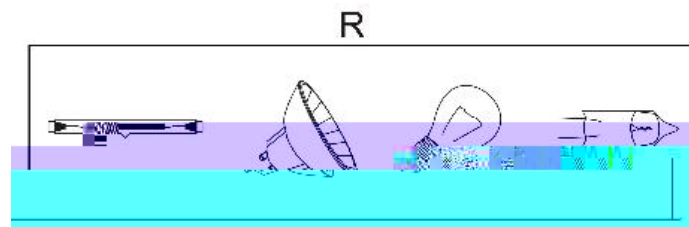
KNX

230V A

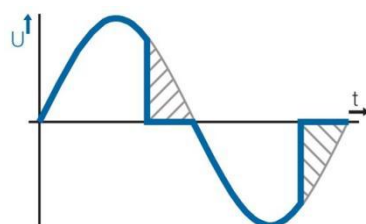
2.1. KA/D 03.1
2.1.1.

	21-30V DC	KNX
	230 V AC	50/60Hz
	4	/2 /1
KA/D	0403.1/0203.1/0103.1	
	230 V AC	50/60Hz
	4	400W
	1 2	500W
	5W	
KNX	KNX	
	2	
	2	L N
LED		
LED		
IP 20	EN 60 529	
	-5 °C ... + 45 °C	
	-25 °C ... + 55 °C	
	-25 °C ... + 70 °C	
	<93%,	
35mm DIN		
90Ö72Ö64		
90Ö144Ö64 mm		
90Ö216Ö64 mm		
CE	EMC	
EIB/KNX		
0.3		
0.5kg		
0.75kg		

2.1.2.



2.1.3.



2.2. 0 10V DC
KA/D 04.T1.1
2.2.1.

21-30V DC		KNX			
100~240V AC					
/					
0~10V DC max.100mA					
16A /250V AC				4A	
KNX	KNX				
	2		L	N	
	13	1	4	1~10V	4
		1~10V	8	4	
LED					
LED					
-5 C ... + 45 C					
- 25 °C ... + 55 °C					
-25 °C ... + 70 °C					
<93%,					
IP 20 EN 60 529					
35					
90×143×60 mm					
0.5					

2.3. 0/1 10V DC
ADTV-04/16.2
2.3.1.

21-30V DC		KNX			
/					
1~10V DC		max.100mA			
16A /250V AC		10A/250V			
140µF					
KNX	KNX				
	16	8	4	1~10V	1~10V
	8	4			
LED					
LED					
-5 C ... + 45 C					
- 25 °C ... + 55 °C					
-25 °C ... + 70 °C					
<93%,					
IP 20 EN 60 529					
35					
90×144×64 mm					
CE	EMC				
EIB/KNX					
0.4					

LED		LED	350mA	LED
		350mA	LED	
		LED		
IP 20		EN 60 529		
-5 °C ... + 45 °C				
- 25 °C ... + 55 °C				
- 25 °C ... + 70 °C				
<93%,				
35mm DIN				
/	90 72 64.1	/ 0.3 KG		
CE	EMC			
EIB/KNX				

2.5. 4A LED

ADLD-04/03.1

2.5.1.

		21-30V DC	KNX	
		12-24 V DC		
		4		
		4A		
		12-24V DC		
KNX		KNX		
		6	3	3
		12	8	4
LED				
LED				
LED				
LED				
/				
OT. LED		>70°C		
OV. LED		>26V DC		
IP 20		EN 60 529		
-5 C ... + 45 C				
- 25 °C ... + 55 °C				
- 25 °C ... + 70 °C				
<93%,				
35mm DIN				
90 72 64.1				
0.3kg				
CE		EMC		
EIB/KNX				

2.6. KA/D 0400.1 5A ADDS-02/05.1

2.6.1. KA/D 0400.1

21-30V DC KNX	
KNX	<12mA
KNX	<360mW
	100-240V AC
	<2.5W
4	
KNX	(/)
	/
LED	
LED	
LED	LED
	LED
	LED
	/
5 ... + 45	
	-25°C ... + 55°C
	- 25°C ... + 70°C
<93%,	
DIN	35mm
90 36 63.5	
0.2kg	

2.6.2.

ADDS-02/05.1

230 V AC 50/60H			
2			
1000W			
230V AC 50/60Hz ()			
5W			
(/)			
LED	LED		
	A B		
	C D		
LED	LED	75°C	
	1.5	A B	C D
5 ... + 45			
-25°C ... + 55°C			
-25°C ... + 70°C			
<93%,			
DIN	35mm		
90 144 64			
0.5kg			

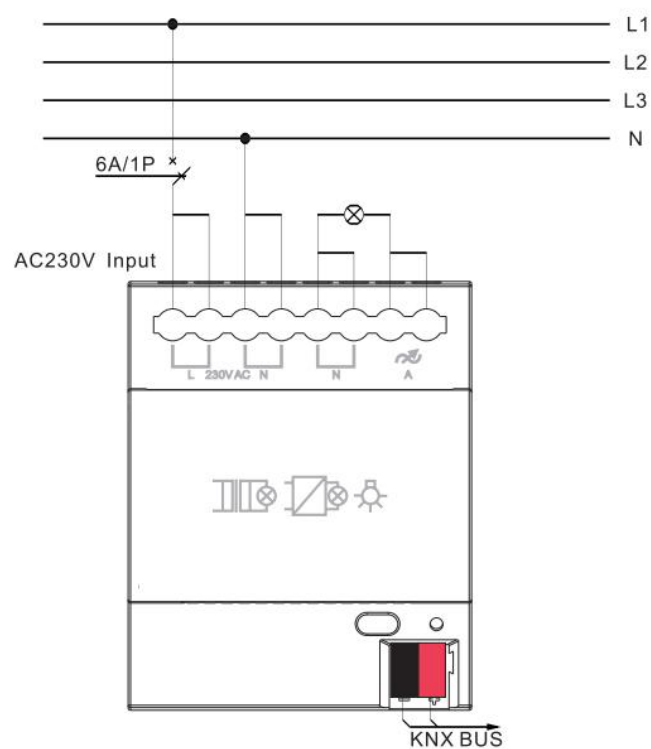
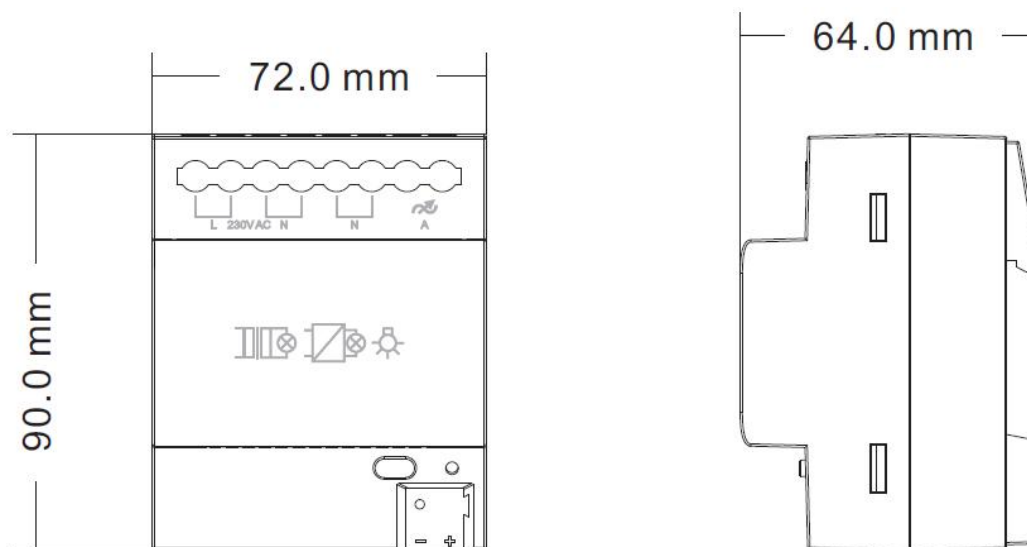
2.7. KA/D 15.S.1

2.7.1.

