

# **Junction Box Overview**

Suitable for lighting, power, HVAC & other applications



# **WAGO Connectors**

# with CAGE CLAMP® & PUSH WIRE® connection

Series		Technical Data
221 Series 4mm²		0.2 - 4mm² "s" or "st" 0.14 - 4mm² "f-st" 32A 450V/4kV/2 <b>⁰</b> /⁰
221 Series 6mm²		0.5 - 6mm² "s", "st" or "f-st" 41A 450V/4kV/2 <b>®</b>
2273 Series		0.5 - 2.5mm <sup>2</sup> "s" only 24A 450V/4kV/2 <sup>1</sup> / <sup>2</sup>
222 Series		0.08 - 2.5mm <sup>2</sup> "s" or "st" 0.08 - 4mm <sup>2</sup> "f-st" 32A 400V/4kV/2 <sup>10/20</sup>
773 Series		0.75 - 2.5mm² "s" 1.5 - 2.5mm² "st" 24A 400V/4kV/2 <b>¹</b> /²
773-173	1000	2.5 - 6mm² "s" or "st" 41A 400V/4kV/2¶⁄2
224 Series		Installation side:- 1 - 2.5mm² "s" Lighting side:- 0.5 - 2.5mm² "s" / "f-st" 24A 400V/4kV/2●
224-101		0.5 - 2.5mm² "s" / "f-st" 24A 400V/4kV/2●

<sup>&</sup>quot;s" solid "st" stranded "f-st" fine stranded

<sup>•</sup> In grounded (earthed) supply systems.

<sup>•</sup> Connectors are de-rated for MF applications, please refer to the MF instructions table.

# WAGOBOX, XL & XLA Junction Boxes

Suitable for BS 5733-MF applications (Maintenance free accessory)

In situations where you need to install a WAGOBOX in an inaccessible location the following instructions must be followed. This ensures the completed accessory complies with the requirements of BS 5733 for a maintenance free accessory. Only certain WAGO connectors are permitted for use with WAGOBOX junction boxes in maintenance free locations, please see table below.

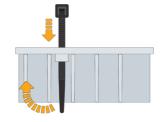
1. Apply BS 5733 rating requirements. Only use the connectors in the table below, please note they have been de-rated to be suitable as a BS 5733 maintenance free accessory. The Max Aggregate Current (I<sub>ag</sub>) is the sum of all the possible currents through the WAGOBOX in normal use. This limit must not be exceeded. Usually the max I<sub>ag</sub> equals the number of phase connectors in the WAGOBOX multiplied by the rating of the OPD\* for the circuit. There are some exceptions to this rule, so if you are in any way unsure how to calculate the maximum aggregate current please consult a qualified electrician. For further information on calculating the max I<sub>ag</sub> of a WAGOBOX configuration please visit www.wagobox.com/support and look in the FAQ section for additional support documents.

#### Suitable connectors and ratings

Connector Series	Max Current Rating	Max Cable Rating	Max Aggregate Current (max I <sub>ag</sub> )	Junction Box	Adapters Required
221 (4mm²)	20A	4	50A**	WAGOBOX, XL & XLA	WAGOBOX & XLA
2273	20A	2.5	50A**	WAGOBOX, XL & XLA	WAGOBOX & XLA
222	20A	2.5	50A**	WAGOBOX & XLA	N/A
773	20A	2.5	50A**	WAGOBOX & XLA	N/A
773-173	32A	6	64A**	WAGOBOX & XLA	N/A

<sup>\*\* 50</sup>A per single side max aggregate current (I ag for XL & XLA.
For further information please visit www.wago.ltd.uk/enclosures/wagobox/ and view the data sheets.

- 2. Follow the WAGOBOX BS EN 60670-22 installation instructions. Please visit www.wago.ltd.uk to view data sheets.
- 3. Secure the WAGOBOX lid using the tie-wrap locking point. Ensure the completed WAGOBOX is not covered by insulating material.



\*Over current Protective Device

# **WAGOBOX Junction Box**

for 222, 773, 221 & 2273 series connectors













# **Applications**

- Lighting
- Power
- HVAC
- & other applications

#### **WAGOBOX**

Technical Data

Dimensions: 108 x 39 x 44mm (LxWxH)

**Cable sizes:** 0.08 to 6mm<sup>2</sup> **Ingress Protection:** IP2X

BS EN 60670-22 Compliant &

BS 5733 MF

Description.	Item No.	Pack Qty.
■ WAGOBOX	51008291	1
■ WAGOBOX	51008319	10
■ WAGOBOX	51253135	10
OWAGOBOX	51253136	10
WAGOBOX	51253137	10
Accessories		
Mounting Button	51009130	10
221 Adapter	60348650	20
2273 Adapter	60348648	20

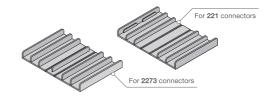
# **Accessories**

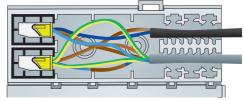
# WAGOBOX Adapters

Part No. 60348650 (PU20) 221 series Part No. 60348648 (PU20) 2273 series

The WAGOBOX 2273 and 221 series adapters should be used when using WAGO 2273 and 221 series connectors with the WAGOBOX or WAGOBOX XLA to ensure compliance with BS EN 60670-22.

