





safe.inspiring.green.



# Smart fire protection solutions from a single source.

In future, Spelsberg will unite its first-class solutions for electrical functional integrity under a new brand: LIFELINE stands for the intelligent integration of innovative product designs with high quality heat and fire resistant materials and components. Consequently, it is ensured that in case of fire all the relevant safety systems continue to work without interruption even under the toughest conditions.



More fire protection.

More safety. More trust.

LIFELINE is the technology for life. With the knowledge and experience of our competent staff, we take responsibility every day to make the world a little safer. The smart fire safety solutions of LIFELINE offer first-class quality, which can be relied upon in emergencies. LIFELINE protects all life and assets without compromises and guarantees the best form of sustained fire safety.



High technical performance.

Only reliable products can ensure the electrical functional integrity and protect life in case of a fire. LIFELINE guarantees the function of life-saving electrical systems in buildings and tunnels, such as emergency lighting and smoke extraction systems in escape and rescue routes. As a leading manufacturer of high quality junction and connection boxes and robust surface-mounted small distribution boards, Spelsberg has always been strongly positioned with the LIFELINE brand for the development of fire protection solutions, particularly in these product segments.



Electrical function integrity E30 to E90

The junction boxes as well as the WKE-AK small distributors of LIFELINE provide electrical functional integrity between 30 and 90 minutes in the event of a fire. In doing so, the classes E30 to E90 identify the minimum duration for the functional integrity of the electrical systems.

LIFELINE ensures that the function of fire alarm systems, acoustic systems, emergency lighting or elevators with evacuation function is maintained for at least 30 minutes during an emergency. And in the case of pressure boosting systems for the extinguishing water supply, smoke and heat exhaust ventilation systems or for fire brigade lifts for at least 90 minutes. Guaranteed.



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Technical information

Functional integrity - general information

The brand WLIFELINE

Contents

E30

Ensuring the functional integrity for at least 30 minutes, e.g., for:

- Fire alarm systems
- Acoustic systems
- Emergency lighting
- Elevators with evacuation function for warning, escape and/or rescue

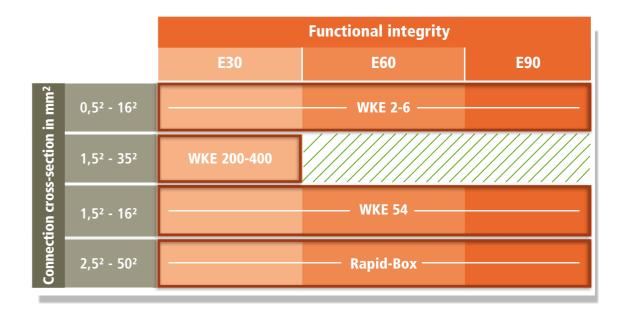
E90

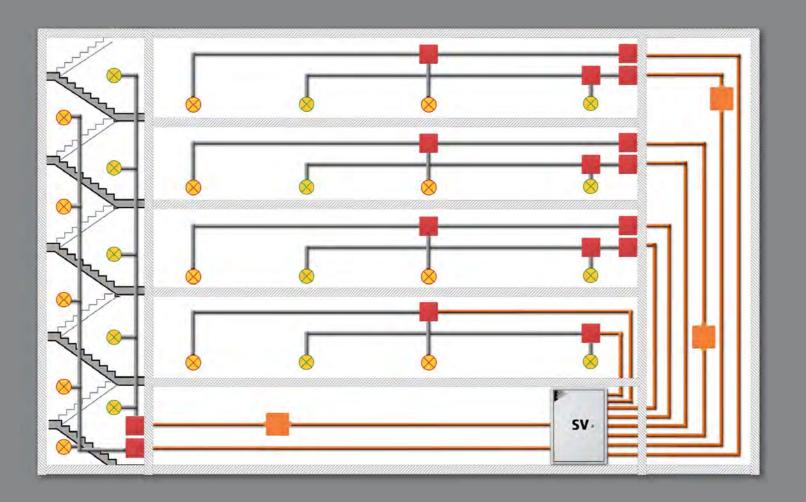
Ensuring the functional integrity for at least 90 minutes, e.g., for:

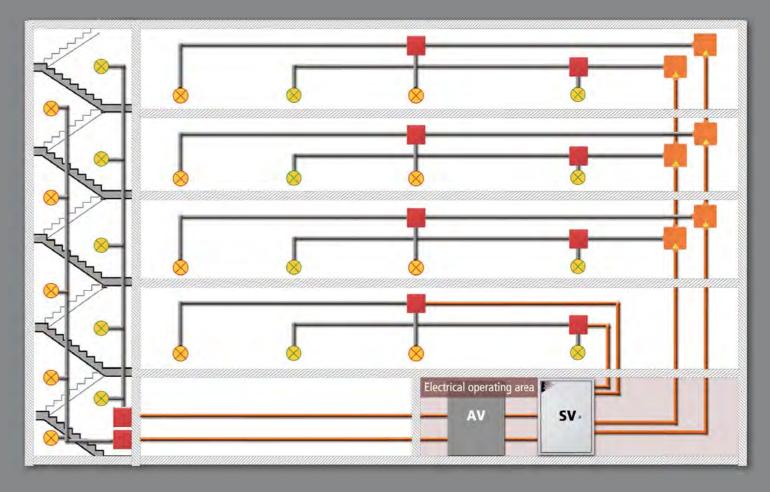
- Pressure boosting systems for supply of extinguishing water
- Smoke and heat extraction systems
- Fire brigade lifts for extinguishing and/or rescue

			Functional integrity	
		E30	E60	E90
	IP66, 6 bar IK08		WKE 2-6 —	
Properties	IP66 IK08	WKE 200-400		
Prop	IP66, IP67 IK07		WKE 54	
	IP66, IP67 IK09		Rapid-Box	

The classes **E30** to **E90** identify the minimum duration for the functional integrity of electrical systems.







AV: General power supply

SV: Safety current supply

AV: General power supply

SV: Safety current supply









**WKE AK** 







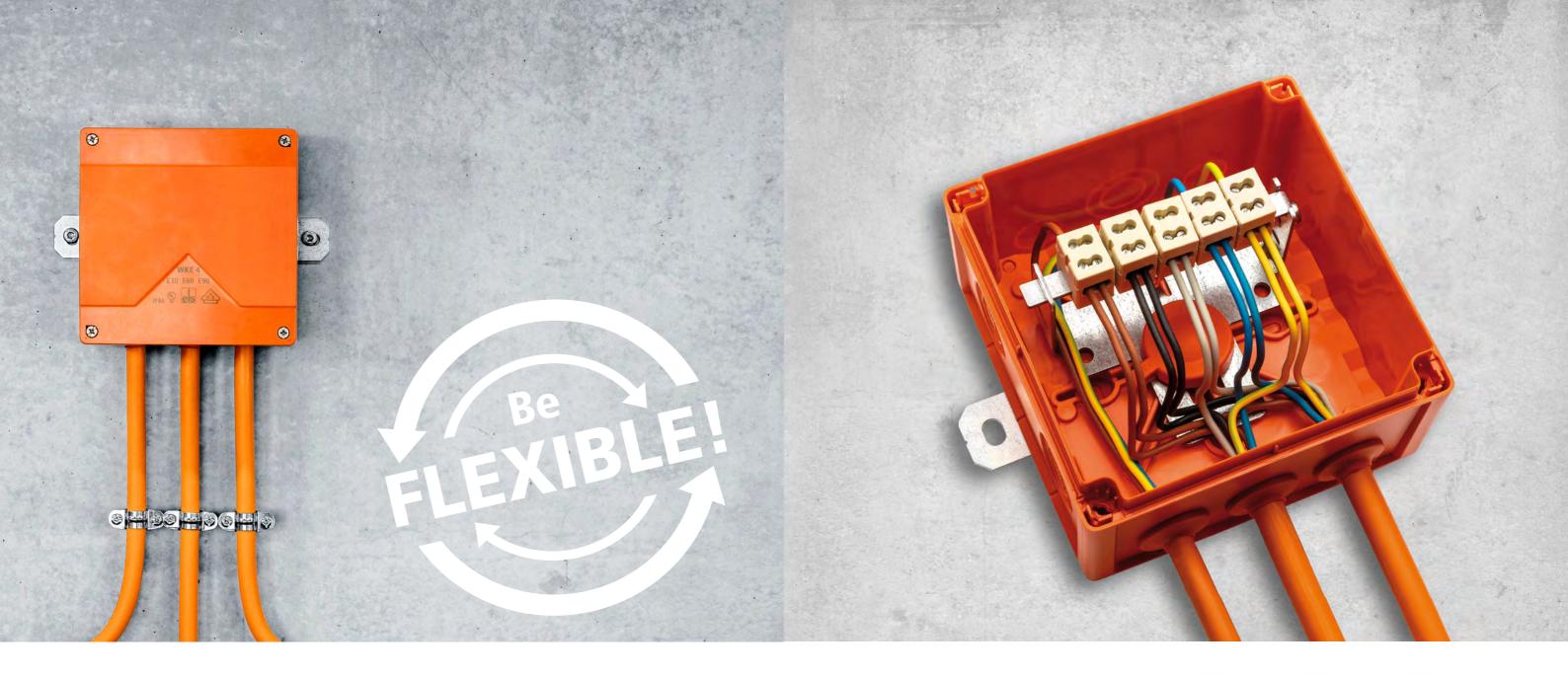
WKE 200-400 (with fuse)



