

Enclosure: Terminal Box, TBE2 Series

Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Application

TBE2 terminal boxes are designed for tapping, splicing, or connecting conductors for control and instrumentation applications. They are suitable for use in explosive atmospheres, including Zones 1, 2, 21, and 22.

Specification

Housing material : Marine grade copper-free aluminium alloy with polyester powder coated, RAL 7032 (Grey)
(optional offshore painting- acrylic polyurethane coating)

Sealing (O-ring) : Silicone -40°C to +175°C

Lid screws : Stainless steel, SS 304
(optional SS 316)

Technical Data

Hazardous Area	Gas	Dust
Zones	1 & 2	21 & 22
Equipment Group/Category	II 2G	II 2D
Symbol of Protection	Ex eb IIC T6-T3 Gb	Ex tb IIIC T80°C- T195°C Db
Certificate	KDB 25 ATEX 0023X IECEx KDB 25.0008X	
Conformity to Standards	EN IEC 60079-0, EN IEC 60079-7, EN IEC 60079-31 IEC 60079-0, IEC 60079-7, IEC 60079-31	
Ambient Temperature	-40°C to +65°C	
Index of Protection	IP66	
Entry Threads	NPT or Metric threads	
Mounting	Wall mount	

Electrical Rating

Rated voltage : up to 690 V

Rated current : up to 58 A
(Depending on the type of terminal used.)

Option

please specify

- Terminal sizes and number of poles.



TBE2 1111



TBE2 1414



TBE2 1818

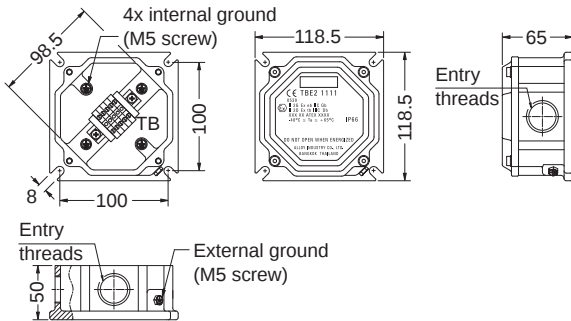
Ordering Requirements

Cat. No.	Ex e Terminal block (The maximum current depends on the conductor cross-section. For maximum current data, please refer to the maximum number of terminals table in TBE2 series installation, operating and maintenance instruction, section 3)					Maximum terminal block (poles)	Temp. Class (for zone 1 & 2)		Max. Surface Temp. (for zone 21 & 22)		
	Brand	Model	Order code	Wire size	Voltage		Ta 40°C	Ta 65°C	Ta 40°C	Ta 65°C	
TBE2 1111	ABB Entelec	DR4/6.Ex	1SNA146199R2200	0.5-4 mm ²	275 V	6	T5	T4	T95°C	T130°C	
	Phoenix Contact	MUT 4	3248035	0.5-4 mm ²	352 V						
	Wago	264-125	-	0.5-2.5 mm ²	550 V	5	T6	T4	T80°C	T130°C	
TBE2 1414	ABB Entelec	ZS4	1SNK505010R0000	0.5-4 mm ²	630 V	8	T5	T4	T95°C	T130°C	
		ZS6	1SNK506010R0000	0.5-6 mm ²			T4	T3	T130°C	T195°C	
	Phoenix Contact	UK 3N	3001501	0.5-2.5 mm ²	690 V	9	T6	T4	T80°C	T130°C	
		UK 5N	3004362	0.5-4 mm ²							8
		UK 6N	3004524	1.5-6 mm ²							7
	Wago	2002-1201	2002-1201	0.5-2.5 mm ²	550 V	9	T6	T5	T80°C	T95°C	
		2004-1201	2004-1201	0.5-4 mm ²							7
		2006-1201	2006-1201	1.5-6 mm ²							6
	TBE2 1818	ABB Entelec	ZS4	1SNK505010R0000	0.5-4 mm ²	630 V	18	T6	T5	T80°C	T95°C
ZS6			1SNK506010R0000	0.5-6 mm ²	16		T5	T4	T95°C	T130°C	
ZS10			1SNK508010R0000	1.5-10 mm ²	10						
ZS16			1SNK510010R0000	1.5-16 mm ²	8						
Phoenix Contact		UK 3N	3001501	0.5-2.5 mm ²	690 V	20	T6	T5	T80°C	T95°C	
		UK 5N	3004362	0.5-4 mm ²		16					
		UK 6N	3004524	1.5-6 mm ²		12	T4	T4	T130°C	T130°C	
		UK 10N	3005073	1.5-10 mm ²		9					
		UK 16N	3006043	4-16 mm ²		7					
Wago		2002-1201	2002-1201	0.5-2.5 mm ²	550 V	20	T6	T5	T80°C	T95°C	
		2004-1201	2004-1201	0.5-4 mm ²		16					
		2006-1201	2006-1201	1.5-6 mm ²		14	T5	T4	T95°C	T130°C	
		2010-1201	2010-1201	1.5-10 mm ²		10					
		2016-1201	2016-1201	1.5-16 mm ²		8					