	21-30V DC	KNX
	230 V AC	50Hz
	4	/2
KA/D	0415.S.1/0215.S.1	
	230 V AC	50Hz
	300W (	)
	200W (LED)	
KNX	KNX	
	0.2–6.0mm ²	
	0.2–4mm ²	
LED		
LED		
LED		
IP 20	EN 60 529	
	-5 C ... + 45 C	
	-25 °C ... + 55 °C	
	-25 °C ... + 70 °C	
	<93%,	
	35mm DIN	
/	90 144 64	/ 0.5KG
	90 x 216 x 64 mm	/ 0.7KG

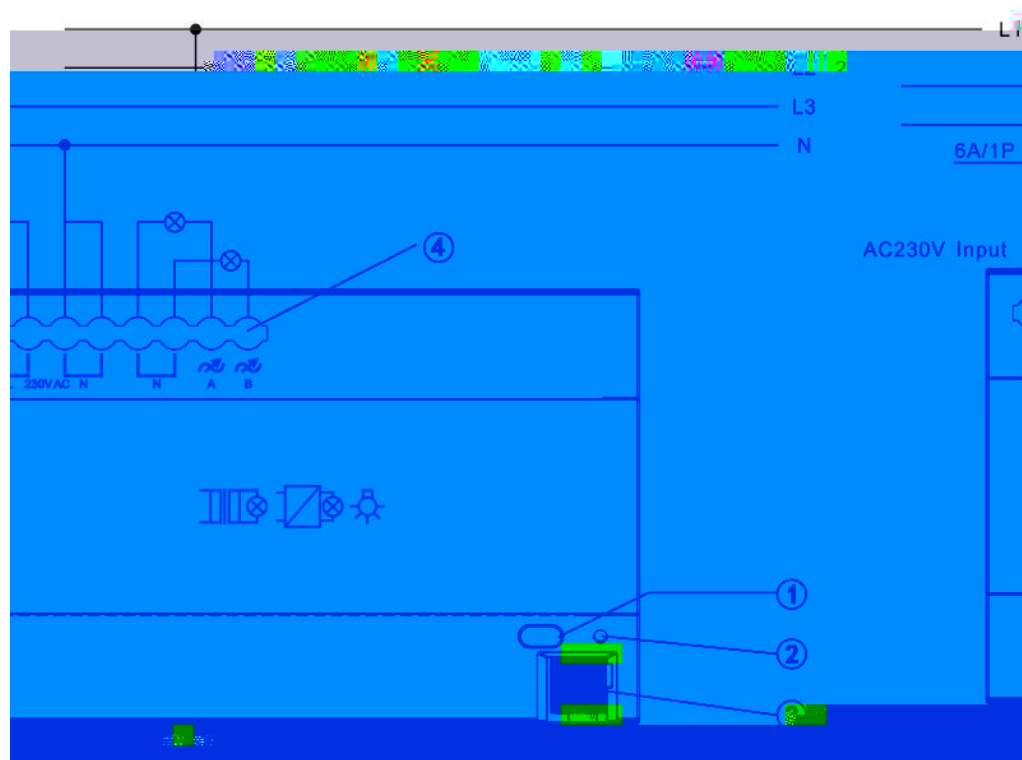
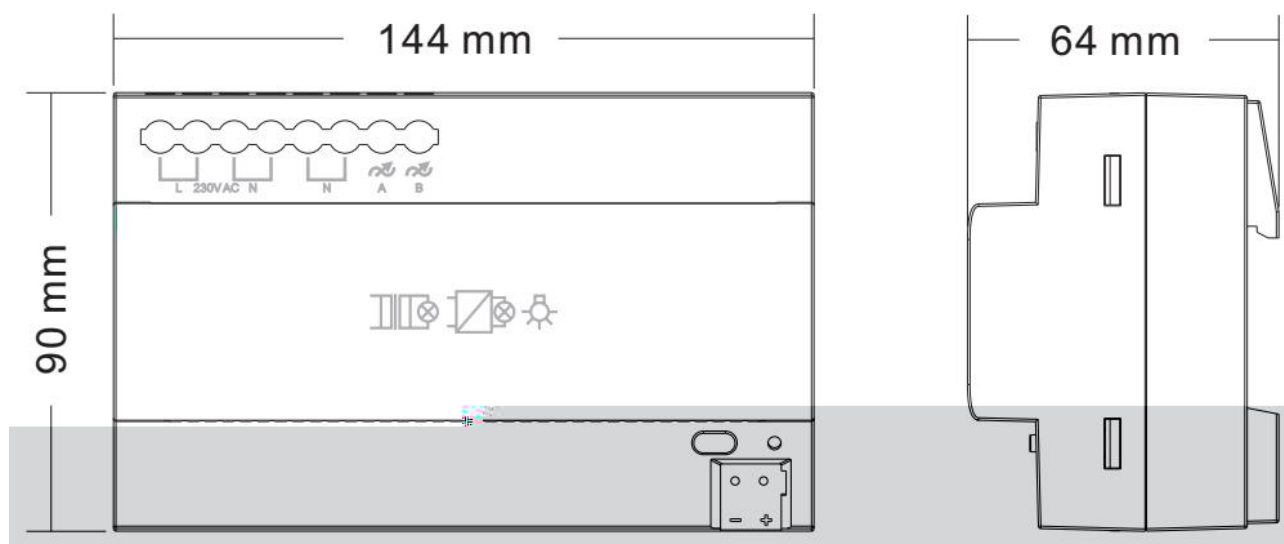
3.1.

3.1.1. KA/D 0103.1



3.1.2.

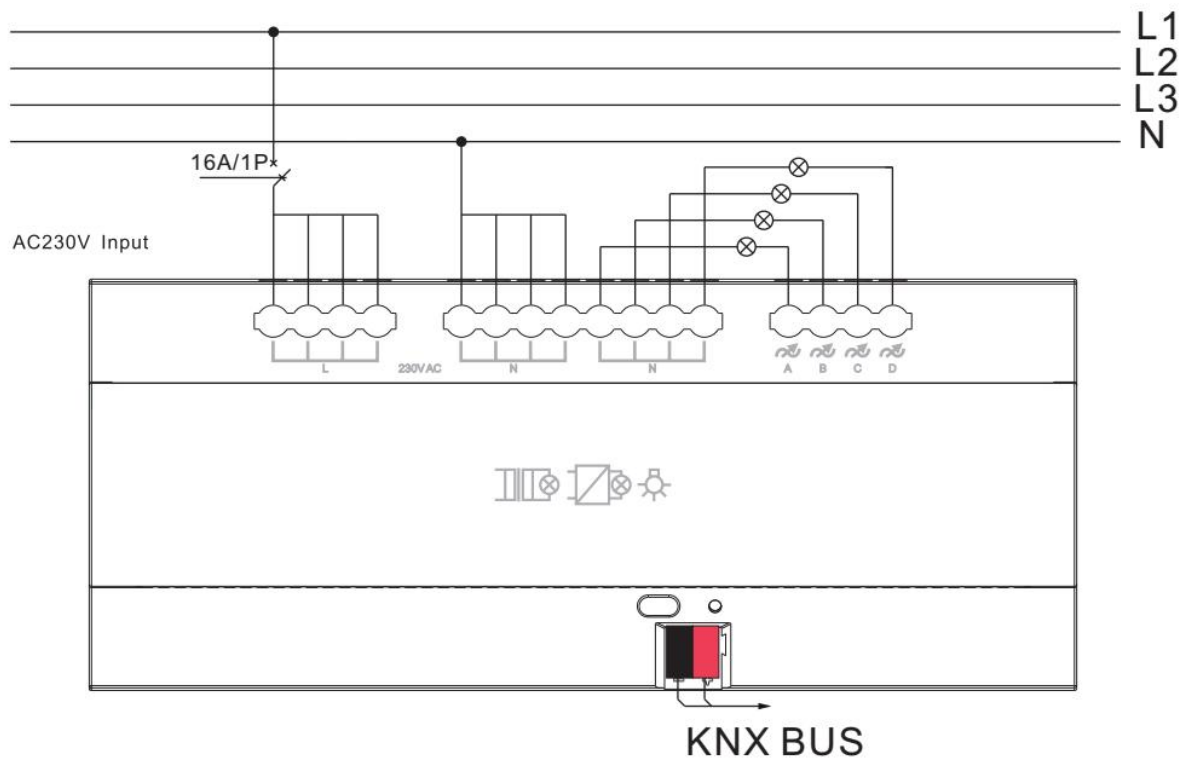
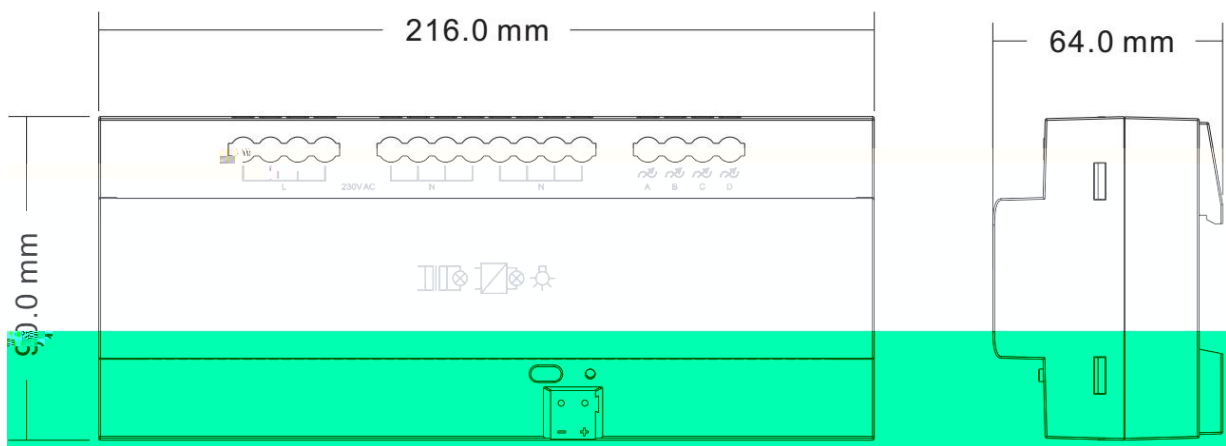
KA/D 0203.1



