

Terminal Boxes with WAGO 221 Ex

Series 8118 made of Moulded Material



- Compact, impact-resistant enclosure with increased safety (Ex e) type of protection
- Versions available with integrated metal bracket for optimised installation of metal cable glands
- Pre-installed fixing carrier for WAGO 221 Ex connection terminals
- Simple, fast and safe installation of electrical lines with spring lever technology
- A range of clamping cross-sections from 0.14 to 4 mm² can be installed for each connection clamping unit
- Use of core end sleeves not necessary for stranded or finely stranded electrical lines
- 2-, 3- and 5-way terminal blocks available as accessories

E3

WebCode 8118D



R. STAHL Series 8118 terminal boxes with WAGO 221 Ex connection terminals are made of glass fibre reinforced polyester resin. They are available in 2 design sizes and can be flexibly equipped with plastic or metal cable glands. They combine the advantages of the simple WAGO 221 connection terminal installation technology with proven R. STAHL enclosures with increased safety (Ex e) type of protection.

	IECEx / ATEX					
Zone	0	1	2	20	21	22
Installation in		•	•		•	•

Selection Table						
Product Description	Ex e terminal box					
Ambient temperature	-55 °C ... +40 °C (T6)					
Ambient temperature	-55 °C ... +55 °C (T5)					
Ambient temperature	-67°F ... +104°F (T6)					
Ambient temperature	-67°F ... +131°F (T5)					
Figure	Product Type	Cable glands	Terminal	Terminal rail	Art. No.	Weight
	8118/122-199-C2374	5 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm)	6 x WAGO 221-485 5 conductor 4 mm ² , light grey	35 x 90 mm (1x)	276883	700 g
	8118/122-141-0	2 x 8161/7-M20-1304-LT Polyamide cable gland, black with plug M20 x 1.5 (4 – 13 mm) 1 x 8290/3-M20 Polyamide stopping plug (Provided separately) M20 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289846	500 g
	8118/122-138-0	4 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm)	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289849	500 g
	8118/122-131-0	3 x 8161/7-M20-1304-LT Polyamide cable gland, black with plug M20 x 1.5 (4 – 13 mm) 1 x 8290/3-M20 Polyamide stopping plug (Provided separately) M20 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289845	500 g

Selection Table

Product Description		Ex e terminal box				
Ambient temperature		-55 °C ... +40 °C (T6)				
Ambient temperature		-55 °C ... +55 °C (T5)				
Ambient temperature		-67°F ... +104°F (T6)				
Ambient temperature		-67°F ... +131°F (T5)				
Figure	Product Type	Cable glands	Terminal	Terminal rail	Art. No.	Weight
	8118/122-118-0	4 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm)	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	273361	620 g
	8118/122-107-0	4 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm) 2 x 8290/3-M25 Polyamide stopping plug (Provided separately) M25 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289847	500 g
	8118/122-106-0	4 x 8161/7-M20-1304-LT Polyamide cable gland, black with plug M20 x 1.5 (4 – 13 mm) 2 x 8290/3-M20 Polyamide stopping plug (Provided separately) M20 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289844	500 g
	8118/122-105-0	3 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm) 1 x 8290/3-M25 Polyamide stopping plug (Provided separately) M25 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289848	500 g
	8118/132-149-0	6 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm)	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 120 mm (1x)	277900	860 g
	8118/132-117-0	6 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm)	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 120 mm (1x)	273362	820 g
	8118/132-114-0	6 x 8161/7-M25-1707-LT Polyamide cable gland, black with plug M25 x 1.5 (7 – 17 mm) 2 x 8290/3-M25 Polyamide stopping plug (Provided separately) M25 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 120 mm (1x)	289871	600 g
	8118/132-111-0	4 x 8161/7-M32-2109-LT Polyamide cable gland, black with plug M32 x 1.5 (9 – 21 mm) 2 x 8290/3-M32 Polyamide stopping plug (Provided separately) M32 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 120 mm (1x)	289820	500 g

