



- Small, robust Ex e enclosure for distributing electrical energy
- IP66 degree of protection
- Equipped with 4 mantle terminals and 1 PE connection
- Available with plastic semi-glands or cable glands

E3

MY R. STAHL 8102A



R. STAHL junction boxes from series 8102 are small Ex e enclosures for conducting and distributing electrical energy in hazardous areas. They are made from glass-fibre-reinforced polyester resin and are therefore extremely robust. The junction box has 5 mantle terminals, whereby one is used as a PE connection point. The cable dia. range of the mantle terminals is 2 x 4 mm².

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

Selection Table					
Product description		Ex e junction box			
Figure	Product Type	Cable glands	Terminal	Art. No.	Weight
	8102/21-42-C1151	2 x 8161/7-M20-1304 Polyamide cable gland M20 x 1.5 (4 – 13 mm) 1 x 8161/7-M25-1707 Polyamide cable gland M25 x 1.5 (7 – 17 mm) 1 x 8290/3-M20 Polyamide stopping plug, provided separately M20 x 1,5	5 x Mantle terminal 4 mm ²	132979	0.330 kg
	8102/21-32	3 x 8161/7-M20-1304 Polyamide cable gland, black M20 x 1.5 (4 – 13 mm)	5 x Mantle terminal 4 mm ²	218559	0.330 kg
	8102/21-32-C995	3 x 8161/7-M20-1307 Polyamide cable gland, black M20 x 1.5 (7 – 13 mm)	5 x Mantle terminal 4 mm ²	132973	0.200 kg
	8102/21-32-C1013	2 x 8161/7-M20-1304 Polyamide cable gland, black M20 x 1.5 (4 – 13 mm) 1 x 8290/3-M20 Polyamide stopping plug M20 x 1.5	5 x Mantle terminal 4 mm ²	132975	0.330 kg
	8102/21-31	3 x Semi-gland M20 (6.5 – 14 mm)	5 x Mantle terminal 4 mm ²	132988 ▲	0.300 kg

Selection Table

Ex i junction box					
Product description					
Figure	Product Type	Cable glands	Terminal	Art. No.	Weight
	8102/22-32	3 x 8161/8-M20-1304 Polyamide cable gland, blue M20 x 1.5 (4 – 13 mm)	5 x Mantle terminal 4 mm²	261597	0.330 kg
	8102/22-31	3 x Semi-gland M20 (6.5 – 14 mm)	5 x Mantle terminal 4 mm²	132989 ▲	0.300 kg

Technical Data

Variant	Ex e junction box with semi-glands	Ex e junction box	Ex i junction box with semi-glands	Ex i junction box
Explosion Protection				
Area of application	IECEx European Union (ATEX)	IECEx European Union (ATEX)	IECEx European Union (ATEX)	IECEx European Union (ATEX)
IECEx gas explosion protection	Ex eb IIC T6 / T5 Gb	Ex eb IIC T6 / T5 Gb	Ex ia ib IIC T6 Gb	Ex ia ib IIC T6 Gb
IECEx dust explosion protection	Ex tb IIIC T80 °C / T90 °C Db	Ex tb IIIC T80 °C / T90 °C Db	Ex tb IIIC T80 °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 eb IIC T6 / T5 Gb	Ⓔ II 2 G Ex ia ib IIC T6 Gb	Ⓔ II 2 G Ex ia ib IIC T6 Gb
ATEX dust explosion protection	Ⓔ II 2 D Ex tb IIIC T80 °C / T90 °C Db	Ⓔ II 2 D Ex tb IIIC T80 °C / T90 °C Db	Ⓔ II 2 D Ex tb IIIC T80 °C Db	Ⓔ II 2 D Ex tb IIIC T80 °C Db
Certificates	ATEX (PTB), China (NEPSI), IECEx (PTB)	ATEX (PTB), China (NEPSI), IECEx (PTB)	ATEX (PTB), China (NEPSI), IECEx (PTB)	ATEX (PTB), China (NEPSI), IECEx (PTB)
Declaration of conformity	ATEX (EUK), ATEX (Simple apparatus), China (CCC)	ATEX (EUK), China (CCC)	ATEX (EUK), ATEX (Simple apparatus), China (CCC)	ATEX (EUK), ATEX (Simple apparatus), China (CCC)
Notes	For product label, see area of application.			
Electrical Data				
Rated operational voltage AC	0 ... 690 V	0 ... 690 V	0 ... 60 V	0 ... 60 V
Rated operational current	16 A (T6) 25 A (T5)	16 A (T6) 25 A (T5)	10 A (T6)	10 A (T6)
Ambient Conditions				
Ambient temperature	-50 °C ... +55 °C (T6) -50 °C ... +70 °C (T5)	-40 °C ... +40 °C (T6) -40 °C ... +70 °C (T5)	-50 °C ... +70 °C (T6)	-40 °C ... +70 °C (T6)
Mechanical Data				
Enclosure material	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced	Polyester resin, Glass fibre reinforced

Terminal compartment

Housing/ types of terminals/ terminal compartment/ tightening torque	Conductor type	Number of conductors	Conductor cross-section (mm²)			
			0.75	1.5	2.5	4
Enclosure: 8102/2 Mantle terminal: M7 x 0.75 Terminal compartment: 3.1 x 5.4 mm Tightening torque: 3.5 Nm	solid	min.	1	1	1	1
		max.	4	4	2	2
	finely stranded, prepared, crimped core end sleeve	min.	1	1	1	
		max.	3	3	2	
	finely stranded, unprepared	min.	1	1	1	1
		max.	4	3	2	2

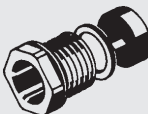
Note: All conductors of a terminal must have the same cross section and be made of the same material.