Visit www.wago.ltd.uk to view installation instructions for all the WAGOBOX's.





Shown with 2273 adapters.

# **WAGOBOX XLA Junction Box**

for 222, 773, 221 & 2273 series connectors













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Ap	pli	ica	ıtic	ns

- Lighting
- Power
- HVAC
- & other applications

#### **WAGOBOX XLA**

Technical Data

Dimensions: 115 x 126 x 55mm (LxWxH)

**Cable sizes:** 0.08 to 6mm<sup>2</sup> **Ingress Protection:** IP2X

**BS EN 60670-22 Compliant &** 

**BS 5733 MF** 

Description.	Item No.	Pack Qty.
■ WAGOBOX XLA	60358440	1
Accessories		
Mounting Button	51009130	10
221 Adapter	60348650	20
2273 Adapter	60348648	20

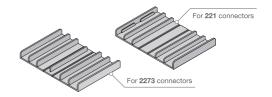
# **Accessories**

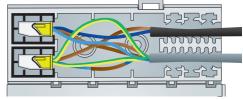
# **WAGOBOX Adapters**

Part No. 60348650 (PU20) 221 series Part No. 60348648 (PU20) 2273 series

The WAGOBOX 2273 and 221 series adapters should be used when using WAGO 2273 and 221 series connectors with the WAGOBOX or WAGOBOX XLA to ensure compliance with BS EN 60670-22.

Visit www.wago.ltd.uk to view installation instructions for all the WAGOBOX's.





Shown with 2273 adapters.

# **WAGOBOX XL Junction Box**

# for 221 & 2273 series connectors







#### **WAGOBOX XL**

Technical Data

Dimensions: 115 x 126 x 55mm (LxWxH)

Cable sizes: 0.14 to 4mm<sup>2</sup> Ingress Protection: IP2X

**BS EN 60670-22 Compliant &** 

BS 5733 MF

Description.	Item No.	Pack Qty.
■ WAGOBOX XL	60339091	1
Accessories		
Mounting Button	51009130	10

# **Applications**

- Lighting
- Power
- HVAC
- & other applications

# **WAGOBOX Light Junction Box**

for 224, 260 & 294 series connectors













# **Applications**

- Lighting
- Power
- HVAC
- & other applications

#### **WAGOBOX Light**

Technical Data

Dimensions: 95 x 39 x 29mm (LxWxH)

**Cable sizes:** 0.08 to 2.5mm<sup>2</sup> **Ingress Protection:** IP2X

BS EN 60670-22 Compliant

Description.	Item No.	Pack Qty.
■ WAGOBOX Light	51303208	1
■ WAGOBOX Light	51257303	10
Accessories		
Mounting Button	51009130	10
Thumb Tool	51302076	1

#### 260 Series for WAGOBOX Light

Technical Data

0.08 - 1.5mm<sup>2</sup> 
400 V/6 kV/3
18 A

■ 8 - 9 mm

Description.	Item No.	Pack Qty.
Orange, green-yellov	v, blue	
3-pole (L/⊕/N)	51302077	1
4-pole (L1/⊕/L2/N)	51302078	1

• When using ferruled conductors, it is necessary to use a terminal block one size larger than the nominal cross section of the wire.

For information on the 294 series please visit www.wago.ltd.uk or contact us on:

T: 01788 568 008

E: ukmarketing@wago.com

Visit www.wago.ltd.uk to view installation instructions for all the WAGOBOX's.

# **WAGOBOX Capsule Junction Box**

# for WAGO installer connectors

















#### **WAGOBOX Capsule**

Technical Data

Dimensions: Lid diameter 92mm, height

122mm, body width 85mm Gland sizes: M16, M20 Cable sizes: 0.08 to 6mm² Ingress Protection: IP68

BS EN 60529

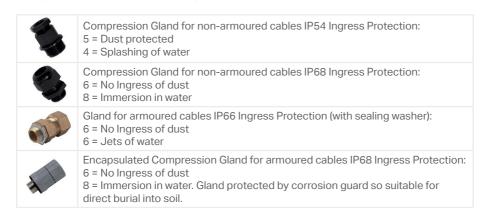
Description.	Item No.	Pack Qty.
O WAGOBOX Capsule	51312608	1
WAGOBOX Capsule	51312606	1
WAGOBOX Capsule	51312607	1
Accessories for WAGO	BOX Capsule	<u>)</u>
Capsule bracket	51312590	1
Capsule bracket	51312594	1
Capsule lid plate	51312602	1
Capsule side plate	51312603	1
Thumb Tool	51302076	1