**WKE 54** 

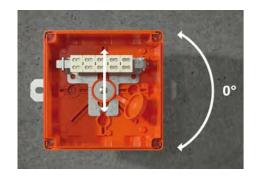


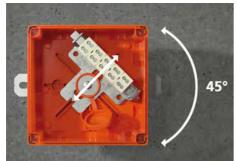
**WKE AK** 

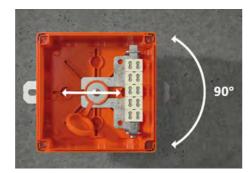


## Planning freedom saves time and cost for you

- Clear and variable positioning of the base carrier through simple rotation in steps of 45°
- Step-less positioning of the longitudinal axis







## An easy, quick and safe installation

- Central fixing through just one screw
- Accessible at any time
- All cable entries can be used with terminal in high position

## Position above:

- easy handling of the wires
- Possible to mount the cables by adhering to the bending radius
- All cable entries can be used without restrictions

# Position **below**:

- ideal for special solutions
- Use of D0 fuses (for WKE 6)

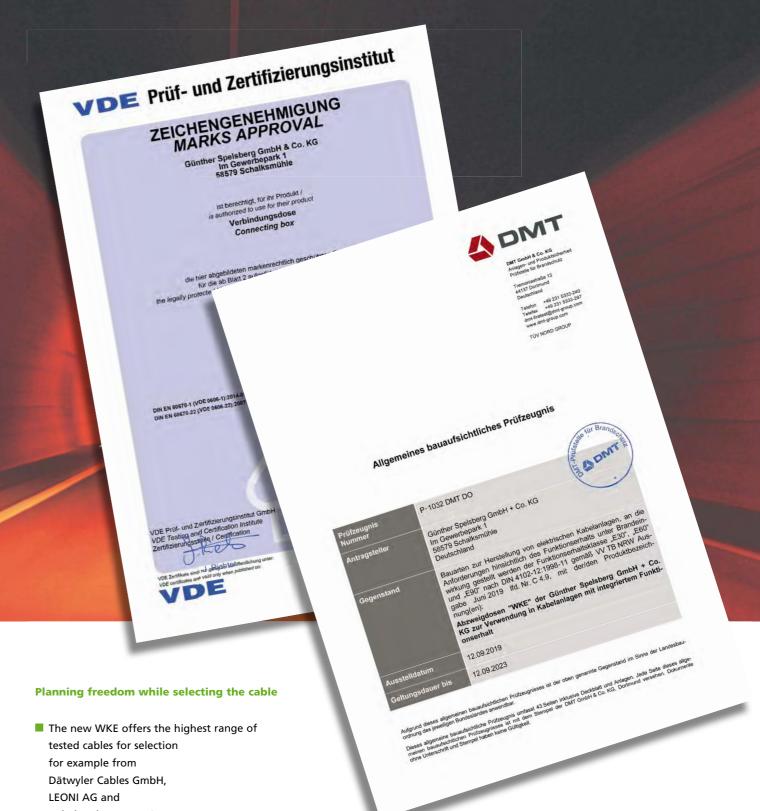






# **Extremely robust**

- High protection class IP 66
- Impact strength IK08
- Ideal for special solutions e.g., in tunnels IP 66 6 bar according to RVS 09.02.41
- External fixing lugs and cover screws optionally in stainless steel V4A
- High strength of the box



Kabelwerk Eupen AG



# **Cover retaining strap**

can be used optionally by the



# **Labelling fields**

← Areas for an individual labelling



# **Knockouts with multiple** options

- optimised positioning of the knockouts
- adjusted to the fixing systems
   Locking of counter nuts
  patented knockouts

- integrated knockout points
- easy and clean knocking-out



further accessories



# **External fixing lugs**

- ≠ pre-mounted for a fast installation
   ≠ can be rotated by 90°
- ensures correct mounting



# **External drainage membrane**

optional knocking-out, even after the installation



# **Extensive international**

certifications

DIN 4102-12 Functional integrity E30 / E60 / E90



EN 60670
Tapping and connection boxes



IEC 62208 & IEC 61439
Empty housing & switching device combinations

Further relevant information on the topic of functional integrity is available at:

www.spelsberg.com/WKE







WKE 2 - 5 x 1,5<sup>2</sup>







EN 60670 and IEC 62208, with electrical circuit integrity

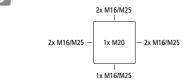
E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of high-

temperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning









Description

Order no.

WKE 2 - 5 x 1,52 Junction box, 5-pole, 0.5 - 2.5 mm<sup>2</sup>, distribution box, 5-pole, 0.5 - 1.5 mm<sup>2</sup>, number of clampable conductors per pole: 8 x 0.5<sup>2</sup> / 4 x 0.75<sup>2</sup> / 6 x 1<sup>2</sup> / 6 x 1.5<sup>2</sup> / 2 x 2.5<sup>2</sup>

86650201

WKE 2 - 3 x 4<sup>2</sup>

1x M16/M25









E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of high-

temperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning







Description

Order no.

86651201

WKE 2 - 3 x 4<sup>2</sup>

Junction box, 3-pole, 1 - 6 mm<sup>2</sup>, distribution box, 3-pole, 1 - 4 mm<sup>2</sup>, number of clampable conductors per pole:  $10 \times 1^2 / 8 \times 1,5^2 / 6 \times 2,5^2 / 4 \times 4^2 / 2 \times 6^2 / 2 \times 10^2$ 

WKE 4 - 5 x 4<sup>2</sup>









EN 60670 and IEC 62208, with electrical circuit integrity

E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of high-

temperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning





Cable distribution and junction box with IP66, certified to

2x M20/M32 -2x M20 - 2x M20/M32 3x M25

Description

Order no. 86650401

WKE 4 - 5 x 4<sup>2</sup>

Junction box, 5-pole, 1 - 10 mm<sup>2</sup>, distribution box, 5-pole, 1 - 4 mm<sup>2</sup>, number of clampable conductors per pole:

 $10 \times 1^2 / 8 \times 1,5^2 / 6 \times 2,5^2 / 4 \times 4^2 / 2 \times 6^2 / 2 \times 10^2$ 









included









certificate (AbP) VDE certified UL-EU certified

















Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



# **Description**

Order no.

WKE 2 - Duo 3 x 4<sup>2</sup>

86740001

Junction box, 3-pole, 0.5 - 4 mm<sup>2</sup>, distribution box, 3-pole, 0.5 - 4 mm<sup>2</sup>, number of clampable conductors per pole: 16 x 0.5<sup>2</sup> / 8 x 0.75<sup>2</sup> / 12 x 1<sup>2</sup> / 12 x 1.5<sup>2</sup> / 4 x 2.5<sup>2</sup> / 4 x 4<sup>2</sup>

WKE 4 - Duo 5/3 x 6<sup>2</sup>

















Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



# **Description**

Order no.