LED
KNX

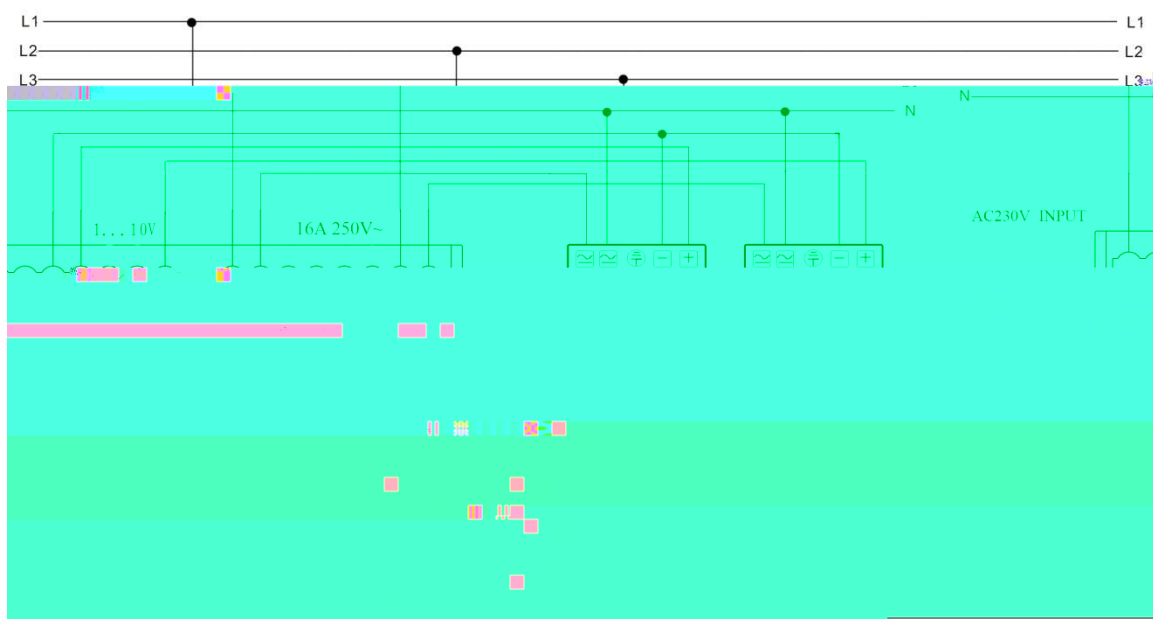
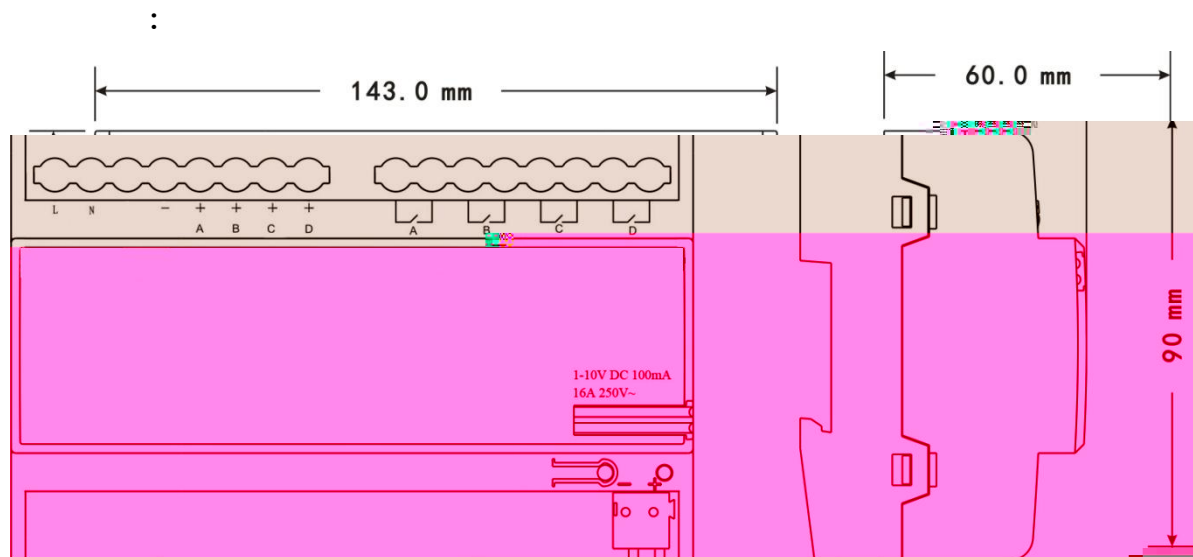
LED

