

# Data Sheet | Item Number: 737-224

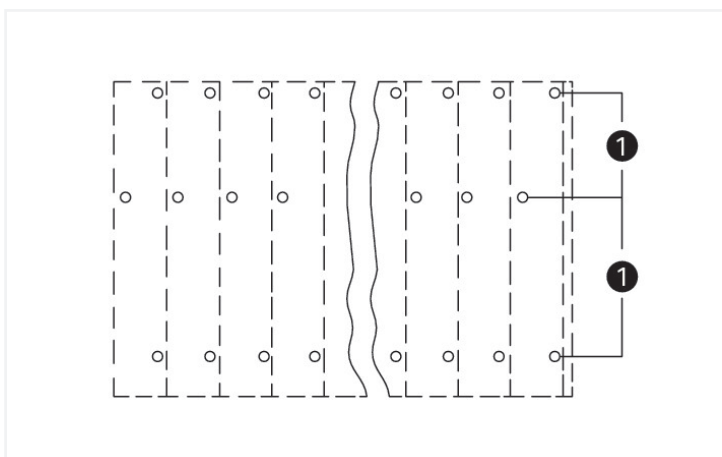
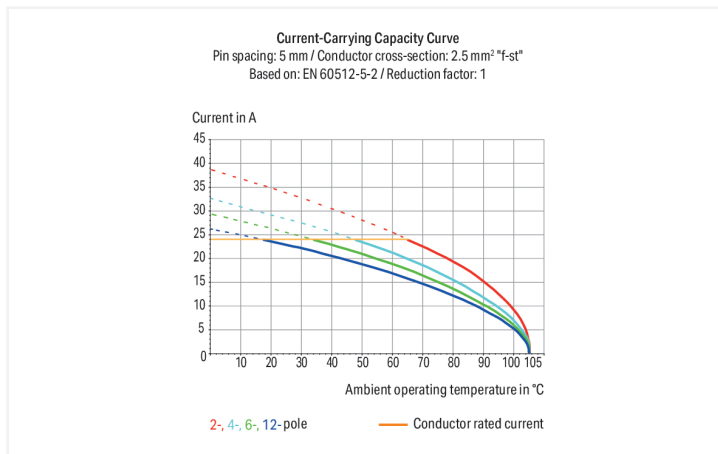
Triple-deck PCB terminal block; 2.5 mm<sup>2</sup>; Pin spacing 5 mm; 72-pole; CAGE CLAMP®; gray

<https://www.wago.com/737-224>

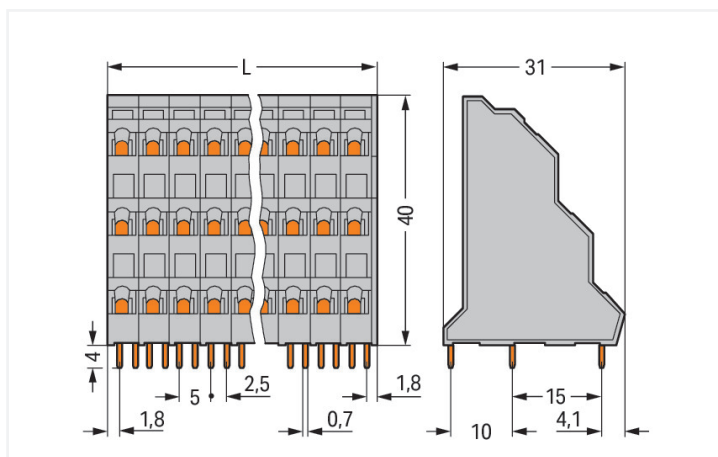


Color: ■ gray

Similar to illustration



(1) Solder pins for deck 2 staggered by half the pin spacing



Dimensions in mm

$L = ((\text{pole no.} / 3) \times \text{pin spacing}) + 1.1 \text{ mm}$

## PCB terminal block, 737 Series, CAGE CLAMP®

Our PCB terminal block (item number 737-224) ensures effortless electrical installations. It is a universal connector that can be used almost anywhere, for example, as a pluggable PCB connector, panel feedthrough header, connector for rail-mount terminal blocks, or a floating connector for different mounting methods. Ensure that the strip lengths are between 5 and 6 mm when connecting conductors to this PCB terminal block. Featuring one conductor terminal along with CAGE CLAMP®, this product outperforms the competition. Our CAGE CLAMP® connection provides a dependable and maintenance-free way to connect all types of conductors. You do not need to prepare the conductor in any way, such as crimping ferrules. Dimensions: (121.1 x 44 x 31) mm (width x height x depth). This PCB terminal block is suitable for conductor cross sections ranging from 0.08 mm<sup>2</sup> to 2.5 mm<sup>2</sup>.

Tin is used for coating the contact surfaces. An operating tool is used to operate this PCB terminal block. THT is used to solder the PCB terminal block. Insert the conductor into the board at a 45° angle.