WKE 4 - Duo 5/3 x 6<sup>2</sup>

86771001

Junction box, 5-pole, 0.5 - 6 mm<sup>2</sup>, distribution box 3-pole 0.5 - 6 mm<sup>2</sup>, number of clampable conductors per pole: 16 x 0.5<sup>2</sup> / 8 x 0.75<sup>2</sup> / 12 x 1<sup>2</sup> / 12 x 1.5<sup>2</sup> / 4 x 2.5<sup>2</sup> / 4 x 4<sup>2</sup> / 4 x 6<sup>2</sup>, in 2-pole pass-through 8 x 0.5<sup>2</sup> /  $4 \times 0.75^{2} / 6 \times 1^{2} / 6 \times 1.5^{2} / 2 \times 2.5^{2} / 2 \times 4^{2} / 2 \times 6^{2}$ 

WKE 4 - Duo 5 x 6<sup>2</sup>















Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



# **Description**

Order no. 86741001

WKE 4 - Duo 5 x 62 Junction box, 5-pole, 0.5 - 6 mm<sup>2</sup>, distribution box, 5-pole, 0.5 - 6 mm<sup>2</sup>, number of clampable conductors per pole: 16 x 0.5<sup>2</sup> / 8 x 0.75<sup>2</sup> / 12 x 1<sup>2</sup> / 12 x 1.5<sup>2</sup> / 4 x 2.5<sup>2</sup> / 4 x 4<sup>2</sup> / 4 x 6<sup>2</sup>

## WKE 6 - Duo 7 x 6<sup>2</sup>





EN 60670 and IEC 62208, with electrical circuit integrity

E30 - E90 according to DIN 4102 part 12. Halogen-free

housing made of special thermoplastic, clamps of high-

external fastening lugs, variable terminal positioning

temperature-resistant special ceramic, quick assembly with









1x M20/M32 2x M25/M40 1x M25/M40 2x M20/M32 1x M25/M40 4x M25/M40

Description

WKE 6 - Duo 7 x 62

WKE 6 - 5 x 6<sup>2</sup>

Description

Junction box, 7-pole, 0.5 - 6 mm<sup>2</sup>, distribution box 7-pole 0.5 - 6 mm<sup>2</sup>, number of clampable conductors per

pole: 16 x 0.5<sup>2</sup> / 8 x 0.75<sup>2</sup> / 12 x 1<sup>2</sup> / 12 x 1.5<sup>2</sup> / 4 x 2.5<sup>2</sup> / 4 x 4<sup>2</sup> / 4 x 6<sup>2</sup>

# 250 x 200 x 120 mm













1x M20/M32 2x M25/M40 Cable distribution and junction box with IP66, certified to 1x M25/M40 2x M20/M32 1x M25/M40 2x M20/M32 4x M25/M40

1x M20/M32 2x M25/M40

EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning

WKE 6 - 5 x 6<sup>2</sup> 86650601 Junction box, 5-pole, 1.5 - 16 mm<sup>2</sup>, distribution box, 5-pole, 1 - 6 mm<sup>2</sup>, number of clampable conductors per pole: 10 x 1.5<sup>2</sup> / 8 x 2.5<sup>2</sup> / 4 x 4<sup>2</sup> / 4 x 6<sup>2</sup> / 2 x 10<sup>2</sup> / 2 x 16<sup>2</sup>

# WKE 4 - Duo 3 x 10<sup>2</sup>



pole: 20 x 12 / 16 x 1,52 / 12 x 2,52 / 8 x 42 / 4 x 62 / 4 x 102









EN 60670 and IEC 62208, with electrical circuit integrity

E30 - E90 according to DIN 4102 part 12. Halogen-free

housing made of special thermoplastic, clamps of high-

external fastening lugs, variable terminal positioning

temperature-resistant special ceramic, quick assembly with







2x M20 1x M20/M32 Cable distribution and junction box with IP66, certified to 2x M20/M32 2x M20 - 2x M20/M32 3x M25

Description Order no. WKE 4 - Duo 3 x 10<sup>2</sup> 86750001 Junction box, 3-pole, 1 - 10 mm<sup>2</sup>, distribution box, 3-pole, 1 - 10 mm<sup>2</sup>, number of clampable conductors per

Order no.

86742001

Order no.

250 x 200 x 120 mm

# WKE 6 - Duo 5 x 10<sup>2</sup>













Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



# **Description**

## WKE 6 - Duo 5 x 10<sup>2</sup>

Junction box, 5-pole, 1 - 10 mm<sup>2</sup>, distribution box, 5-pole, 1 - 10 mm<sup>2</sup>, number of clampable conductors per pole: 20 x 1<sup>2</sup> / 16 x 1,5<sup>2</sup> / 12 x 2,5<sup>2</sup> / 8 x 4<sup>2</sup> / 4 x 6<sup>2</sup> / 2 x 10<sup>2</sup>

# WKE 6 - Duo 3 x 16<sup>2</sup>

Order no.

86751001









temperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning





Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of high-



## **Description**

## WKE 6 - Duo 3 x 16<sup>2</sup>

Junction box, 3-pole, 1.5 - 16 mm<sup>2</sup>, distribution box, 3-pole, 1.5 - 16 mm<sup>2</sup>, number of clampable conductors per pole: 20 x 1.52 / 16 x 2.52 / 12 x 42 / 8 x 62 / 4 x 102 / 4 x 162 Order no. 86760001

# WKE 6 - Duo 5 x 16<sup>2</sup>

















Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



## Description

# WKE 6 - Duo 5 x 16<sup>2</sup>

Junction box, 5-pole, 1.5 - 16 mm<sup>2</sup>, distribution box, 5-pole, 1.5 - 16 mm<sup>2</sup>, number of clampable conductors per pole:  $20 \times 1.5^2 / 16 \times 2.5^2 / 12 \times 4^2 / 8 \times 6^2 / 4 \times 10^2 / 4 \times 16^2$  Order no. 86761001









- Terminal area up to 35²
- Extremely durable
- Ideal for time and material-saving planning in building technology
- State-certified by MPA NRW
- Latest test certificate available on the Internet at www.spelsberg.com
- Extensive accessories, such as fixing screws and fittings enclosed in all junction boxes
- **connection and tapping till the rated** cross-section without restrictions

We can offer you a large number of special variants upon request.































Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



**Description** Order no. **WKE 202 RK** 86220201 Junction box 5-pole, termination capability per pole 2 x 0.5 - 6 mm<sup>2</sup>

### **WKE 203 RK** 115 x 115 x 93 mm















Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



**Description** Order no. **WKE 203 RK** 86220301 Junction box 3-pole, termination capability for each pole 4 x 0.5 - 4 mm<sup>2</sup>

### 160 x 160 x 110 mm **WKE 302 RK**





















Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



**Description** Order no. **WKE 302 RK** 86230201 Junction box 5-pole, termination capability for each pole 4 x 4 - 16 mm<sup>2</sup>

# **WKE 303 RK**





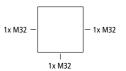








Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



Order no. **Description WKE 303 RK** 86230301 Junction box 5-pole, termination capability for each pole 4 x 2.5 - 10 mm<sup>2</sup>

## **WKE 402 RK**









Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



**Description** Order no. **WKE 402 RK** 86240201 Junction box 5-pole, termination capability for each pole 2 x 2.5 - 35 mm<sup>2</sup>

# **WKE 403 RK**







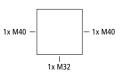




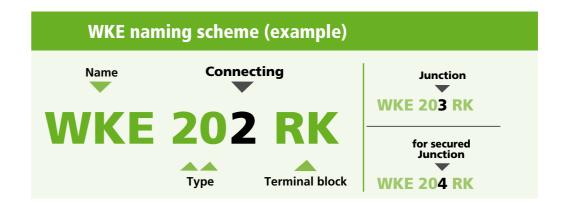




Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



**Description** Order no. 86240301 **WKE 403 RK** Junction box 5-pole, termination capability for each pole 4 x 4 - 16 mm<sup>2</sup>









Exchangeable fuses









**WKE 4-6** 





**WKE 54** 



The new WKE 4 to 6 branch and junction boxes with fuses offer functional integrity for the main supply line by enabling safe and secure branches for every floor or every fire compartment. In case of faults, only the affected branch is disconnected safely from the main line. The main line remains intact so that, for instance, the lighting of the escape routes continues to function.