Selection Table						
Product Description		Ex i terminal box				
Ambient temperature		-55 °C ... +75 °C (T6)				
Ambient temperature		-40°F ... +167°F (T6)				
Figure	Product Type	Cable glands	Terminal	Terminal rail	Art. No.	Weight
	8118/222-150-0	2 x 8161/8-M20-1304-LT Polyamide cable gland, blue with plug M20 x 1.5 (4 – 13 mm)	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289874	500 g
	8118/222-141-0	2 x 8161/8-M20-1304-LT Polyamide cable gland, blue with plug M20 x 1.5 (4 – 13 mm) 1 x 8290/3-M20 Polyamide stopping plug (Provided separately) M20 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289873	500 g
	8118/222-131-0	3 x 8161/8-M20-1304-LT Polyamide cable gland, blue with plug M20 x 1.5 (4 – 13 mm) 1 x 8290/3-M20 Polyamide stopping plug (Provided separately) M20 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289872	500 g
	8118/222-104-0	2 x 8161/8-M25-1707-LT Polyamide cable gland, blue with plug M25 x 1.5 (7 – 17 mm) 1 x 8290/3-M25 Polyamide stopping plug (Provided separately) M25 x 1.5	1 x WAGO 221-482 2 conductor 4 mm ² , light grey	35 x 100 mm (1x)	289875	500 g

"—" = marking for installation option
Enclosure equipped with terminals and cable glands with plugs

Technical Data		
Variant	Ex e terminal box	Ex i terminal box
Explosion Protection		
Scope of validity	European Union (ATEX) IECEX	European Union (ATEX) IECEX
IECEX gas explosion protection	Ex eb IIC T6 / T5 Gb	Ex ia ib IIC T6 Gb
IECEX dust explosion protection	Ex tb IIIC T80 °C / T95 °C Db	Ex tb IIIC T80 °C Db
ATEX gas explosion protection	⊕ II 2 G Ex eb IIC T6 / T5 Gb	⊕ II 2 G Ex ia ib IIC T6 Gb
ATEX dust explosion protection	⊕ II 2 D Ex tb IIIC T80 °C / T95 °C Db	⊕ II 2 D Ex tb IIIC T80 °C Db
Certificates	ATEX (PTB), Brazil (ULB), China (NEPSI), IECEX (PTB), India (PESO), Korea (KTL)	ATEX (PTB), Brazil (ULB), China (NEPSI), IECEX (PTB), India (PESO)
Notes	For product label, see scope of validity.	
Mechanical Data		
Enclosure material	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced
Silicone-free	No	No
Connection cross-section note	Min. clamping range: 0.2 mm ² (solid, stranded) / 0.14 mm ² (finely stranded). It is possible to connect conductors with different cross sections. Use only in connection with fixing carrier type no. 272625.	Min. clamping range: 0.2 mm ² (solid, stranded) / 0.14 mm ² (finely stranded). It is possible to connect conductors with different cross sections. Use only in connection with fixing carrier type no. 272625.
Components		
Note mounting carriers	A mounting foot must be installed between the fixing carriers in order to maintain the creepage distances and clearances for 440 V.	A mounting foot must be installed between the fixing carriers in order to maintain the creepage distances and clearances for 440 V.

Technical Data		
Variant	Ex e terminal box	Ex i terminal box
Components		
Note connection terminal	<p>The connection terminals must be fixed to the fixing carrier.</p> <p>Maximum equipping per fixing carrier: (max. 10 clamping units per fixing carrier)</p> <p>5 x 2-conductor connection terminals (275 V), 4 x 2-conductor connection terminals (440 V), 3 x 3-conductor connection terminals (440 V), 2 x 5-conductor connection terminals (440 V).</p> <p>At a rated operational voltage > 275 V, a slot between the each of the connection terminals must remain free. This means that the maximum equipping is reduced to 4 x 2-conductor connection terminals per fixing carrier.</p> <p>Number of fixing carriers: max. 3 pieces for enclosure size 8118/2 max. 5 pieces for enclosure size 8118/3</p>	<p>The connection terminals must be fixed to the fixing carrier.</p> <p>Maximum equipping per fixing carrier: (max. 10 clamping units per fixing carrier)</p> <p>5 x 2-conductor connection terminals (275 V), 4 x 2-conductor connection terminals (440 V), 3 x 3-conductor connection terminals (440 V), 2 x 5-conductor connection terminals (440 V).</p> <p>At a rated operational voltage > 275 V, a slot between the each of the connection terminals must remain free. This means that the maximum equipping is reduced to 4 x 2-conductor connection terminals per fixing carrier.</p> <p>Number of fixing carriers: max. 3 pieces for enclosure size 8118/2 max. 5 pieces for enclosure size 8118/3</p>

