WGK 50 BK BX

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image

Similar to illustration

The WGK finger-proof-insulated enclosures are especially suitable as industrial electronic enclosures for frequency converters, power supplies or filter components which offer a convenient and reliable form of connection internally and externally. To match the wire guides to the installation requirements in the best possible way, Weidmüller offers two versions with horizontal (WGK) and vertical (WGKV) outlet directions.

General ordering data

Version	OMNIMATE Power - series WGK, Feed-through terminal, Rated cross-section: 50 mm², Wemid (PA)
Order No.	2427680000
Type	WGK 50 BK BX
GTIN (EAN)	4050118436679
Qty.	10 pc(s).
Product data	IEC: 690 V / 150 A / 16 - 50 mm² UL: 600 V / 150 A / AWG 6 - AWG 1/0
Packaging	Box

Creation date June 4, 2024 2:52:16 AM CEST

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Technical data

Dimensions and weights

Net weight	101.1 g

System parameters

Product family	OMNIMATE Power - series WGK	Wire connection method	Screw connection
Conductor outlet direction	180°	Number of poles	1
Fitted by customer	No	Screwdriver blade	1.2 x 6.5
Tightening torque, min.	4 Nm	Tightening torque, max.	5.5 Nm
Clamping screw	M 6	Stripping length	24 mm
Touch-safe protection acc. to DIN VDE 0470	IP 20	Protection degree	IP20

Material data

Insulating material	Wemid (PA)	Colour	black
Colour chart (similar)	RAL 9011	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	120 °C

Conductors suitable for connection

Clamping range, min.	10 mm²		
Clamping range, max.	50 mm²		
Wire connection cross section AWG, min.	AWG 6		
Wire connection cross section AWG, max.	AWG 1/0		
Solid, min. H05(07) V-U	16 mm²		
Solid, max. H05(07) V-U	16 mm²		
Stranded, min. H07V-R	16 mm²		
Stranded, max. H07V-R	50 mm²		
Flexible, min. H05(07) V-K	16 mm²		
Flexible, max. H05(07) V-K	50 mm²		
w. wire end ferrule, DIN 46228 pt 1, min.	10 mm²		
w. wire end ferrule, DIN 46228 pt 1, max.	50 mm²		
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	35 mm²
	wire end ferrule	Stripping length	nominal 25 mm
		Recommended wire-end ferrule	H35.0/25
Reference text	Length of ferrules is to be chosen depending on the product and the rated voltage., The outside diameter of the plastic collar should not be larger than the pitch (P)		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1	Rated current, min. number of poles (Tu=20°C)	150 A
Rated current, max. number of poles (Tu=20°C)	150 A	Rated voltage for surge voltage class / pollution degree III/3	690 V
Rated impulse voltage for surge voltage class/ contamination degree III/3	6 kV		

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Rated data acc. to CSA

Rated voltage (Use group B / CSA)	600 V	Rated voltage (Use group C / CSA)	600 V
Rated current (Use group B / CSA)	150 A	Rated current (Use group C / CSA)	150 A
Wire cross-section, AWG, min.	AWG 6	Wire cross-section, AWG, max.	AWG 1/0

Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated current (Use group B / UL 1059)	150 A	Rated current (Use group C / UL 1059)	150 A
Wire cross-section, AWG, min.	AWG 6	Wire cross-section, AWG, max.	AWG 1/0
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	210 mm
VPE width	99 mm	VPE height	60 mm

Classifications

ETIM 6.0	EC001283	ETIM 7.0	EC001283
ETIM 8.0	EC001283	ETIM 9.0	EC001283
ECLASS 9.0	27-14-11-34	ECLASS 9.1	27-14-11-34
ECLASS 10.0	27-14-11-34	ECLASS 11.0	27-14-11-34
ECLASS 12.0	27-14-11-34	ECLASS 13.0	27-14-11-34

Important note

Notes

- Clearance and creepage distances to other components must be devised in accordance with the relevant application standard. This can be achieved in the device by full encapsulation or by the use of additional spacer plates.
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Colours: SW = black; GN/YL = green/yellow; GY = grey
- Additional variants on request
- WGK: Rated voltage plastic walls: 1 - 6 mm = 800 V; metal walls: 1 - 2.5 mm = 800 V; metal walls: 2.5 - 6 mm = 690 V
- Wire-end ferrules are mandatory for stranded wires with more than 19 strands.
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN

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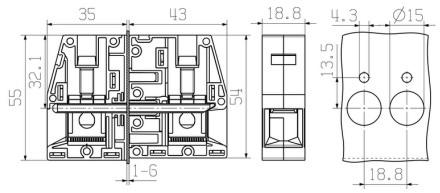
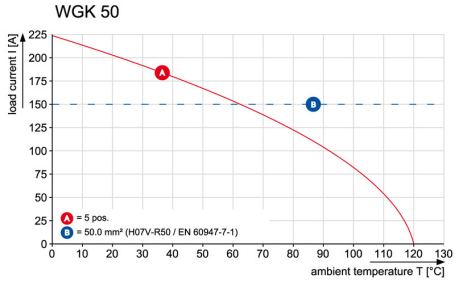
Drawings

Dimensional drawing



Graph



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Accessories

Blank

The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.
Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

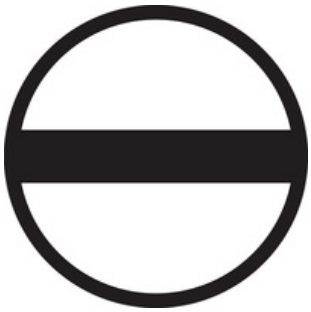
- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

For custom printing: Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

General ordering data

Type	DEK 5/5 MC NE WS	Version
Order No.	1609801044	Dekafix, Terminal marker, 5 x 5 mm, Pitch in mm (P): 5.00
GTIN (EAN)	4008190397111	Weidmueller, white
Qty.	1,000 pc(s).	

Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

General ordering data

Type	SDIS 1.2X6.5X150	Version
Order No.	2749860000	Screwdriver, Blade width (B): 6.5 mm, Blade length: 150 mm, Blade
GTIN (EAN)	4050118897067	thickness (A): 1.2 mm
Qty.	1 pc(s).	

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Integrate, expand and customise: the perfect supplement to every application.

Universal system accessories enable easy adaptation of the interfaces to fulfil specific requirements for the relevant application.

General ordering data

Type	DP WGK 50	Version	Product data
Order No.	1937030000	OMNIMATE Power - series WGK, Feed-through terminal	UL:
GTIN (EAN)	4032248664795		
Qty.	10 pc(s).		

Type	DP WGK 50 BK BX	Version	Product data
Order No.	1250610000	OMNIMATE Power - series WGK, Feed-through terminal	UL:
GTIN (EAN)	4050118041736		
Qty.	10 pc(s).		

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General ordering data

Type	DEK 5/8 MC NE WS	Version
Order No.	1856740000	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4032248400850	Weidmueller, white
Qty.	800 pc(s).	

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General ordering data

Type	DEK 5/6 MC NE WS	Version
Order No.	1609820000	Dekafix, Terminal marker, 5 x 6 mm, Pitch in mm (P): 6.00
GTIN (EAN)	4008190203436	Weidmueller, white
Qty.	1,000 pc(s).	