This method enables a completely new type of installation, because there is no need to

supply power to individual sections in starshape, but instead can junction off comfortably from the main strand without impairing the functional integrity. The cables saved in this way reduce cost and installation time while setting up the system. Double clamps made of high temperature ceramic material for cable cross-sections up to 16 mm<sup>2</sup> provide for additional safety and ensure the functional integrity up to E 90.

Similarly, the junction and connection boxes WKE 200-400 with fuses are also the new members in the WKE product family. They also help in disconnecting individual sections or floors from the main strand - but enable the wiring of cross-sections up to 35 mm.

## WKE 4 - 3/3 x 6<sup>2</sup> 1SB









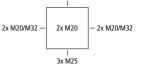






EN 61439 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning

Cable distribution and junction box with IP66, certified to



## Description

## WKE 4 - 3/3 x 6<sup>2</sup> 1SB

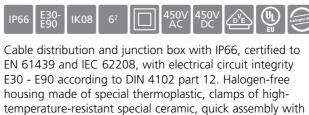
Transit box, 3-pole, 0.5 - 6 mm<sup>2</sup>, distribution box, 3-pole, 0.5 - 6 mm<sup>2</sup>, fuse in the distribution box 1 x 2A (inner lying, 1 x WKE BS F2A, 86300101), number of clampable conductors per clamping point: 4 x 0.5<sup>2</sup>/  $2 \times 0.75^{2} / 3 \times 1^{2} / 3 \times 1.5^{2} / 1 \times 2.5^{2} / 1 \times 4^{2} / 1 \times 6^{2}$ 

# WKE 4 - 5/3 x 6<sup>2</sup> 1SB

Order no.

86911101





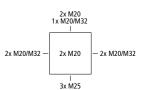












## **Description**

### WKE 4 - 5/3 x 6<sup>2</sup> 1SB

Transit box, 5-pole, 0.5 - 6 mm<sup>2</sup>, distribution box, 3-pole, 0.5 - 6 mm<sup>2</sup>, fuse in the distribution box 1 x 2A (inner lying, 1 x WKE BS F2A, 86300101), number of clampable conductors per clamping point: 4 x 0.5<sup>2</sup> /

external fastening lugs, variable terminal positioning

Order no. 86912101

# WKE 6 - 5/3x10<sup>2</sup> 1D0

2 x 0.75<sup>2</sup> / 3 x 1<sup>2</sup> / 3 x 1.5<sup>2</sup> / 1 x 2.5<sup>2</sup> / 1 x 4<sup>2</sup> / 1 x 6<sup>2</sup>



WKE 6 - 5/3x10<sup>2</sup> 1D0















Cable distribution and junction box with IP66, certified to EN 61439 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with



## **Description**

# Transit box, 5-pole, 0.5 - 6 mm<sup>2</sup>, distribution box, 3-pole, 0.5 - 6 mm<sup>2</sup>, fuse in the distribution box 1 x 2A

(inner lying, 1 x WKE BS F2A, 86300101), number of clampable conductors per clamping point: 4 x 0.52/ 2 x 0.75<sup>2</sup> / 3 x 1<sup>2</sup> / 3 x 1.5<sup>2</sup> / 1 x 2.5<sup>2</sup> / 1 x 4<sup>2</sup> / 1 x 6<sup>2</sup>

external fastening lugs, variable terminal positioning

Order no. 86922120

WKE 4-6 | FOR SECURED JUNCTION els spelsberg



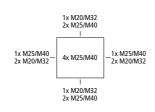








Cable distribution and junction box with IP66, certified to EN 61439 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



Description

Order no.

## WKE 6 - 5/3x16<sup>2</sup> 1D0

86932120

Transit box, 5-pole, 1.5 - 16 mm<sup>2</sup>, distribution box, 3-pole, 1.5 - 10 mm<sup>2</sup>, fuse in distribution box 1 x D01 socket (without insert), number of clampable conductors per clamping point 5 x 1.5<sup>2</sup> / 4 x 2.5<sup>2</sup> / 2 x 4<sup>2</sup> / 2 x 6<sup>2</sup> / 1 x 10<sup>2</sup> /

# Safe solution for U55

The underground line 55 of Berlin runs on the section between Brandenburg Gate and the main station. 365 days in a year, round the clock. The transport companies of Berlin (BVG) have very strict safety conditions for electrical engineering in the tunnels. They must ensure the functionality of the facilities vital for life even in case of fire.

The fire protection boxes of Spelsberg with integrated fuses protect the electrical cable systems in this harsh environment. In case of fire, they ensure that the lighting and the evacuation facilities continue to function for at least 30 minutes.

The special solutions of the types WKE 300 and WKE 400 in protection class II and protection type IP66, developed especially for the Berlin transport companies, are made of a extremely durable halogen-free, self-extinguishing duroplast. A safe solution, wherever fire protection, high impact resistance and reliable sealing against dust and water are important.







## WKE 300 8 x 6<sup>2</sup> 2FS





Cable junction and connection boxes with IP66 certified

as per EN 61439-2, with electrical functional integrity E30

according to DIN 4102 Part 12 in the duct, enclosure and

terminal strips made from halogen-free special duroplastic







2x M25

## **Description**

Order no.

WKE 300 8 x 6<sup>2</sup> 2FS

86226201

Junction box with fused branch, Connection box 3-pole, Junction box 3-pole, Number of conductors per pole 4 x 1.5 - 6mm<sup>2</sup>, Capacity per clamping point 1 x 1.5 - 6mm<sup>2</sup>, Fuse holder (20 x 5mm) max. 6.3A

# WKE 400 7 x 10<sup>2</sup> 1D0







2x M32

as per EN 61439-2, with electrical functional integrity E30 according to DIN 4102 Part 12 in the duct, enclosure and terminal strips made from halogen-free special duroplastic

1x M25

# **Description**

Order no. 86235501

WKE 400 7 x 10<sup>2</sup> 1D0

Junction box with fused branch, Connection box 3-pole, Junction box 3-pole, Number of conductors per pole 4 x 1.5 - 10mm<sup>2</sup>, Capacity per clamping point 1 x 1.5 - 10mm<sup>2</sup>, D02 fuse holder max. 6A

200 x 200 x 110 mm

## WKE 400 7 x 10<sup>2</sup> 2D0













Cable junction and connection boxes with IP66 certified as per EN 61439-2, with electrical functional integrity E30 according to DIN 4102 Part 12 in the duct, enclosure and terminal strips made from halogen-free special duroplastic



Description

Order no.

WKE 400 7 x 10<sup>2</sup> 2D0

86235601

Junction box with fused branch, Connection box 3-pole, Junction box 3-pole, Number of conductors per pole 4 x 1.5 - 10mm<sup>2</sup>, Capacity per clamping point 1 x 1.5 - 10mm<sup>2</sup>, D02 fuse holder max. 6A

WKE 4-6 | FOR SECURED JUNCTION

**WKE 204 RK** 















Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



# **Description**

Order no.

## **WKE 204 RK**

Junction box with fused branch, Connection box 3-pole, Junction box 3-pole, Number of conductors per pole 4 x 0.5 - 4mm<sup>2</sup>, Capacity per clamping point 1 x 0.5 - 4mm<sup>2</sup>, Fuse holder (20 x 5mm) max. 6.3A

86220401

**WKE 304 RK** 









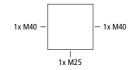








Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to DIN 4102-12, enclosure and terminal strips made from halogen-free special duroplastic



# Description

Order no. 86230401

**WKE 304 RK** Junction box with fused branch, Connection box 5-pole, Junction box 3-pole, Number of conductors per pole

## **WKE 404 RK**







WKE 200-400 | FOR SECURED JUNCTION



halogen-free special duroplastic



4 x 1.5 - 10mm<sup>2</sup>, Capacity per clamping point 1 x 1.5 - 10mm<sup>2</sup>, Fuse holder (20 x 5mm) max. 6.3A



Cable junction and connection box with IP66 certified acc. EN 60670, with electrical functional integrity E30 acc. to

DIN 4102-12, enclosure and terminal strips made from





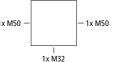




# Description

### **WKE 404 RK**

Junction box with fused branch, Junction box 5-pole, Number of conductors per pole 2 x 2.5 - 35mm<sup>2</sup>, Capacity per clamping point 1 x 2.5 - 35mm<sup>2</sup>, Junction box 3-pole, Number of conductors per pole 4 x 1.5 - 10mm<sup>2</sup>, Capacity per clamping point 1 x 1.5 - 10mm<sup>2</sup>, Fuse holder (20 x 5mm) max. 6.3A



Order no.