3.1.3. KA/D 0403.1



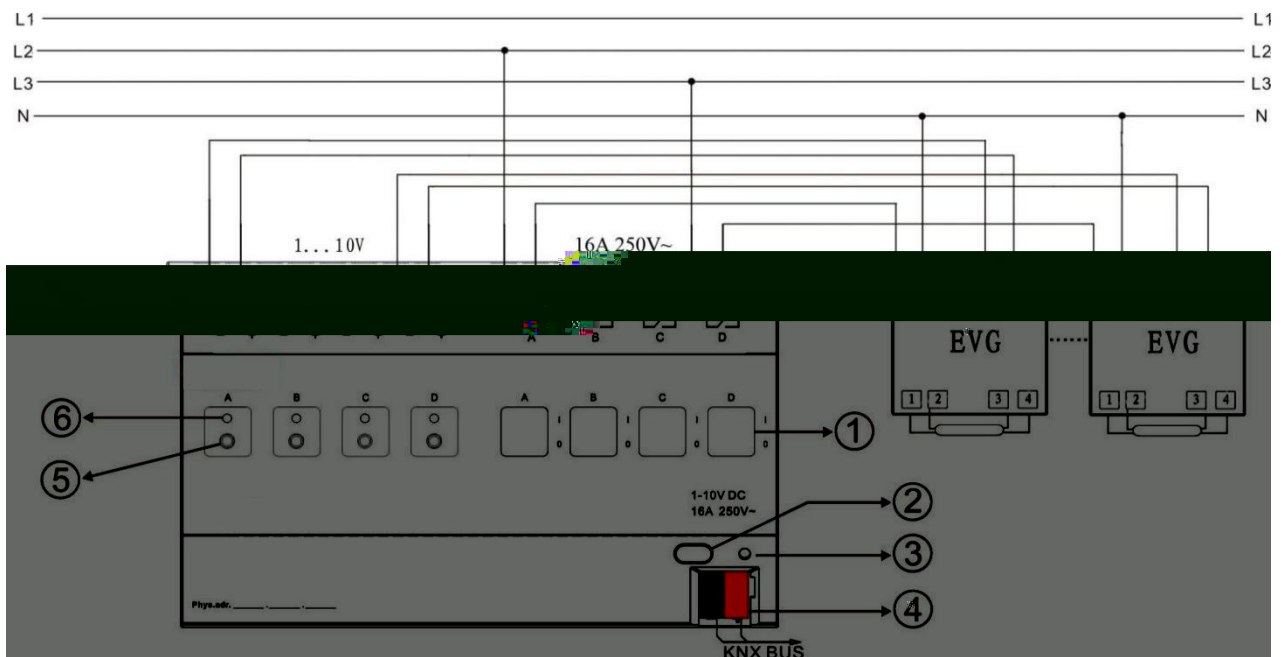
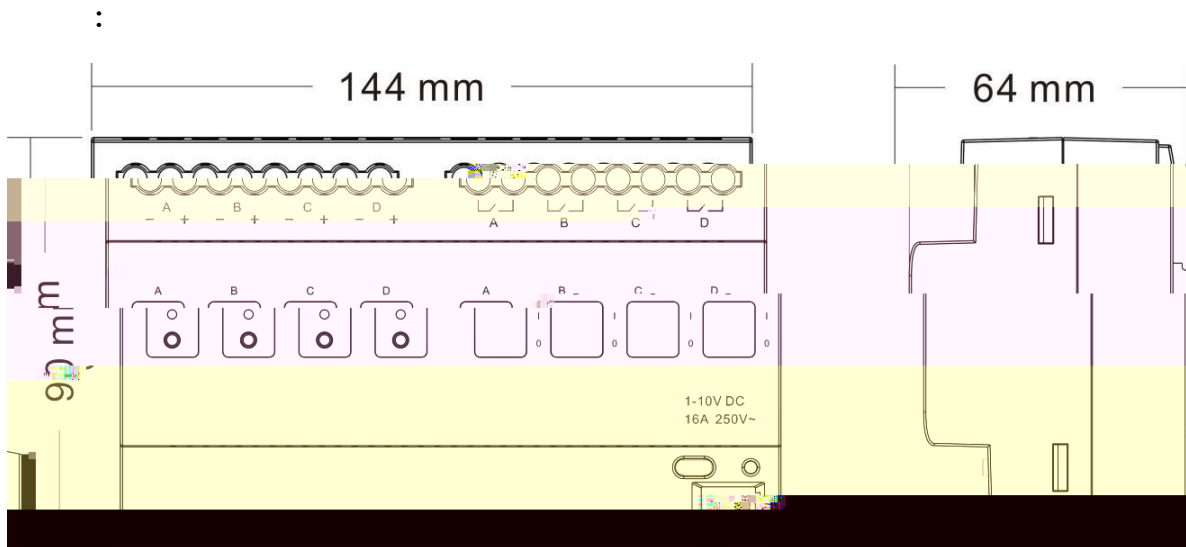
3.2. 0 10V DC

KA/D 04.T1.1



3.3. 0/1 10V DC

ADTV-04/16.2



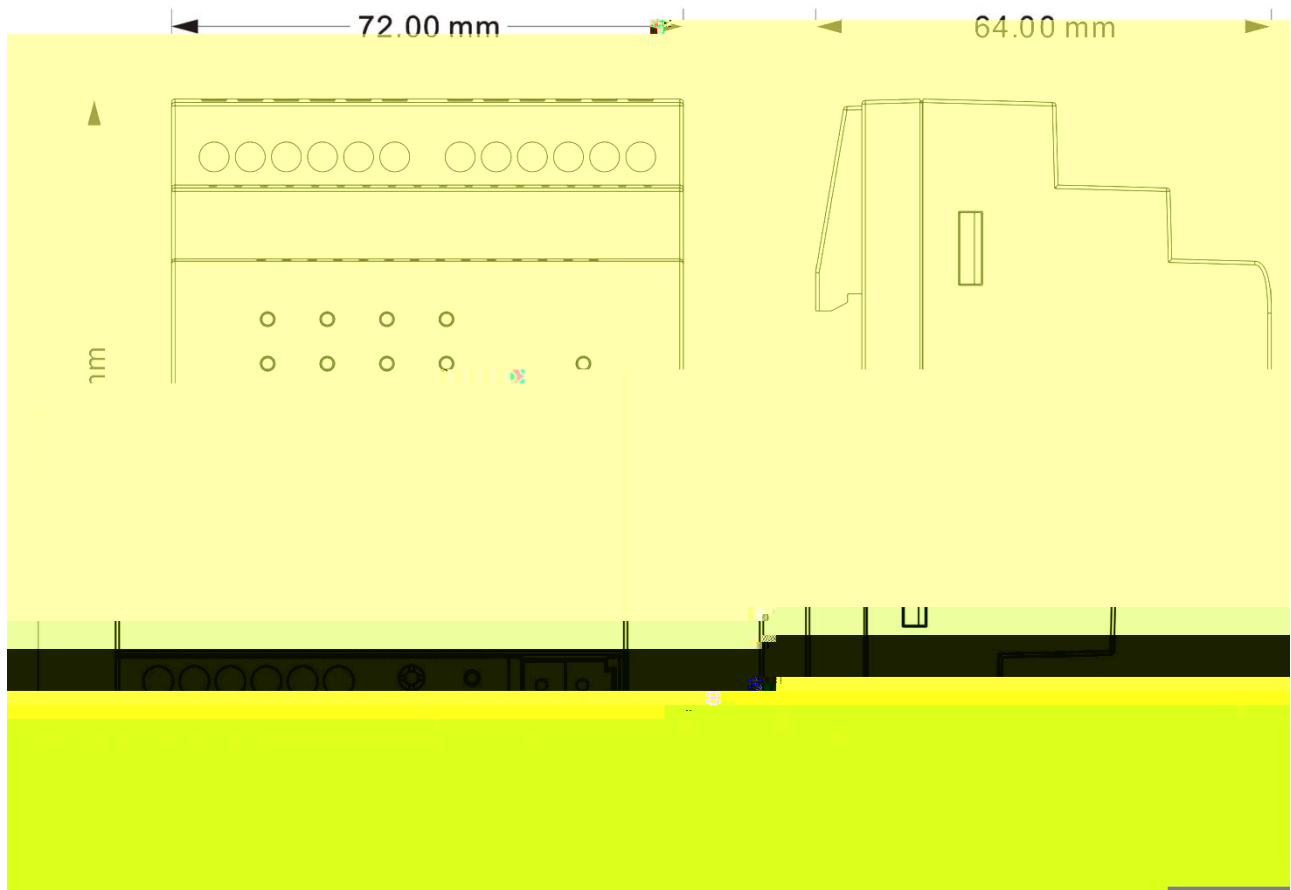
LED LED

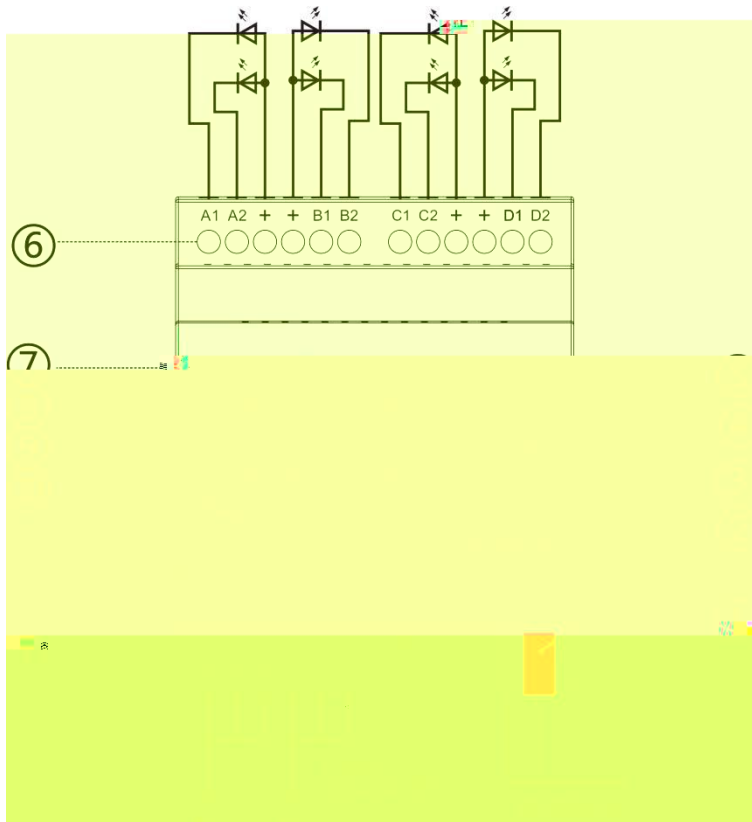
KNX

/

3.4. 350 A LED KA/D 04.L1.1

:





KEY 5

LED 5

LED

LED

LED 1~LED 4

/

KEY 1~KEY 4

12~48V

DC

KNX

LED

LED

350mA

LED

LED

LED

350mA LED

350mA

LED

LED

LED

350mA LED

□

2

	350 A	700 A	1050 A
A1 A2	KEY5 LED5 KEY1 LED1	KEY5 LED5 KEY1 LED1 KEY5 LED5 KEY1 LED1	KEY5 LED5 KEY1 LED1
B1 B2	KEY5 LED5 KEY2 LED2	KEY5 LED5 KEY2 LED2 KEY5 LED5 KEY2 LED2	KEY5 LED5 KEY1 LED1
C1 C2	KEY5 LED5 KEY3 LED3	KEY5 LED5 KEY3 LED3 KEY5 LED5 KEY3 LED3	KEY5 LED5 KEY1 LED1
D1 D2	KEY5 LED5 KEY4 LED4	KEY5 LED5 KEY4 LED4 KEY5 LED5 KEY4 LED4	KEY5 LED5 KEY1 LED1

350mA LED

LED

LED

75

LED

90

1. 1A 2

2. 700mA 4

3. 350mA 8

4. 1 1A 2 700mA

5. 1 700mA 4 350mA

1 1A 2 700mA

2 700mA 6 350mA 2

350mA 1A A1,A2

LED

LED

LED

LED

3 4A 4B D

KNX

12-24V DC

LED

LED

LED

LED

>4A LED ;

>5A LED

>26V DC LED ;

>30V DC LED

/

>70°C LED

0.5°C

5%

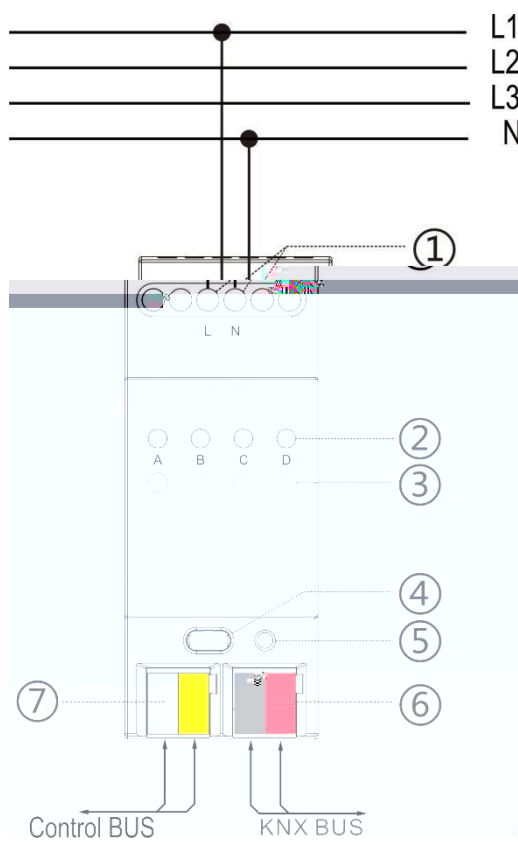
12-24V DC

3.6.

KA/D 0400.1

:





LED

LED

LED

/

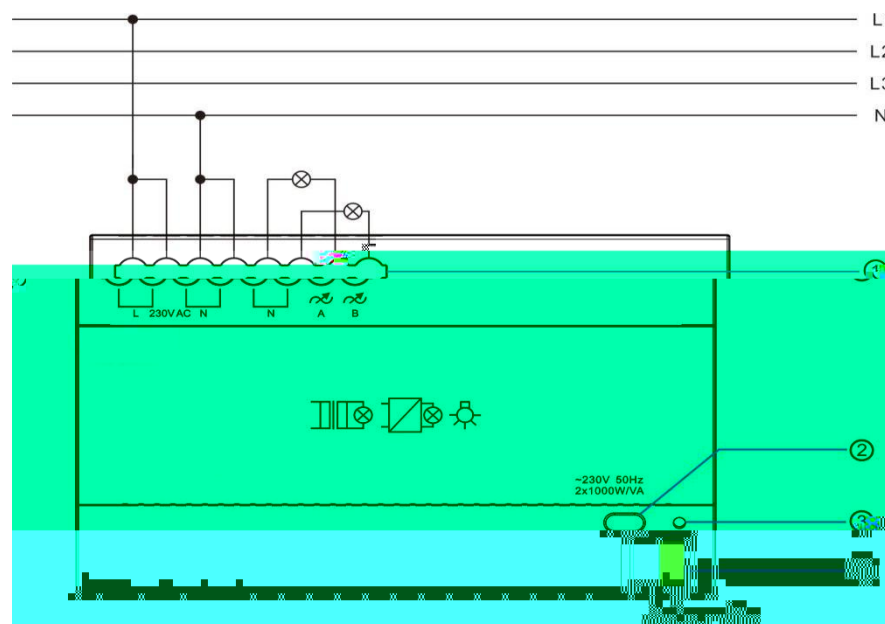
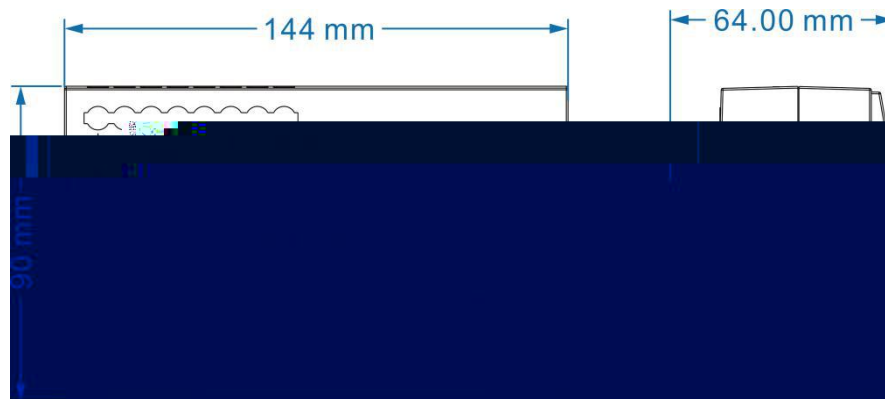
LED

LED

KNX

3.7. ADDS-02/05.1

:



1.5

A B

C D

LED

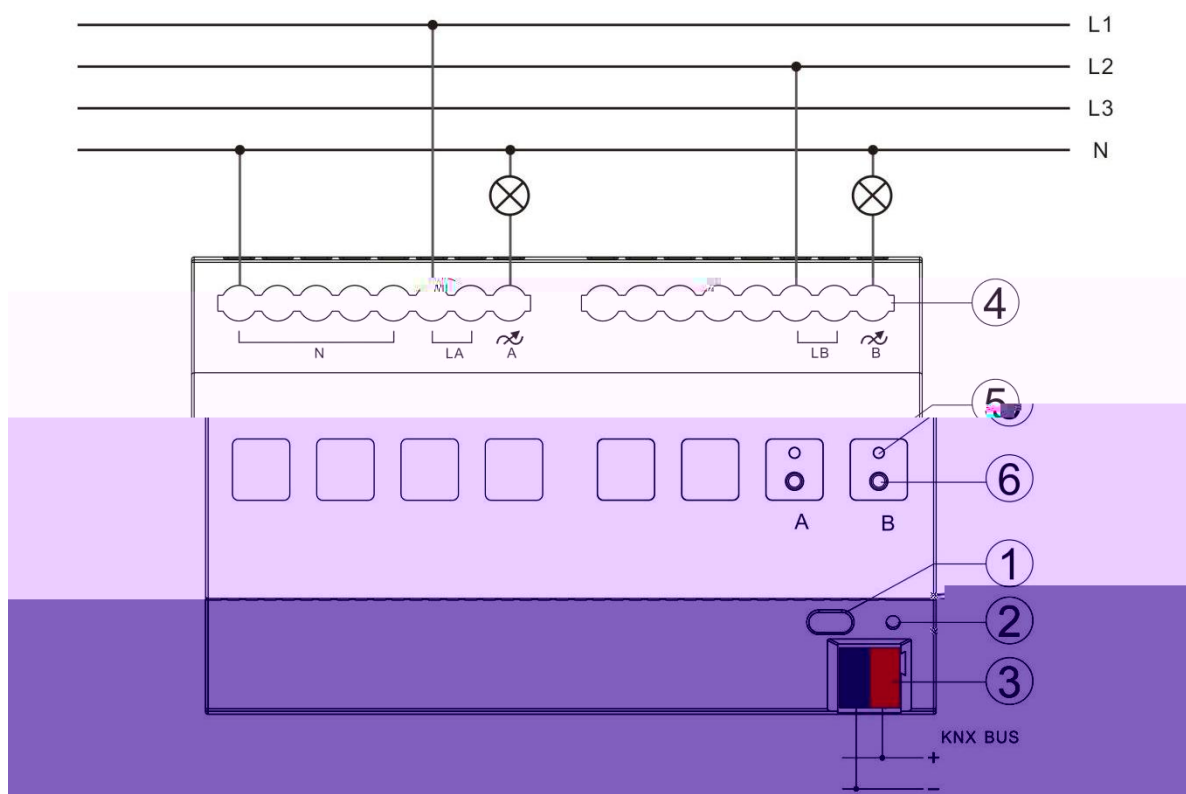
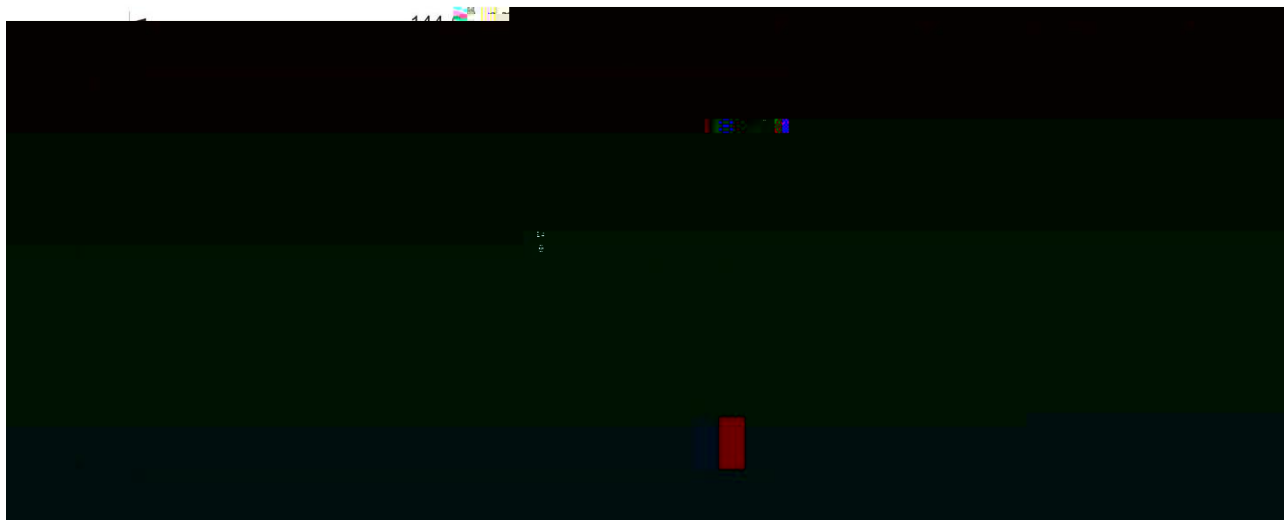
A B

C D

Control

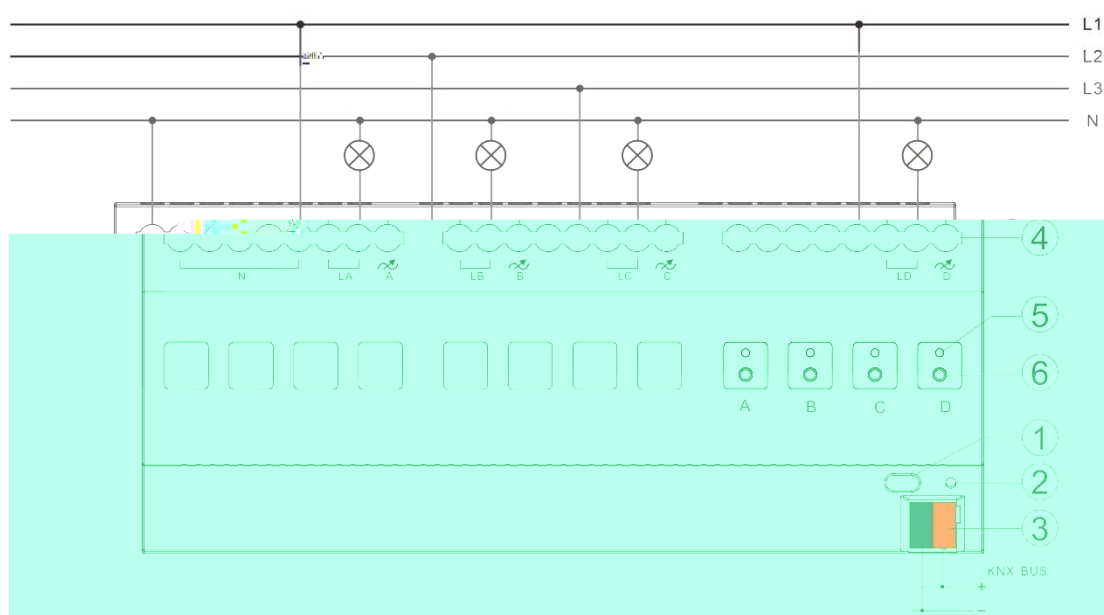
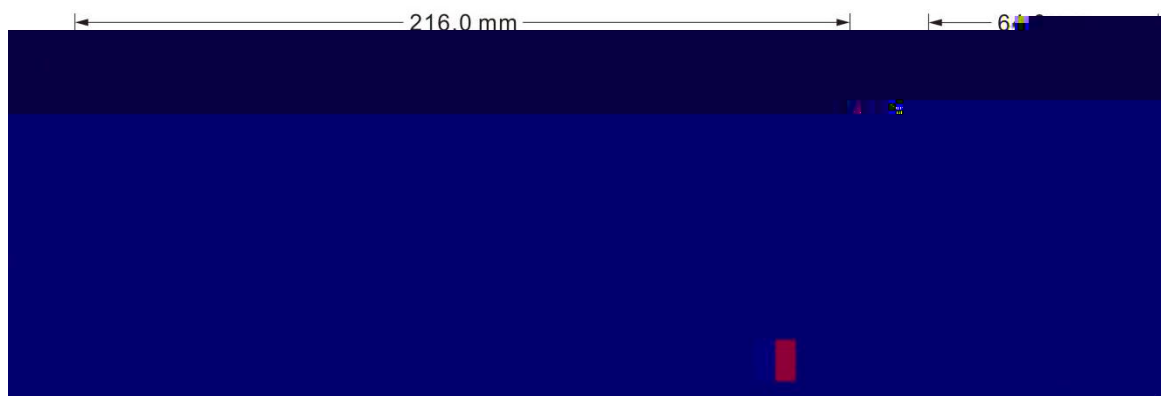
3.8.

3.8.1. KA/D 0215.S.1



3.8.2.

KA/D 0415.S.1



LED

LED

KNX

--

--

(5s) 1 -- 2

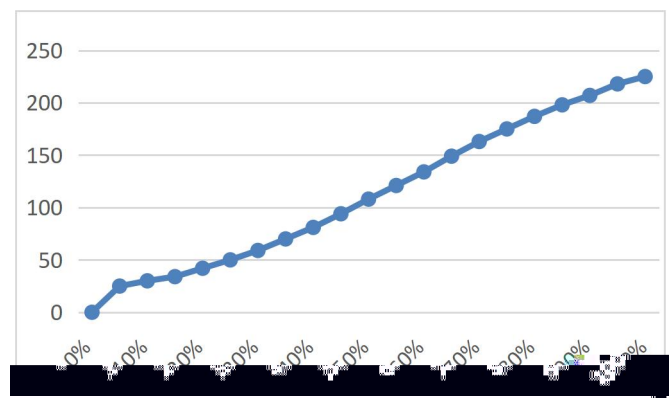
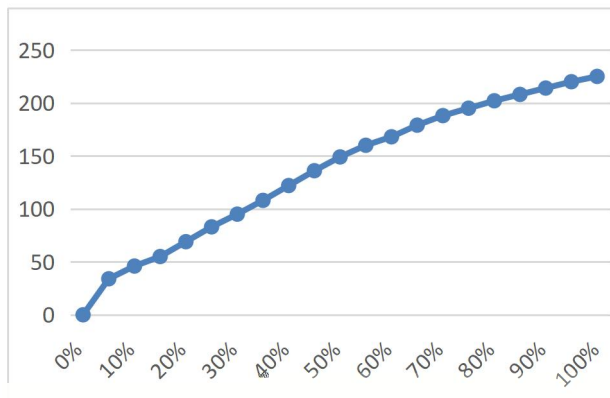
-1.5

