


## Terminal Block UK

Article description	UK 3 N *
Article no.	3001501 *
<b>EC-TYPE EXAMINATION CERTIFICATE IECEX-CERTIFICATE</b>	<b>KEMA 98ATEX1651 U *</b> <b>IECEX KEM 06.0034 U *</b>
Marking	0344  Ex eb IIC KEMA 98ATEX1651 U IECEX KEM 06.0034 U
Assembly on mounting rails	NS 32 acc. to EN 60715-G 32 NS 35 acc. to EN 60715-TH 35
Stripping length	8 mm
Torque	0,6 - 0,8 Nm
Assembly instructions	See page 2
Operating temperature range	-60 °C ... +110 °C



### Technical data according to IEC/EN 60079-7 (increased safety „e“)

Rated insulation voltage	630 V	
Rated voltage	690 V	
Nominal current	23 A ΔT 40 K	24,0 A ΔT 45 K
Max. rated current	29 A ΔT 40 K	30,5 A ΔT 45 K
Temperature rise	34 K (23,3 A / 2,5 mm <sup>2</sup> )	36 K (24,9 A / 2,5 mm <sup>2</sup> )
Contact resistance	0,5 mΩ	

### Connection capacity

Rated cross-section	2,5 mm <sup>2</sup>	AWG 14
Max. conductor cross-section	4 mm <sup>2</sup>	AWG 12
Connectable conductor cross-section	0,2 - 4 mm <sup>2</sup> rigid 0,2 - 2,5 mm <sup>2</sup> flexible	AWG 24 - 12 AWG 24 - 14

### Multi-conductor connection (2 conductors of the same cross-section and conductor type)

rigid / flexible	0,2 - 1,5 mm <sup>2</sup>	AWG 24 - 16
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### Data of insulation material

Description	PA 6.6	
Creep resistance acc. to IEC 60112 / material group	CTI 600 / I	

Accessories	Description	Article no.	
Cover	D-UK 4/10	3003020	
	D-UK 16	3006027	
Partition plate	ATP-UK 5-MTK	3004210	
Fixed bridge bar	FBR 2-5-EX	0716129	18 A / 2,5 mm <sup>2</sup> ΔT 40 K
	FBR 10-5-EX	2303226	19 A / 2,5 mm <sup>2</sup> ΔT 45 K
	FBR 80-5-EX	3000942	24 A / 4 mm <sup>2</sup> ΔT 40 K
Insertion bridge	EBL 2-5	2303145	
	EBL 3-5	2303158	20,0 A / 2,5 mm <sup>2</sup> ΔT 40 K
	EBL 4-5	2303161	21,5 A / 2,5 mm <sup>2</sup> ΔT 45 K
	EBL 5-5	2303174	23,5 A / 4 mm <sup>2</sup> ΔT 40 K
	EBL 6-5	2303190	25,0 A / 4 mm <sup>2</sup> ΔT 45 K
	EBL 10-5	2303132	

\* valid for colour variants

## Important assembly instructions – increased safety „e“

The Terminal Blocks are suitable for use in enclosures in atmospheres with flammable gases or combustible dust. For flammable gases these enclosures must satisfy the requirements according to IEC/EN 60079-0 and IEC/EN 60079-7. For combustible dust these enclosures must satisfy the requirements according to IEC/EN 60079-31.

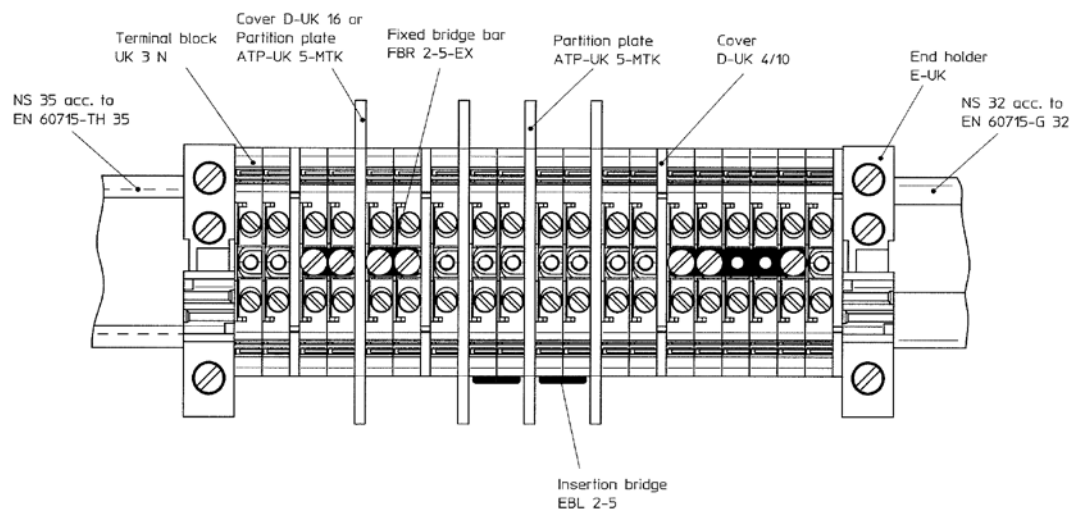
When assembling with other certified series and sizes of terminal blocks and using accessories designed for the purpose, the required creepage distances and clearances have to be observed.