86240401

## Secured tapping

- Double terminal 16<sup>2</sup>
- Ideal for tunnels and industrial areas

## E90 functional integrity

- According to DIN 4102 Part 12
- Function of the electrical system for over 90 minutes
- Certified by MPA Dresden

## **IP67** protection class

- As per DIN EN 60670
- No penetration of dust
- Protection during temporary submersion
- Protection against external mechanical stresses
- IK07

## Pressure-pull strength

■ Testing according to specifications of DB-AG "Tunnel safety lighting systems for railway tunnels"

























WKE 54 | FOR SECURED JUNCTION

**WKE 54** 













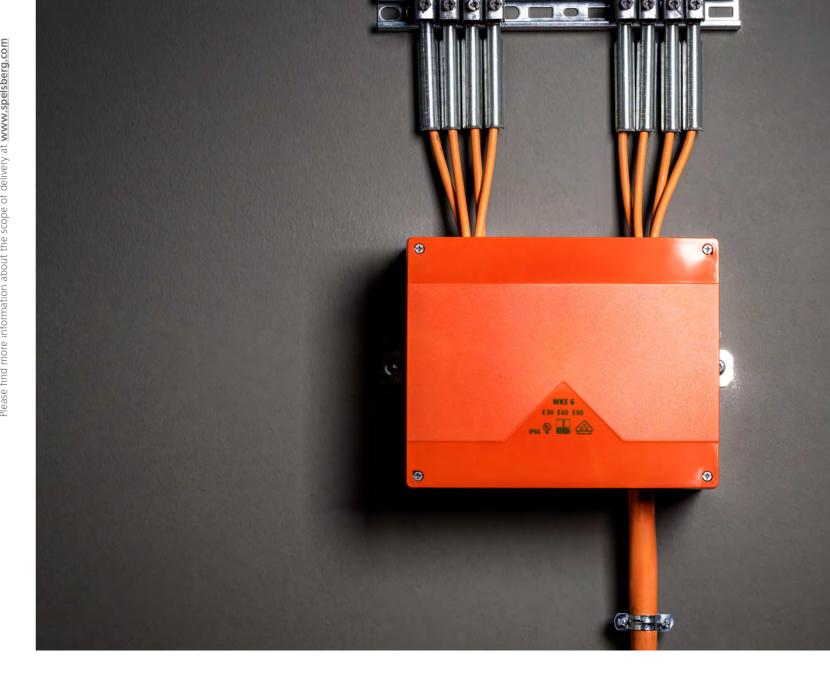


Cable junction and connection boxes with IP66/67, certified according to EN 61439-2, with electrical functional integrity E30 - E90 acc. to DIN 4102-12, halogen-free enclosure made from special duroplastic, terminals made of a high-temperature-resistant special ceramic, rapid mounting by external brackets

Description	Order no.
WKE 54	86025401
To be used as a junction box with fused branch, Connection box 5-pole 1.5 - 16 mm <sup>2</sup> , Junction box 5-pole	
1.5 - 10 mm <sup>2</sup> , Number of conductors per pole: 20 x 1.5 <sup>2</sup> / 16 x 2.5 <sup>2</sup> / 12 x 4.0 <sup>2</sup> / 8 x 6 <sup>2</sup> / 4 x 10 <sup>2</sup> / 4 x 16 <sup>2</sup> ,	
2 fuse bases D01 max. 16 A	

Recommended accessories:	Order no.
KVR M20-MGM/or, cable gland	22762001
KVR M25-MGM/or, cable gland	22762501
KVR M32-MGM/or, cable gland	22763201
KVR M40-MGM/or, cable gland	22764001





# Functional integrity E30-E90 according to DIN 4102 Part 12 with ceramic terminals 1.5 mm<sup>2</sup>

- The right solution for each cross-section and application
- Installation materials such as screw anchors and double diaphragm membranes included
- Possible to mount on cable trays
- Up to 32-pin

- Quick mounting through external fixing
- Completely pre-assembled
- Ideal for building technology
- General construction-supervisory test certificate (AbP)
- VDE certified

























# WKE 4 - 8 x 1,5<sup>2</sup>













Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



# **Description**

## WKE 4 - 8 x 1,5<sup>2</sup>

Junction box, 8-pole, 0.5 - 2.5 mm<sup>2</sup>, distribution box, 8-pole, 0.5 - 1.5 mm<sup>2</sup>, number of clampable conductors per pole: 8 x 0.5<sup>2</sup> / 4 x 0.75<sup>2</sup> / 6 x 1<sup>2</sup> / 6 x 1.5<sup>2</sup> / 2 x 2.5<sup>2</sup>

# WKE 6 - 16 x 1,5<sup>2</sup>

Order no.

86850801













Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



## **Description**

### WKE 6 - 16 x 1.52

Junction box, 16-pole, 0.5 - 2.5 mm<sup>2</sup>, distribution box, 16-pole, 0.5 - 1.5 mm<sup>2</sup>, number of clampable conductors per pole:  $8 \times 0.5^{2} / 4 \times 0.75^{2} / 6 \times 1^{2} / 6 \times 1.5^{2} / 2 \times 2.5^{2}$  Order no. 86851601

# WKE 6 - 32 x 1,5<sup>2</sup>

















Cable distribution and junction box with IP66, certified to EN 60670 and IEC 62208, with electrical circuit integrity E30 - E90 according to DIN 4102 part 12. Halogen-free housing made of special thermoplastic, clamps of hightemperature-resistant special ceramic, quick assembly with external fastening lugs, variable terminal positioning



## **Description**

## WKE 6 - 32 x 1.52

Junction box, 32-pole, 0.5 - 2.5 mm<sup>2</sup>, distribution box, 32-pole, 0.5 - 1.5 mm<sup>2</sup>, number of clampable conductors per pole:  $8 \times 0.5^2 / 4 \times 0.75^2 / 6 \times 1^2 / 6 \times 1.5^2 / 2 \times 2.5^2$  Order no. 86853201



# **WKE 405 LSA**



Tested system: WKE 405 - cable junction boxes with time-saving (solder, screw and stripping free) connection technology for cables with functional integrity according to DIN 4102 part 12 - tested by the MPA Dresden



# Description

## WKE 405 LSA

Junction box equipped with two LSA-Plus connector blocks, respectively for 10 double wires (2 x 10 DA), the LSA-Plus contacts are suitable for a solid conductor with 0.4 to 0.8 mm diameter and an outside insulation diameter of 0.7 to 1.6 mm

Order no. 86240501









# Double membrane seals



Double membrane seals made of elastic plastic with two sealing membranes, closed, f. wall thicknesses 1.5 - 4.5 mm, thermoplastic elastomer, orange

Description	Order no.
DMS M16/or	26061601
DMS M20/or	26062001
DMS M25/or	26062501
DMS M32/or	26063201
DMS M40/or	26064001

# Double membrane seals



Double membrane seals made of elastic plastic with two sealing membranes, max. four cable entries for control cables, f. wall thicknesses 1.5 - 4.5 mm, thermoplastic elastomer, orange

Description	Order no.
DMS M32/4 or	26063301
DMS M40/4 or	26064101

# Cable gland



Cable gland with strain relief, polyamide, M\_ x 1.5 mm, with lock nut, orange

Description	Sealing area/mm	Thread lenght/mm	Order no.
KVR M20-MGM/or	7 - 14.0	9	22762001
KVR M25-MGM/or	9 - 16	11	22762501
KVR M32-MGM/or	11 - 21.0	11	22763201
KVR M40-MGM/or	16 - 28.0	11	22764001

# WKE BS F2A spare fuses



Spare fuses for WKE 2-6 in the "SB" versions, Wired device fuses F2A in the size 5 x 20 mm coated with a glass fibre sleeve

Description	Order no.
WKE BS F2A	86300101
10 pieces per packaging unit	

# Externel fastening lugs



External fastening kit V2A

Description	Order no.
WKE 200 ABL External fastening kit V2A, for WKE 200 up to WKE 400, Material stainless steel V2A (1.4301), Set = 4 pcs.	86040001
<b>KVS</b> Cable gland protection set, is needed for IK 09 when cable glands are used, for WKE 200 up to WKE 400, IK09, Material stainless steel V2A (1.4301), Set = 3 pcs.	89004001