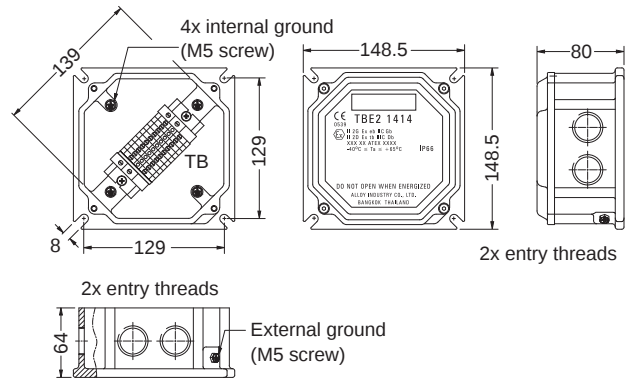
Remark * : The maximum surface temperatures are specified for dust free condition. The dust layer which may cover around the lighting fixture will cause higher surface temperature.

Dimensions (in mm)

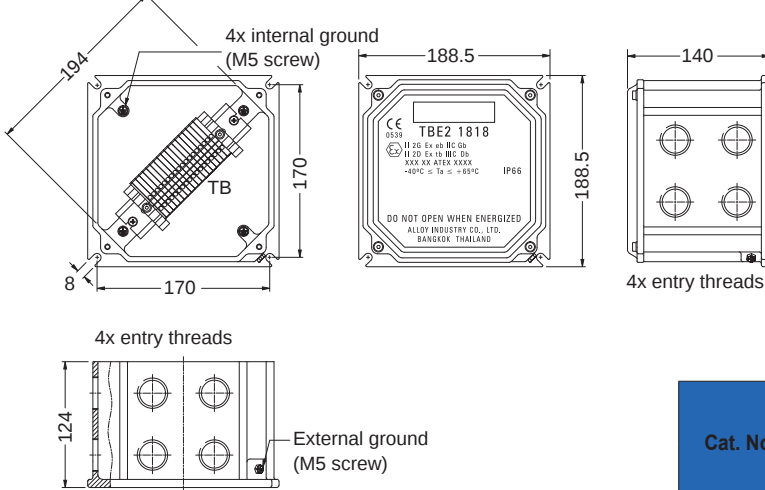
TBE2 1111



TBE2 1414



TBE2 1818



Cat. No.	Maximum entries thread size NPT (Metric)			Empty weight (kg)
	1/2" NPT (M20x1.5)	3/4" NPT (M25x1.5)	1" NPT (M32x1.5)	
TBE2 1111	1	1	-	0.8
TBE2 1414	2	2	1	1.2
TBE2 1818	4	4	3	2.6

Terminal Box Specification Sheet, Cat. No. TBE2 1111

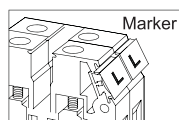
Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

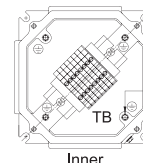


Project: _____		Date: _____	
Customer: _____		Owner: _____	
Contact person: _____			Quantity (Set)
Tel: _____	Fax: _____	E-mail: _____	