3 -2

4 -2.5

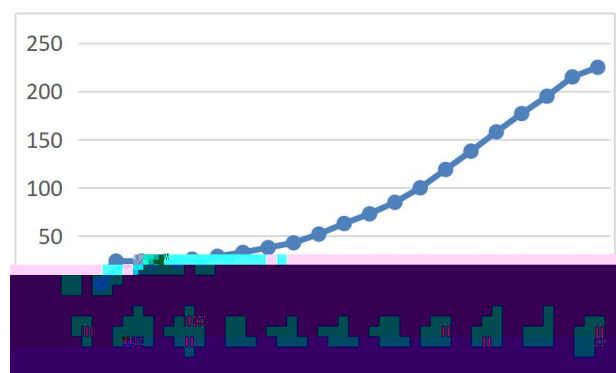
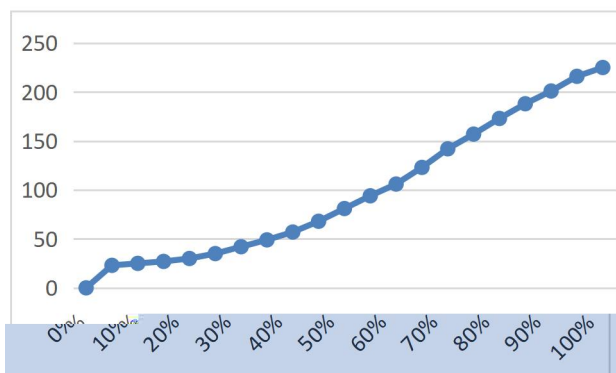
/

220VAC 10W



1

2 1.5



3 2

4 2.5

4.1.

1bit

1% 100%

4.2.

4

0

4bit

1

0

1 7

0 8

9 15

	0	1	2	3	4	5	6	7
	/	255	128	64	32	16	8	4

	8	9	10	11	12	13	14	15
	/	255	128	64	32	16	8	4

4.3.

8

0 255

0

0

0

4.4.

1

4.5.

8

15

1 15

1

4.6.

1bit

1bit

2

4.7.

20%

20%

1bit

1

1

20%

0

0

20%

1

0

20%

0

(1 0)

4.8.

□

5 4A LED

	B 0	B 1	B 2	B 3	B 4	B 5
	A	B	C	D		
					>26V DC	>70°C

6

	B 0	B 1	B 2	B 3	B 4	B 5
	A	B	C	D		
	>75°C	>75°C	>75°C	>75°C		

“0”

“1”

70

“2”

80

4.10.

1

ETS**5.1.**

N ()

S

5.2.

D

B

Device general	Telegram rate	No limit
CH A general	Error report	☒ Disable ☐ Enable
CH B general	Send object "In operation"	no

5.1 "Device general"

T

N

D 100

D 200

D 700

No limit

E

,1byte

D

E

"Disable"

"Enable"

			1min	70	1min
	30%	60	1min		50%
90	1min				
	350mA LED		75	LED	
	90				
	350 A LED				
4A LED		70	1	LED	5%
		80			

0

0/1-10V DC

0-10V

1-10V

S

I

"1" "0"

N

S

0

S

1

"No"

"Send value "0" cyclically"

"Send value "1" cyclically"

S

[1 65535]

1 ..65535

5.3. CH X G B

"CH X active" 5.2 X

"CH X" "X"

Device general	Channel function	☐ Activated ☒ Deactive
CH A general		
CH B general		

5.2 "CH X general"

C

A

D

"Activated" X , 5.3

"Deactive"

Device general	Channel function	☒ Activated ☐ Deactive
CH A general	Staircase lighting	☐ Activated ☒ Deactive
A:dimming general	Brightness value OBJ transmit after dimming	☒ Nothing ☐ Transmit new brightness
A:dimming	Switch Status report	☒ Nothing ☐ It's new status

5.3 "CH X general"

S

A

D

"Activated" X "Deactive"

B

OBJ

N

T

"Nothin

KNX/EIB

"last brightness " switch

switch

switch

128

switch

P

(1% 100%)

"switch"

1% 100%

"switch"

D

S

"Dimming on"

"switch"

"time duration of dimming time=entry*2"

2

"Switch on softly"

"switch"

4s

"brightness"

D

S

"Dimming on"

"brightness"

"time duration of dimming time=entry*2"

2

"switch on softly"

"brightness"

4s

S

-

"switch"

D

S

S

"Dimming off"

"Switch"

"Time duration of dimming time=entry*2"

2

"Switch off softly"

"Switch"

4s

"Switch off instantly"

0

A

nj

5.4.2. X: B

Device general	Relative dimming	
CH A general	Low dimming threshold 1~127(0.4%~49.9%)	1
A:dimming general	Upper dimming threshold 128~255 (50.2%~100%)	255
A:dimming	If dimming down and value <= low dimming threshold output switch	☐ Off ☒ To low threshold value
A:scene page	Output switch on after receipt of dimming up telegram	No ☐ Yes ☐
A: preset	Brightness value	
CH A: dimming general	Low dimming threshold 1~127(0.4%~49.9%)	1
	Upper dimming threshold 128~255(50.2%~100%)	255
	If output on: receipt of Brightness value = 0 output switch	☐ Off ☒ To low threshold value
	On receipt Brightness Value>=1 output switch on	No ☐ Yes ☐

5.5 “X: dimming”

CH X dimming”

5.5

brightness

brightness

Relative dimming

brightness value()

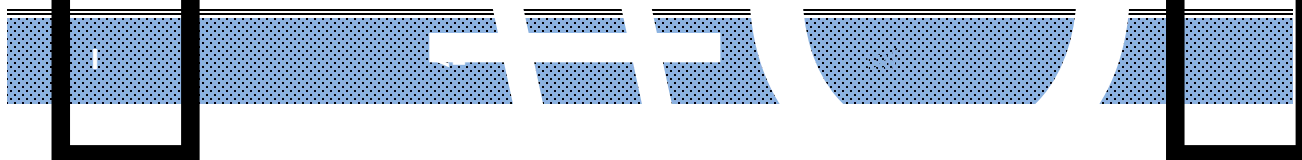
R

Figure 1: Comparison of the number of nodes in the network. The figure consists of two horizontal bar charts. The top chart shows the number of nodes in the network for the 'U' (Univariate) model, with a value of 1,127 (0.4% of 49.9%). The bottom chart shows the number of nodes in the network for the 'U' (Univariate) model, with a value of 128,255 (50.2% of 100%).

GVS

K-bus

KNX



O

T

50

"Off"

50

"To low threshold

value"

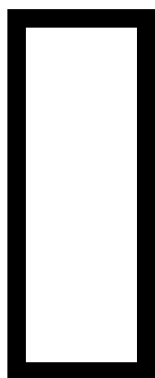
50

"Off"

"To low threshold

value"

□ □ □ □ □ □



□

1 127 0.4% 49.9%)

1~127

0

50

200

30

50

60

50

60

100

30

100

50

50

128 255 50.2% 100%)

128~255

50

200

200

200

I

:

=0

0

O

T

"Off"

0

0

"To low threshold value"

0

0

>=1

0

brightness

N

Y

"No"

0

100

0

"Yes"

1

5.4.3.