Cover screws and external fitting lugs can be delivered in V4A upon request



■ VDE tested according to EN 61 439-2

■ 14 -70 modular units

- Low-voltage switching device combinations according to EN 61439 that can be planned freely
- Compact size
- Can be fitted individually with type-tested equipment
- Tested according to DIN 4102 Part 2 by MPA Dresden
- the protection of the escape and rescue route according to MLAR 2005
- Functional integrity F90 (according to E90) for the protection of electrical fittings as per MLAR 2005
- One housing for all applications

**WKE AK 14** 540 x 400 x 230 mm



IP6X E30- S M R IK10 400V AC DC DC













Fire protection small-scale distributors, VDE certificated compliant with DIN EN 61 439-2, VDE tested and certified under specific operating conditions to be compliant with DIN EN 61 439-2, tested compliant with DIN 4102-2 by MPA Dresden, F90 for internal flame impingement according to DIN 4102 based on I90, F90 for external flame impingement according to DIN 4102 based on E90, can be individually equipped with type-tested operating materials

Description Order no. 86541401 WKE AK 14 Hinges left, 1-row, 14 distribution units, Ui=400V, screwless PE/N terminal rails each with 3 screwable clamping points, 2.5 - 16 mm<sup>2</sup>, 14 screwless terminal points, 1.5 - 4 mm<sup>2</sup>, elastic entries on top, with cable covering, masking and labelling strips, additional double-membrane seals and other accessories 86551401 Hinges right, 1-row, 14 distribution units, Ui=400V, screwless PE/N terminal rails each with 3 screwable clamping points, with cable covering, 2.5 - 16 mm<sup>2</sup>, 14 screwless terminal points, 1.5 - 16 mm<sup>2</sup>, elastic entries on top, masking and labelling strips, additional double-membrane seals and other accessories

WKE AK 28









Fire protection small-scale distributors, VDE certificated compliant with DIN EN 61 439-2, VDE tested and certified under specific operating conditions to be compliant with DIN EN 61 439-2, tested compliant with DIN 4102-2 by MPA Dresden, F90 for internal flame impingement according to DIN 4102 based on I90, F90 for external flame impingement according to DIN 4102 based on E90, can be individually

equipped with type-tested operating materials





17x M20 2x M20/M25 1x M32/M40

Description	Order no.
<b>WKE AK 28</b> Hinges left, 2 row, 28 distribution units, Ui=400V, 150 mm rail spacing, screwless PE/N terminal rails each with 3 screwable clamping points 1.5 - 4 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, with cable covering, masking and labelling strips, additional double-membrane seals and other accessories	86542801
WKE AK 28 R Hinges right, 2 row, 28 modules, Ui=400V, 150 mm rail spacing, masking and labelling strips, additional double, mombrane scale and other accessories, screwless PE/N terminal rails each with 3 screwable clamping points.	86552801

ble-membrane seals and other accessories, screwless PE/N terminal rails each with 3 screwable clamping points 1.5 - 4 mm<sup>2</sup>, 21 / 2 x 14 screwless clamping points 1.5 mm<sup>2</sup> - 4 mm<sup>2</sup>, elastic entries on top, with cable covering





















WKE AK 42 840 x 400 x 230 mm















Fire protection small-scale distributors, VDE certificated compliant with DIN EN 61 439-2, VDE tested and certified under specific operating conditions to be compliant with DIN EN 61 439-2, tested compliant with DIN 4102-2 by MPA Dresden, F90 for internal flame impingement according to DIN 4102 based on I90, F90 for external flame impingement according to DIN 4102 based on E90, can be individually equipped with type-tested operating materials

17x M20 2x M20/M25 1x M32/M40

Description	Order no.
WKE AK 42 Hinges left, 3 row, 42 distribution units, Ui=400V, 150 mm rail spacing, screwless PE/N terminal rails each with 6 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, with cable covering, masking and labelling strips, additional double-membrane seals and other accessories	86544201
WKE AK 42 R Hinges right, 3 row, 42 distribution units, Ui=400V, 150 mm rail spacing, with cable covering, masking and labelling strips, screwless PE/N terminal rails each with 6 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, additional double-membrane seals and other accessories	86554201

WKE AK 56

















Fire protection small-scale distributors, VDE certificated compliant with DIN EN 61 439-2, VDE tested and certified under specific operating conditions to be compliant with DIN EN 61 439-2, tested compliant with DIN 4102-2 by MPA Dresden, F90 for internal flame impingement according to DIN 4102 based on I90, F90 for external flame impingement according to DIN 4102 based on E90, can be individually equipped with type-tested operating materials



Description	Order no.
WKE AK 56 Hinges left, 4 row, 56 distribution units, Ui=400V, 150 mm rail spacing, screwless PE/N terminal rails each with 6 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, additional double-membrane seals and other accessories	86545601
WKE AK 56 R Hinges right, 4 row, 56 distribution units, Ui=400V, 150 mm rail spacing, additional double-membrane seals and other accessories, screwless PE/N terminal rails each with 3 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top	86555601

















Fire protection small-scale distributors, VDE certificated compliant with DIN EN 61 439-2, VDE tested and certified under specific operating conditions to be compliant with DIN EN 61 439-2, tested compliant with DIN 4102-2 by MPA Dresden, F90 for internal flame impingement according to DIN 4102 based on I90, F90 for external flame impingement according to DIN 4102 based on E90, can be individually equipped with type-tested operating materials

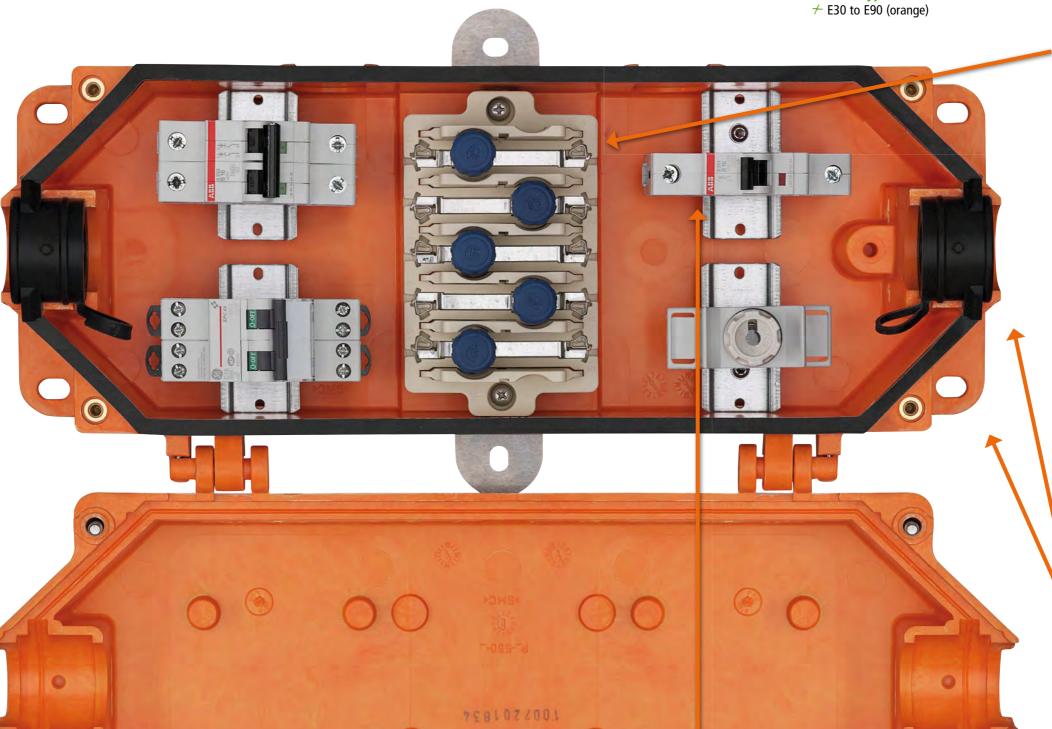
17x M20 2x M20/M25 1x M32/M40

Description	Order no.
WKE AK 70 Hinges left, 5 row, 70 distribution units, Ui=400V, 150 mm rail spacing, screwless PE/N terminal rails each with 6 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, additional double-membrane seals and other accessories	86547001
WKE AK 70 R Hinges right, 5-row, 70 distribution units, Ui=400V, 150 mm rail spacing, screwless PE/N terminal rails each with 6 screwable clamping points, 2.5 - 16 mm², 21 / 2 x 14 screwless clamping points 1.5 mm² - 4 mm², elastic entries on top, additional double-membrane seals and other accessories	86557001