#### **Applications**

- Lighting
- Power
- HVAC
- & other applications

#### **IP Rated Glands**

The WAGOBOX Capsule has been designed to be used with a range of different IP rated cable glands. The selection of the glands will depend on the degree of ingress protection required and the types of cable being connected. **Please note glands are not sold by WAGO.** 



# Abox 060 enclosure

# with 221 series compact lever connectors es spelsberg





#### Abox 060 enclosure - 221 series

Technical Data

Dimensions: 110 x 110 x 67mm (WxLxH)

Cable sizes: 0.14 to 4mm<sup>2</sup> **Ingress Protection: IP2X** Rating: 32A / 450V

**EN 60670 Compliant** 

Description.	Item No.	Pack Qty.
Polystyrene	60290788	1

#### Includes

- IP65 Abox with cable entry holes (right diagram)
- Mounting bracket for the 221 Series connectors
- IP54 adapters / M25 blanking plug / fixing covers
- 5 x 221-413

# M20/M25 M20/ M20/ 2 x M16 M25 M25 M20/ M25

# **Operating**



1. Strip the conductor 11mm.



2. Open clamping unit using the lever and insert the conductor.



3. Lower the lever to close the clamp to complete the connection. 4. To remove, lift

the lever and pull out the conductor.



Easy testing, test point on the back and front of the housing.

# Abox 060 enclosure

# with 222 series lever connectors





#### Abox 060 enclosure - 222 series

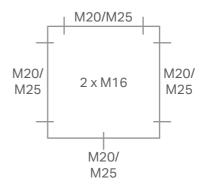
Technical Data

Dimensions: 110 x 110 x 67mm (WxLxH)

Cable sizes: 0.08 to 4mm<sup>2</sup> Ingress Protection: IP2X Rating: 32A / 400V

**EN 60670 Compliant** 

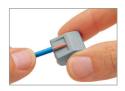
Description.	Item No.	Pack Qty.
Polystyrene	51004455	1
Polycarbonate	51004456	1



#### Includes

- IP65 Abox with cable entry holes (right diagram)
- Mounting bracket for the 222 Series connectors
- IP54 adapters / M25 blanking plug / fixing covers
- 5 x 222-413

# **Operating**



1. Strip the conductor 9 - 10mm.



2. Open clamping unit using the lever and insert the conductor.



- 3. Lower the lever to close the clamp to complete the connection.
- 4. To remove, lift the lever and pull out the conductor.



Easy testing, test point on the top of the housing.

# Abox 100 enclosure with TOPJOB® S Push-in terminal blocks





#### Abox 100 enclosure - TOPJOB® S

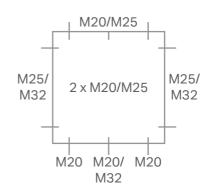
Technical Data

Dimensions: 140 x 140 x 79mm (WxLxH)

Cable sizes: 0.5 to 6mm<sup>2</sup> Ingress Protection: IP2X Rating: 41A / 800V

**EN 60670 Compliant** 

Description.	Item No.	Pack Qty.
Polystyrene	51004457	1
Polycarbonate	51004458	1



#### Includes

- IP65 Abox with cable entry holes (right diagram)
- Mounting bracket for the TOPJOB® S terminals
- IP54 adapters / M32 blanking plug / fixing covers
- 10 x 2006-1201 terminals, 1 x end plate & 2 x end stops (mounted on T35 Din Rail)

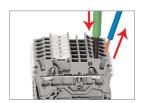
# Operating



Push in termination Stripped solid conductors, fine-stranded conductors with ferrules, or ultrasonically "bonded" conductors are simply pushed in until they hit the backstop. No tool required.



Termination using a screwdriver
Connecting fine-stranded conductors
without ferrules, or smaller
cross-sectional conductors that
cannot be pushed in, is preformed
the same way as the original CAGE
CLAMP\* - using an operating tool.



Conductor removal: Insert an operating tool in to the operating slot to remove the conductor, just like the original CAGE CLAMP° terminal blocks.

# The mBox L32 wiring centre

# with 221 series compact lever connectors







#### mBox L32 wiring centre

Technical Data

Dimensions: 159 x 35 x 114mm (WxLxH)

Cable sizes: 0.14 to 4mm<sup>2</sup> Ingress Protection: IP2X Rating: 32A / 450V

**EN 60670 Compliant** 

Description.	Item No.	Pack Qty.
mBox L32	60362958	1

# **Includes**

- 3 x 221-412
- 2 x 221-413
- 4 x 221-415
- Y & S plan wiring diagram
  - + blank for custom

# **Applications**

- Heating systems
- Data centres
- Alarm Systems
- Lighting

# Y'PLAN EARTH 4 NEUTRAL 6 REUTRAL 6 REUTRAL 1 REUTRAL 1 REUTRAL 6 REUTRAL

# **Operating**



1. Strip the conductor 11mm.



Open clamping unit using the lever and insert the conductor.



3. Lower the lever to close the clamp to complete the connection.

4. To remove, lift the lever and pull out the conductor.



Easy testing, test point on the back and front of the housing.