Accessories				
Figure	Description	Art. No.	Weight	
Cable gland made of plastic				
	8161/7-M20-1307-LT, Ex e Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm Lot size 50 pieces	239204	13 g	
	8161/7-M25-1710-LT, Ex e Plastic, M25 x 1.5, cable outer diameter 10 to 17 mm Lot size 50 pieces	239205	19 g	
	8161/7-M32-2113-LT, Ex e Plastic, M32 x 1.5, cable outer diameter 13 to 21 mm Batch size 25 pieces	239206	32 g	
	8161/8-M20-1307-LT, Ex i Plastic, M20 x 1.5, cable outer diameter 7 to 13 mm Lot size 50 pieces	239212	13 g	
	8161/8-M25-1710-LT, Ex i Plastic, M25 x 1.5, cable outer diameter 10 to 17 mm Lot size 50 pieces	239213	19 g	
Connection terminal				
	WAGO 221-482 for 2 x 0.2 ... 4 mm ² Lot size 100 pieces	272622	100 g	
	WAGO 221-483 for 3 x 0.2 ... 4 mm ² Lot size 50 pieces	272623	100 g	
	WAGO 221-485 for 5 x 0.2 ... 4 mm ² Lot size 25 pieces	272624	100 g	
Connection terminal set				
	Installation set WAGO 221 Contains 2 x Fixing adapter 221-501 for 4mm ² 2 x Mounting foot 209-120 6.4 mm 4 x Connection terminal 221-482 for 2 x 0.2 to 4 mm ² 6 x Connection terminal 221-483 for 3 x 0.2 to 4 mm ² 5 x Connection terminal 221-485 for 5 x 0.2 to 4 mm ²	288873	65 g	

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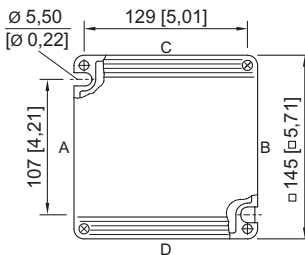
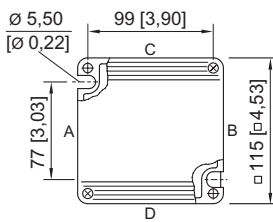
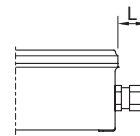
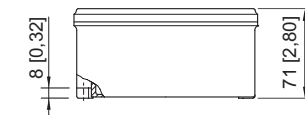
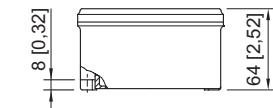


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Accessories				
Figure	Description	Art. No.	Weight	
Fixing adapter				
	WAGO 221-501 for 4 mm ² , blue	289956	0 g	
	WAGO 221-501 for 4 mm ² Lot size 10 pieces	272625	100 g	
Mounting foot				
	WAGO 209-120; 6.4 mm Lot size 25 pieces	272626	100 g	
Reduction sealing insert (standard), EPDM (-40 ... +75 °C) For cable glands				
	Connection thread: M20 x 1.5 Clamping range: 4 – 8 mm	Lot size: 50	239446	1 g
	Connection thread: M25 x 1.5 Clamping range: 7 – 12 mm	Lot size: 25	239447	3 g
	Connection thread: M32 x 1.5 Clamping range: 9 – 14 mm	Lot size: 25	239448	3 g
Stopping plug				
	8290/3-M20 Plastic, M20 x 1.5 Lot size 100 pieces		285773	500 g
	8290/3-M25 Plastic, M25 x 1.5 Lot size 100 pieces		285774	700 g
	8290/3-M32 Plastic, M32 x 1.5 Lot size 50 pieces		285779	600 g

Lot size: Purchase order quantity in [pieces], the delivery quantity is automatically rounded to the lot size.

Dimensional Drawings (All Dimensions in mm [inches]) – Subject to Alterations



Length L
 protrusion length for cable glands, Series 8161
 in case of M20: 25 ... 31 [0.98 ... 1.22]
 in case of M25: 27 ... 33 [1.06 ... 1.3]
 in case of M32: 32 ... 39 [1.26 ... 1.54]
 protrusion length for cable glands with strain relief,
 Series HSK-K-MZ
 in case of M25: 41 [1,61]

8118/.2.
enclosure size 2

8118/.3.
enclosure size 3