Terminal block (TB) specifications, Ex e type



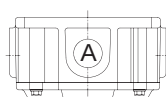
Terminal block arrangement



☐ Brand: ABB ENTRELEC (Certificate number LCIE 19 ATEX 3006U)		(Compression clamp terminal blocks)
☐ Rated cross section; 0.5-4.0 mm ² wire size		Maximum terminal block; 6-poles (include PE)
☐ Model: DR4/6.Ex	Q'ty _____ Poles	Marker No. _____
☐ Jumper Bar	_____ Poles _____ Sets	for Marker No. _____
☐ Brand: PHOENIX CONTACT (Certificate number LCIE 08 ATEX 0007U)		(Compression clamp terminal blocks)
☐ Rated cross section; 0.5-4.0 mm ² wire size		Maximum terminal block; 6-poles (include PE)
☐ Model: MUT 4	Q'ty _____ Poles	Marker No. _____
☐ Jumper Bar	_____ Poles _____ Sets	for Marker No. _____
☐ Brand: WAGO (Certificate number PTB 98 ATEX 3129U)		(Case clamp spring terminal block)
☐ Rated cross section; 0.5-4.0 mm ² wire size		Maximum terminal block; 5-poles
☐ Model: 264-125	Q'ty _____ Poles	Marker No. _____
☐ Jumper Bar	_____ Poles _____ Sets	for Marker No. _____

Note: _____

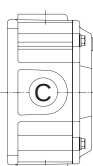
Entry threads



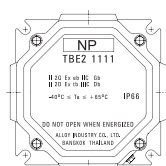
Top view

Maximum entries

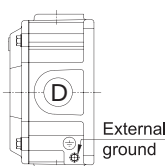
3/4" NPT or M25x1.5



Left view

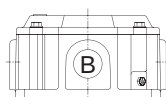


Front view



Right view

External ground



Bottom view

☐ Top view 1-hole (center) A	☐ Bottom view 1-hole (center) B
☐ Left view 1-hole (center) C	☐ Right view 1-hole (center) D
☐ Nameplate (NP) Letters	

Material; Acrylic multipolymer (10 x 35mm.)
 Legend colour; Black letter, white background
 (Attach documents in case of more than one)

Terminal Box Specification Sheet, Cat. No. TBE2 1414

Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22

Project: _____ Date: _____

Customer: _____ Owner: _____

Contact person: _____

Tel: _____ Fax: _____ E-mail: _____

Quantity (Set)	
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Terminal block (TB) specifications, Ex e type

☐ Brand: **ABB ENTRELEC** (Certificate number LCIE 08 ATEX 0007U) (Compression clamp terminal blocks)

☐ **Rated cross section; 0.5-4.0 mm² wire size** **Maximum terminal block; 8-poles (include PE)**

☐ Model: ZS4 Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ **Rated cross section; 0.5-6.0 mm² wire size** **Maximum terminal block; 8-poles (include PE)**

☐ Model: ZS6 Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ Brand: **PHOENIX CONTACT** (Certificate number KEMA 98 ATEX1651U) (Compression clamp terminal blocks)

☐ **Rated cross section; 0.5-2.5 mm² wire size** **Maximum terminal block; 9-poles (include PE)**

☐ Model: UK 3N Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ **Rated cross section; 0.5-4.0 mm² wire size** **Maximum terminal block; 8-poles (include PE)**

☐ Model: UK 5N Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ **Rated cross section; 1.5-6.0 mm² wire size** **Maximum terminal block; 7-poles (include PE)**

☐ Model: UK 6N Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ Brand: **WAGO** (Certificate number PTB 03 ATEX 1162U/ PTB 05 ATEX 1095U/ 1030U) (Case clamp spring terminal block)

☐ **Rated cross section; 0.5-2.5 mm² wire size** **Maximum terminal block; 9-poles**

☐ Model: 2002-1201 Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ **Rated cross section; 0.5-4.0 mm² wire size** **Maximum terminal block; 7-poles**

☐ Model: 2004-1201 Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

☐ **Rated cross section; 1.5-6.0 mm² wire size** **Maximum terminal block; 6-poles**

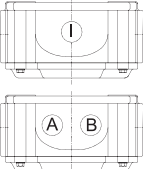
☐ Model: 2006-1201 Q'ty _____ Poles _____ Marker No. _____

☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____

Entry threads



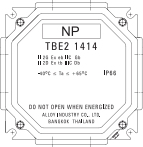
Top view



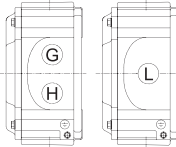
Left view



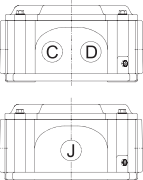
Front view



Right view



Bottom view



Maximum entries, 2-holes

A	B
C	D
E	F
G	H

3/4" NPT or M25x1.5

Maximum entries, 1-hole

I
J
K
L

1" NPT or M32x1.5

☐ **Top view**

2-holes

A	
B	

1-hole (center)