- Contacting of uncut conductors up to 50 mm<sup>2</sup>, also suitable for retrofit
- Maintenance-free and secured jacket clamp with rotating, spring-loaded pressure piece and reverse rotation lock
- Tapping via tension spring clamp
- Simplified mounting of cable during installation
- Cost-effective, low maintenance operation of the system
- Uninterrupted power supply through the uncut conductor

## **Properties**

- 2 base versions:
- Standard according to IEC 61439-2 (VDE)
- Functional integrity E30 / E60 / E90 according to EN 1363 (MPA)
- Pre-wired on fuse
- With external fixing points
- Dimensions: 447 x 190 x 105 mm



\*













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**Basic types** 

← Circuit breaker 2A to 16A, 1-pin to

6

→ Safety fuse D01 from 2A to 16A, 1 to 4 pieces



## **Clamping capacity**

- ★ Terminal in the passage 16<sup>2</sup>: Terminal can be loaded with a rated current of max. 63 A, clamping range for uncut conductors 2.5 mm<sup>2</sup> - 16 mm<sup>2</sup>, clamping range for cut conductors 2.5 mm<sup>2</sup> - 10 mm
- ★ Terminal in the passage 50<sup>2</sup>: Terminal can be loaded with a rated current of max.100 A, clamping range for uncut conductors 10 mm<sup>2</sup> - 50mm<sup>2</sup>, clamping range for cut conductors 2.5 mm<sup>2</sup> - 35 mm<sup>2</sup>
- <u>
  ← Terminal in the branch 2.5<sup>2</sup>:</u> Terminal can be loaded with a rated current of max. 24 A, clamping range for conductors 0.5 mm<sup>2</sup> - 2.5 mm<sup>2</sup>

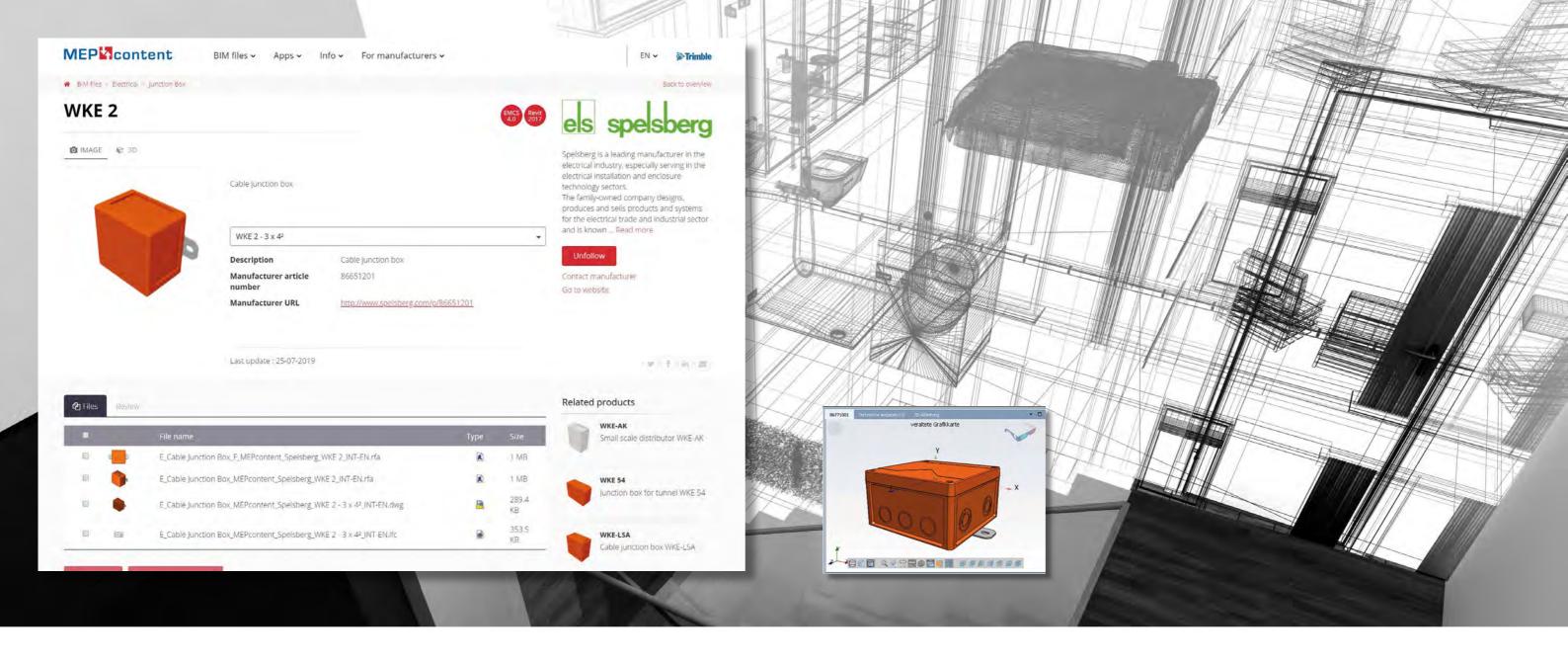


## **Cable diameter**

- Ø 9 to 34 mm
- means of cable gland: Ø till 16 mm (KVR M25)







Digitalisation in building technology has long since arrived with the use of CAD and smart solutions. In case of **Building Information Modelling** the entire building is recorded as a model. In doing so, all data relevant for planning, execution or management are combined under a single interface across all sectors.

Consequently, all information is constantly available to all persons involved. If the architect changes the floor plan, the bill of materials for doors or sockets changes automatically, and plans for the supply lines are also adjusted.

From specialist planners to retailers right till the contractors, regular synchronisation always keeps everyone up to date. In this way, quality of the process increases, while time and cost are reduced.

## Spelsberg supports the new standard

Many CAD manufacturers already support the IFC standard, which is available as an open standard to anyone who deals with buildings throughout their lifecycle.

With immediate effect, Spelsberg is also offering its products as BIM objects for the software solutions REVIT and ArchiCAD.

These can be downloaded from www.mepcontent.com.



Cadenas PARTsolutions supports design engineers, planners and buyers in their work by providing CAD models. For this reason, Spelsberg is also present with its products on the 3D CAD download portal **Cadenas PARTcommunity.** 

As early as in the design phase, engineers quickly find both components and standard parts using the smart portal search function.

Apart from this, PARTsolutions also offers the possibility of reducing and managing the components product costs significantly.

Likewise, the increased clarity in the form of a unified structure in the parts-information data and the ordered catalogue structure is a valued advantage for the users.





Spelsberg offers ready-to-use advertising texts for all products on ausschreiben.de, ais-online.de and heinze.de.

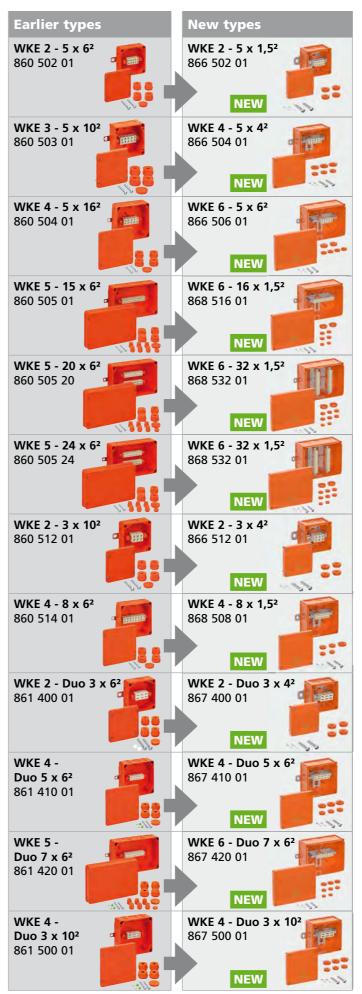
The texts provide relevant product information and descriptions in a convenient format. Thus, planners and architects have this tool directly available for efficient and safe planning.