When using the fixed bridge bars to achieve a skipped bridging the rated voltage is reduced to 176 V. For this purpose the bridge of the skipped terminal blocks is not assembled with spacers and bridge screws.

If conductors with smaller cross section than the rated cross section are used, the assigned lower current has to be specified in the EC-Type Examination Certificate of the complete apparatus.

The Terminal Blocks may be used, based on the self-heating when used at the nominal current and at ambient temperatures of -60 °C to +40 °C at the mounting position in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the Terminal Blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.

The Terminal Blocks and their appropriate accessories have to be assembled as specified below.



## Operational instructions – Intrinsic safety “i”

IEC/EN 60079-14 Clause 12 describes modular terminal blocks as simple apparatus when used in intrinsically-safe circuits. Testing by a notified body and marking is not required. If terminal blocks be identifiable as part of an intrinsically circuit are marked by a colour, the colour used shall be [light blue](#).

Testing for compliance to intrinsically safe requirements including clearance, creepage, and solid insulation distances specified in IEC/EN 60079-0 and EN 60079-11 have been performed for circuits up to **60 V**.

Compliance with distance requirements of EN 60079-14 Clause 12.2.3 for the connection of separated intrinsically-safe circuit accessories is met. A minimum distance of 50 mm to separate clamping units of intrinsically-safe and non intrinsically-safe circuits is required through the use of a separating plate or similar device.

## Attestation of Conformity

The above mentioned product is in line with the provisions of the below marked directive and their modification directive(s):

2014/34/EU ATEX Directive

Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2009

EN 60079-7:2007

IEC 60079-0:2011

IEC 60079-7:2006

*current edition:*<sup>\*)</sup>

EN 60079-0:2012

EN 60079-7:2007

IEC 60079-0:2011

IEC 60079-7:2015

The conformity with the provisions of the ATEX directive were certified by

Notified Body: DEKRA Certification B.V.

Address: Utrechtseweg 310, NL-6812 AR Arnhem, The Netherlands [Ident.-No.: 0344]

Certificate: KEMA 98ATEX1651 U, 2012-07-23  
(No., Date)

<sup>\*)</sup>The minor respectively formal changes of the new edition of the mentioned standards do not affect the EHRSs. Consequently the terminal blocks still comply with the relevant requirements of the ATEX Directive.

Blomberg, 2016-05-17



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Business Unit Industrial Cabinet  
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Ex-Representative



Klaus Firschke  
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Connectivity  
Head of Product Marketing

This attestation certifies the conformity with the indicated directive, it does not, however, covenant any characteristics.  
The instructions for safety and installation have to be observed.

## Technical data/requirements acc. to UL and CSA standards

USR: UL 60079-0, 4. Edition  
UL 60079-7, 2. Edition

CNR: CAN/CSA E60079-0:02  
CAN/CSA E60079-7:03

Voltage rating	300 V	
Current rating	20 A	
Wire range	AWG 28 - 12 <sup>*)</sup> solid and stranded	<sup>*)</sup> use copper wire only
	0,081 – 3,3 mm <sup>2</sup>	
Type wiring	Factory and field wiring	
Torque value	5 – 7 lb.-in.	
	0,56 - 0,79 Nm	

### Markings

USR: Class I, Zone I, AEx e II      CNR: Ex e II

### Conditions of Acceptability

1. The suitability of the mounting means shall be determined in the end-use applications.
2. Leads connected to the terminals shall be insulated for the appropriate voltage and this insulation shall extend to within 1mm of the metal of the terminal throat.
3. The terminal blocks were tested for a minimum user temperature (service temperature) of -20 °C and for a maximum user temperature (service temperature) of +85 °C. They shall not be used in an ambient temperature lower than -20 °C and they shall not heat up to more than +85 °C when used in service.
4. The terminal block was investigated for use in an enclosure with a minimum rating of IP54. The suitability of the end-use application enclosure as an increased safety enclosure shall be considered.
5. The field wiring terminals of these terminal blocks have been evaluated using ANSI/UL 486E, "Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors." The suitability of these terminals shall be determined in the end-use investigation.
6. The minimum creepage distance of 6,6 mm and clearance of 6,0 mm between bare conductive parts at different potentials shall be maintained in the end-use.
7. A temperature measurement test on the complete apparatus shall confirm the suitability of the terminals in the end-use application.
8. When used in connection and junction boxes, the Defined Arrangement Method shall be used.

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