I

☐ **Bottom view**

2-holes

C	
D	

1-hole (center)

J

☐ **Left view**

2-holes

E	
F	

1-hole (center)

K

☐ **Right view**

2-holes

G	
H	

1-hole (center)

L

☐ **Nameplate (NP)**

Letters	
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Material; Acrylic multipolymer (15 x 60mm.)
Legend colour; Black letter, white background
(Attach documents in case of more than one)

Terminal Box Specification Sheet, Cat. No. TBE2 1818

Increased Safety and Dust protection by enclosure

Zone 1 & 2 – 21 & 22



Project: _____		Date: _____	
Customer: _____		Owner: _____	
Contact person: _____			Quantity (Set)
Tel: _____	Fax: _____	E-mail: _____	

Terminal block (TB) specifications, Ex e type

☐ Brand: ABB ENTRELEC ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____	(Compression clamp terminal blocks)
☐ Brand: PHOENIX CONTACT ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____	(Compression clamp terminal blocks)
☐ Brand: WAGO ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Model: _____ Q'ty _____ Poles _____ Marker No. _____ ☐ Jumper Bar _____ Poles _____ Sets for Marker No. _____	(Case clamp spring terminal block)

Entry threads

Maximum entries, 4-holes <table border="1" style="width: 100px; text-align: center;"> <tr><td>A</td><td>B</td></tr> <tr><td>C</td><td>E</td></tr> </table> 3/4" NPT or M25x1.5	A	B	C	E	☐ Top view <table border="1" style="width: 100px; text-align: center;"> <tr><td colspan="2">2-holes</td><td colspan="2">3-holes</td></tr> <tr><td>A1</td><td></td><td>E1</td><td></td></tr> <tr><td>B1</td><td></td><td>F1</td><td></td></tr> <tr><td>C1</td><td></td><td>G1</td><td></td></tr> <tr><td>D1</td><td></td><td></td><td></td></tr> </table>	2-holes		3-holes		A1		E1		B1		F1		C1		G1		D1				☐ Bottom view <table border="1" style="width: 100px; text-align: center;"> <tr><td colspan="2">2-holes</td><td colspan="2">3-holes</td></tr> <tr><td>A2</td><td></td><td>E2</td><td></td></tr> <tr><td>B2</td><td></td><td>F2</td><td></td></tr> <tr><td>C2</td><td></td><td>G2</td><td></td></tr> <tr><td>D2</td><td></td><td></td><td></td></tr> </table>	2-holes		3-holes		A2		E2		B2		F2		C2		G2		D2			
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Maximum entries, 3-holes <table border="1" style="width: 100px; text-align: center;"> <tr><td>E</td><td>G</td></tr> <tr><td>F</td><td></td></tr> </table> 1" NPT or M32x1.5	E	G	F		☐ Left view <table border="1" style="width: 100px; text-align: center;"> <tr><td colspan="2">2-holes</td><td colspan="2">3-holes</td></tr> <tr><td>A3</td><td></td><td>E3</td><td></td></tr> <tr><td>B3</td><td></td><td>F3</td><td></td></tr> <tr><td>C3</td><td></td><td>G3</td><td></td></tr> <tr><td>D3</td><td></td><td></td><td></td></tr> </table>	2-holes		3-holes		A3		E3		B3		F3		C3		G3		D3				☐ Right view <table border="1" style="width: 100px; text-align: center;"> <tr><td colspan="2">2-holes</td><td colspan="2">3-holes</td></tr> <tr><td>A4</td><td></td><td>E4</td><td></td></tr> <tr><td>B4</td><td></td><td>F4</td><td></td></tr> <tr><td>C4</td><td></td><td>G4</td><td></td></tr> <tr><td>D4</td><td></td><td></td><td></td></tr> </table>	2-holes		3-holes		A4		E4		B4		F4		C4		G4		D4			
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☐ Nameplate (NP) <table border="1" style="width: 100px;"> <tr> <td style="width: 50px; text-align: center;">Letters</td> <td style="width: 50px;"></td> </tr> <tr> <td colspan="2" style="height: 20px;"></td> </tr> </table>			Letters																																											
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Material: Acrylic multipolymer (20 x 80mm.) Legend colour: Black letter, white background (Attach documents in case of more than one)