Junction boxes

Series 8102 made of moulded material, with 5 mantle terminals

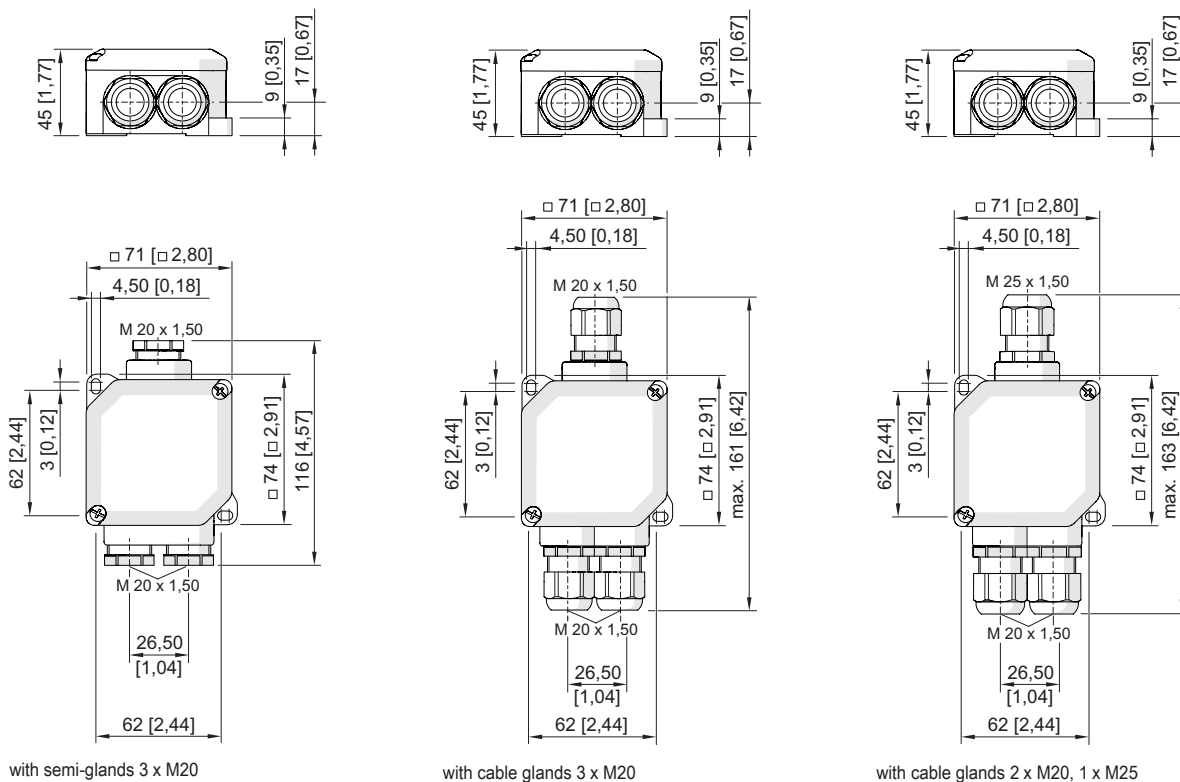
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Accessories			
Figure	Description	Art. No.	Weight
Plastic cable gland			
	8161/7-M20-1304, Ex e Polyamide, M20 x 1,5 mm, 4 – 13 mm Lot size 50 pieces	239156 ▲	0.013 kg
	8161/7-M25-1707, Ex e Plastic, M25 x 1,5, cable outer diameter 7 to 17 mm Lot size 50 pieces	239157 ▲	0.019 kg
	8161/8-M20-1304, Ex i Plastic, M20 x 1,5, cable outer diameter 4 to 13 mm Lot size 50 pieces	239164 ▲	0.013 kg
Semi-gland			
	8102 semi-gland 3 x M20	140474	0.019 kg
Stopping plug			
	8290/3-M20 Plastic, M20 x 1.5 Lot size 1 piece	143522 ▲	0.007 kg

Batch size: Purchase order quantity in [no. of units]; the delivery quantity is automatically rounded to the batch size.

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



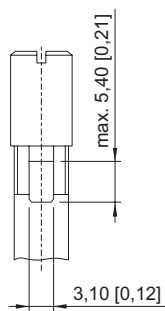
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Diagram of the available connection chamber of the mantle terminal