X:

B

Device general	Scene select function is	☐ Disable ☒ Enable
CH A general	Scene select	1st Scene
A:dimming general	Reaction on receipt scene 1	☒ Dimming on ☐ Switch on softly
A:dimming	Scene 1 duration (Time = entry *2S)	1
A:scene page	Scene 1 brightness value(0%~100%)	100
A: preset	Assignment to Scene number 1.....64	not assignment

5.6 "X: scene page"

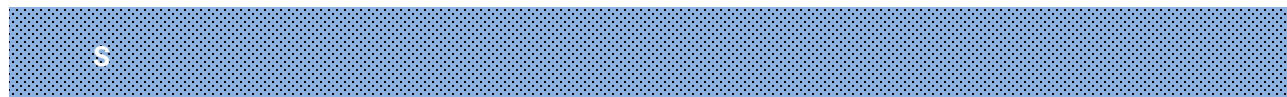
"CH X scene page"

5.6

1~15

15

15



E

D

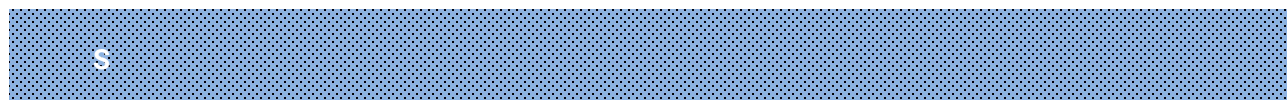
"Enable"

X

,

5.6

"Disable"



S 1

S 2

S 15

15

R

Y

Y

1~15

Y

D

S

"Dimming on"

"Scene Y duration time=entry*2 S "

2

"Switch on softly"

4s

S

Y

=

*2 S

2

255 s

S

Y

0% 100%

0% 100%

A

S

1...64

"Scene/save X"

N

A

1

A

2

A

64

1 64

5.4.4.

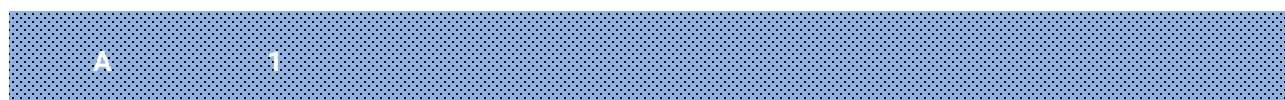
X:

B

Device general	Active preset 1 via bus telegram	☒ Activated ☐ Deactivated
CH A general	Brightness value is	☒ Dimming on ☐ Switch on softly
A:dimming general	Brightness value at obj=0 (1%~100%)	100
A:dimming	Brightness value at obj=1 (1%~100%)	100
A:scene page	Preset 1 can be set via the bus	☒ Disable ☐ Enable
A: preset	Active preset 2 via bus telegram	☐ Activated ☒ Deactivated

5.7 "X: preset"

"X preset" 5.7 2 preset 1
 preset 2 (X preset 1)



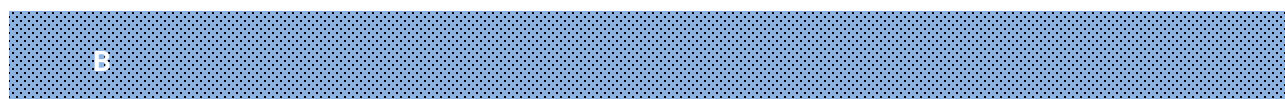
preset 1,

A

D

"Deactivated" preset1

"Activated" preset1,



"preset 1"

"X preset 1" 1bit

"0" "1"

D

S

"Dimming on"

"X preset 1"

"Time duration of dimming Time

=entry"

2;

"switching on softly"

"X preset1"

4s

B

=0(1% 100%)

"X preset 1"

"0"

1 100%

B

=1(1% 100%)

"X preset 1"

"1"

1 100%

P

1

"Enable"

"Set preset 1"

"Set preset 1"

"0"

"brightness value at obj=0"

"1"

"brightness value at obj=1"

E

D

5.5.

5.8

Device general	Duration of staircase lighting: Base	1.0s
CH A general	Duration of staircase lighting:Factor Factor(1~127) Duration = Base*Factor	1
CH B general	Brightness value for staircase lighting (20%~100%)	100
CH C general	Staircase lighting after bus voltage recovery	☐ Switch off ☒ Switch on
CH D general	Staircase value at permanent-on (20%~100%)	100
CH E general	On reception switch (BJ) = 0 switch off enable	☐ Disable ☒ Enable

5.8 "CH X staircase lighting"

D	:B
---	----

base 1.0 / 2.1 / / 1.1 / / 1.2

D	:F
---	----

factor 1 127

"switch"

duration=base*factor

20%

T	20% (D	-E	*2)
---	--------	----	-----

2s

255s

20%

20s,

100%

20%

100-20 %*20s=16s

B	(20% 100%)
---	------------

"switch"

20% 100%

6.1. D G B

"Device General"

2

6.1

6.1

	Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type
	22	Error report	Report error of device			1 byte	C	R	-	T	-	
	23	In operate	In operate			1 bit	C	-	-	T	-	

6.1 Device General

C

W

R

T

U

					DPT
23	I	I	1	C,T	1.001
"1" "0" object "in operation" "send value "0" cyclically" "send value "1" cyclically" "no" "send value "0" cyclically" "0" "send value "1" cyclically" "1"					
22	R	E	1	C, R,T	N DPT
"Error report" "Disable" "Enable" 8bit 8bit 76543210 8 0--- 0 1-- 1 1 1-- 2 2 1-- 3					

3 1-- 4

4 1-- 70

5 1-- 90

350 A LED

8 0--

0 1-- B C 75

1 1-- B C 90

2 1-- A D 75

3 1-- A D 90

4A LED

8 0--

0 1--A

1 1--B

2 1--C

3 1--D

4 1-- >26V DC

5 1-- >70°C

8 0--

0 1--A 75

1 1--B 75

2 1--C 75

3 1--D 75

0 --

1 -- 70

2 -- 80

6.2. D A B

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	OUTPUT A	Switch A			1 bit	C	-	W	-	-	switch	Low
1	OUTPUT A	Switch status A			1 bit	C	R	-	T	-	switch	Low
2	OUTPUT A	Relative dimming A			4 bit	C	-	W	-	-	dimming control	Low
3	OUTPUT A	Brightness A			1 byte	C	-	W	-	-	percentage (0..100%)	Low
4	OUTPUT A	Brightness status A			1 byte	C	R	-	T	-	percentage (0..100%)	Low

6.2

						DPT
1	S	X	OUTPUT X	1	C,R,T	1.001
switch switch 0 "1" 0 "0" "Status report" "It's new status"						
0	S	X	OUTPUT X	1	W,C	1.001
"0" "1"						
4	B	X	OUTPUT X	1	C,R,T	5.001 (0..100%)
"Brightness value OBJ transmit after dimming" "Transmit new brightness"						
3	B	X	OUTPUT X	1	W,C	5.001 (0..100%)
"0" 0						
2	R	X	OUTPUT X	4	C,W	3.007
1~7 1 7 0 9~15 9 15 8						

6.2

6.3. D A B

Number	Name	Object Function ^	Des Gr	Length	C	R	W	T	U	D	Type	Priority
6	OUTPUT A	Scene / save A		1 byte	C	-	W	-	-	-	scene control	Low

6.3

					DPT
6	S / X	OUTPUT X	1B	W,C	18.001
8bit 8bit 8bit () FXNNNNNN F: "0" "1" X NNNNNN 0...63 1~64					

6.3

6.4. D A B

Number	Name	Object Function	Des	Gr	Length	C	R	W	T	U	Data Type	Priority
7	X 1	OUTPUT X	1		1			W,C			1.022	
8	S 1	OUTPUT X	1		1			W,C			1.022	
9	X 2	OUTPUT X	1		1			W,C			1.022	
10	S 2	OUTPUT X	1		1			W,C			1.022	

6.4

						DPT
7	X 1	OUTPUT X	1		W,C	1.022
1 "brightness value at obj=0" "1" "brightness value at obj=1" preset1 "0"						
8	S 1	OUTPUT X	1		W,C	1.022
1 "Preset 1 can be set via the bus" "Enable" "0" "brightness value at obj=0" "1" "brightness value at obj=1"						
9	X 2	OUTPUT X	1		W,C	1.022
2 "brightness value at obj=0" "1" "brightness value at obj=1" preset2 "0"						
10	S 2	OUTPUT X	1		W,C	1.022
2 "Preset 2 can be set via the bus" "Enable" "0" "brightness value at obj=0" "1" "brightness value at obj=1"						

6.4

6.5. D A B

Number	Name	Object Function	Description	Group Address	Length	C	R	W	T	U	Data Type	Priority
0	OUTPUT A	Switch A			1 bit	C	-	W	-	-	switch	Low
5	OUTPUT B	Permanent on A			1 bit	C	-	W	-	-	switch	Low

6.5

					DPT
0	S X	OUTPUT X	1	W,C	1.001
"1" "Duration of staircase lighting Base" "Duration of staircase lighting Factor" duration=base*factor "0"					
5	P X	OUTPUT X	1	C,W	1.001
"1" "0"					

6.5