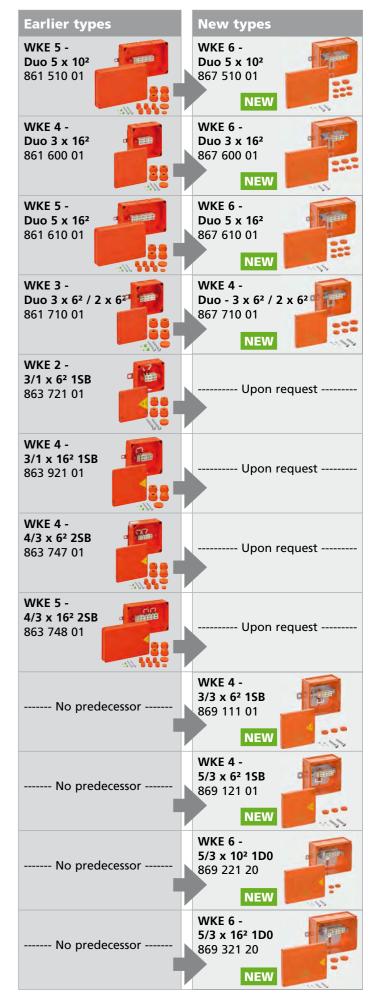
The Spelsberg product series are additionally characterised by expert opinions. The official documents of the certified WKE products can be downloaded as PDF from www.spelsberg.com.











# WKE 2 to 6 - cable entries

9	
M16	5 - 9
M20	7-12
M25	9 - 16
M32	14 - 21
M40	19 - 28
M32/4	4x 3,5 - 6
M40/4	4x 6 - 9

	+24	Nm
M 16 x 1,5	4 - 10	2,5
M 20 x 1,5	6 - 12	4
M 20 x 1,5	7 - 14	4
M 25 x 1,5	9 - 16	6
M 32 x 1,5	11 - 21	7
M 40 x 1,5	16 - 28	7,5

	= Double membrane seals
	= Cable screw coupling
<del> </del>	= Clamping area
Nm	= Rated torque

= Cable cross section

# Number of conductors that can be clamped per pin or clamping unit (depending upon the housing size)

	Tighte	Terminal 62 ening torque 0	).8 Nm	Terminal 10² Tightening torque 1.2 Nm		Terminal 16² Tightening torque 2.0 Nm			
	8 8	00	00	0 0	00	00	8 8	00	00
0,5²	16	8	4						
0,75²	8	4	2						
1,0 <sup>2</sup>	12	6	3	20	10	5			
1,5²	12	6	3	16	8	4	20	10	5
2,5²	4	2	1	12	6	3	16	8	4
<b>4</b> <sup>2</sup>	4	2	1	8	4	2	12	6	3
6 <sup>2</sup>	4	2	1	4	2	1	8	4	2
10 <sup>2</sup>				4	2	1	4	2	1
16²							4	2	1

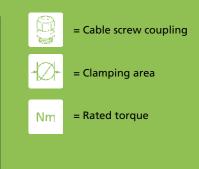
Single terminal, 2 clamping units Single = Clamping unit





# WKE 200-400 - cable entries

	+22+	Nm
M 20 x 1,5	6 - 13	4
M 25 x 1,5	6 - 15	6
M 25 x 1,5	9 - 19	6
M 32 x 1,5	17 - 26	7
M 40 x 1,5	17 - 27	7,5
M 50 x 1,5	23 - 34	7,5



# WKE 200-400 - Connection capacity of the terminals

	Conductor cross-section single-wire		Conductor cross-section multi-wire		Tightening torque	
	min	max	min	max	min	max
WKE SAK 2,5 / 35	0,5 mm <sup>2</sup>	6 mm <sup>2</sup>	0,5 mm <sup>2</sup>	4 mm <sup>2</sup>	0,4 Nm	0,6 Nm
WKE SAK 6 / 35	0,5 mm <sup>2</sup>	10 mm <sup>2</sup>	0,5 mm <sup>2</sup>	6 mm <sup>2</sup>	0,8 Nm	1,6 Nm
WKE SAK 10 / 35	1,5 mm <sup>2</sup>	10 mm <sup>2</sup>	1,5 mm <sup>2</sup>	16 mm <sup>2</sup>	2 Nm	2,4 Nm
WKE SAK 16 / 35	2,5 mm <sup>2</sup>	16 mm <sup>2</sup>	4 mm <sup>2</sup>	16 mm <sup>2</sup>	2 Nm	2,4 Nm
WKE SAK 35 N / 35	2,5 mm <sup>2</sup>	16 mm <sup>2</sup>	4 mm <sup>2</sup>	35 mm <sup>2</sup>	4 Nm	5 Nm





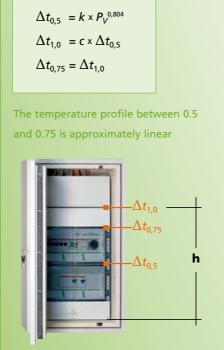








	WKE AK 14	WKE AK 28	WKE AK 42	WKE AK 56	WKE AK 70
Height	300 mm	450 mm	600 mm	750 mm	900 mm
Width	300 mm				
Depth	142 mm				
perm. power loss at 25 °C ambient temperature	21 W	27 W	33 W	40 W	47 W
	k= 2,38 c= 1,18	k= 1,85 c= 1,23	k= 1,53 c= 1,24	k= 1,32 c= 1,25	k= 1,17 c= 1,25



ı	$P_V$ devices*1 + $P_V$ fuses*1 + $P_V$ cables*2		on switching devices having esistance to a large extent, the ion may be used
П	= Total P <sub>V</sub>	$P = P_n \left( \frac{I}{I_n} \right)^2$	P = Power loss I = Load current
п			$I_n$ = Operating current $P_n$ = Power loss at $I_n$

\*2 For a lower load on the conductor, the following equation may be used

$$P = P_n \left( {l \atop l_n} \right)^2$$

P = Power loss in Watt per metre I = Conductor current (load) I<sub>n</sub>= Operating current  $P_n$ = Power loss at  $I_n$ 

### Installation of the cable

If the box is attached to the wall, the cables are inserted one at a time through the openings at the top. The cables must first be passed through the fire protection foam between the outer and inner housing. Double membrane seals ensure that the cable bushing lying inside is sealed securely. Each of the PE and N terminals in the distributor offer adequate connection capacity with up to 6 clamping units 2.5 - 16 mm<sup>2</sup> that can be fixed with screws and up to 21 screw-less clamping units 1.5 - 4 mm<sup>2</sup>.

## Quick mounting on the wall

For fixing the WKE AK 14 to 70 on the wall, only the dowels or screw anchors described in the "General Building Inspectorate Approval" may be used. The wall, on which the distributor is to be mounted, must have sufficient load-bearing capacity. In doing so, the fire resistance of the supporting walls must be at least as high as that of the distributor.

Using the enclosed screw anchors, the WKE AK can be mounted effortlessly on the mounting holes in the housing - in cracked or non-cracked concrete. A distance of at least one metre to the fire protection distributor is prescribed under low-voltage operation for adjacent installations, such as gas or water. A distance corresponding to the door end stop must be maintained near the doors.

Adherence to the limiting temperatures is a decisive criterion for the safe operation of the installation distributor. Too high internal temperatures in the housing can lead to a premature triggering of the fuses or circuit breakers. In extreme cases, too high temperatures can also damage the cables. VDE0660-507 specifies a method for determining the heating of partially typetested low-voltage switching device combinations by extrapolation. In order to simplify the calculation process, the factors k and c have already been determined by Spelsberg.

For a correct calculation of all built-in devices, the operating current (In), the power losses at operating current (Pn) and the actual load current (I) are required. From this, the actual power loss of the individual devices can then be calculated. The temperature increase in the housing can then be calculated using the total power loss. Together with the ambient temperature, the internal temperature of the housing results in different values. With this result, it can then be checked, whether the limiting temperatures of the built-in devices and cables are exceeded.

In this case, different devices are to be used or the power loss is to be reduced. The maximum operating current at the given temperature can be determined for circuit breakers and fuses from the data sheets of the manufacturer.





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