## Notes

Variants:	Other pole numbers Other colors Mixed-color PCB connector strips Direct marking Other versions (or variants) can be requested from WAGO Sales or configured at <a href="https://configurator.wago.com/">https://configurator.wago.com/</a> .
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## Electrical data

Ratings	between the modules			Ratings	between the decks		
Ratings per	IEC/EN 60664-1	IEC/EN 60664-1	IEC/EN 60664-1	Ratings per	IEC/EN 60664-1	IEC/EN 60664-1	IEC/EN 60664-1
Overvoltage category	III	III	II	Overvoltage category	III	III	II
Pollution degree	3	2	2	Pollution degree	3	2	2
Nominal voltage	250 V	320 V	630 V	Nominal voltage	320 V	320 V	630 V
Rated impulse withstand voltage	4 kV	4 kV	4 kV	Rated impulse withstand voltage	4 kV	4 kV	4 kV
Rated current	21 A	21 A	21 A	Rated current	21 A	21 A	21 A

Approvals per	UL 1059		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

Approvals per	CSA		
Use group	B	C	D
Rated voltage	300 V	-	300 V
Rated current	10 A	-	10 A

## Connection Data

Clamping units	72
Total number of potentials	72
Number of connection types	1
Number of levels	3

## Connection 1

Connection technology	CAGE CLAMP®
Actuation type	Operating tool
Solid conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor	0.08 ... 2.5 mm <sup>2</sup> / 28 ... 12 AWG
Fine-stranded conductor; with insulated ferrule	0.25 ... 1.5 mm <sup>2</sup>
Fine-stranded conductor; with uninsulated ferrule	0.25 ... 2.5 mm <sup>2</sup>
Note (conductor cross-section)	12 AWG: THHN, THWN
Strip length	5 ... 6 mm / 0.2 ... 0.24 inches
Conductor connection direction to PCB	45°
Pole number	72

## Physical data

Pin spacing	5 mm / 0.197 inches
Width	121.1 mm / 4.768 inches
Height	44 mm / 1.732 inches
Height from the surface	40 mm / 1.575 inches
Depth	31 mm / 1.22 inches
Solder pin length	4 mm
Solder pin dimensions	0.7 x 0.7 mm
!	1.3 <sup>(±0.1)</sup> mm

### PCB contact

PCB contact	THT
Solder pin arrangement	within the terminal block (staggered)
Number of solder pins per potential	1

### Material data

Note (material data)	<a href="#">Information on material specifications can be found here</a>
Color	gray
Material group	I
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Clamping spring material	Chrome-nickel spring steel (CrNi)
Contact material	Electrolytic copper (E <sub>cu</sub> )
Contact Plating	Tin
Fire load	1.439 MJ
Weight	99.9 g

### Environmental requirements

Limit temperature range	-60 ... +105 °C
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### Commercial data

Product Group	4 (Printed Circuit Connectors)
PU (SPU)	8 pcs
Packaging type	Box
Country of origin	PL
GTIN	4045454022921
Customs tariff number	85369010000

### Product Classification

UNSPSC	39121409
eCl@ss 10.0	27-44-04-01
eCl@ss 9.0	27-44-04-01
ETIM 9.0	EC002643
ETIM 10.0	EC002643
ECCN	NO US CLASSIFICATION

### Environmental Product Compliance

RoHS Compliance Status	Compliant, No Exemption
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### Approvals / Certificates

#### General approvals



Approval	Standard	Certificate Name
CCA DEKRA Certification B.V.	EN 60947	NTR NL-7960
CCA DEKRA Certification B.V.	EN 60947-7-4	2169331.28
CCA DEKRA Certification B.V.	EN 60947-7-4	NTR NL 7445

#### General approvals

CSA DEKRA Certification B.V.	C22.2 No. 158	70049157
UR Underwriters Laboratories Inc.	UL 1059	E45172

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
ABS American Bureau of Shipping	-	24-0095975-PDA
BV Bureau Veritas S.A.	IEC 60998	11915/E0 BV
DNV DNV GL SE	-	TAE000016Z

Downloads

Environmental Product Compliance

Compliance Search	
Environmental Product Compliance 737-224	<a href="#">↓</a>

Documentation

Additional Information			
Technical Section	03.04.2019	pdf 2027.26 KB	<a href="#">↓</a>
Gebrückte Klemmenleisten für Leiterplatten		pdf 303.71 KB	<a href="#">↓</a>

CAD/CAE-Data

CAD data	
2D/3D Models 737-224	<a href="#">↓</a>

CAE data	
EPLAN Data Portal 737-224	<a href="#">↓</a>
ZUKEN Portal 737-224	<a href="#">↓</a>

PCB Design

Symbol and Footprint via SamacSys 737-224	<a href="#">↓</a>
Symbol and Footprint via Ultra Librarian 737-224	<a href="#">↓</a>

1 Compatible Products

1.1 Optional Accessories

1.1.1 Ferrule

1.1.1.1 Ferrule

 <p><b>Item No.: 216-301</b> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>	 <p><b>Item No.: 216-321</b> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow</p>	 <p><b>Item No.: 216-151</b> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>	 <p><b>Item No.: 216-131</b> Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored</p>
 <p><b>Item No.: 216-302</b> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>	 <p><b>Item No.: 216-322</b> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise</p>	 <p><b>Item No.: 216-132</b> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>	 <p><b>Item No.: 216-152</b> Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated</p>
 <p><b>Item No.: 216-201</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; acc. to DIN 46228, Part 4/09.90; white</p>	 <p><b>Item No.: 216-241</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; white</p>	 <p><b>Item No.: 216-221</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white</p>	 <p><b>Item No.: 216-141</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>
 <p><b>Item No.: 216-101</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-121</b> Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-242</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>	 <p><b>Item No.: 216-262</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; gray</p>
 <p><b>Item No.: 216-202</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	 <p><b>Item No.: 216-222</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray</p>	 <p><b>Item No.: 216-142</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>	 <p><b>Item No.: 216-102</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>
 <p><b>Item No.: 216-122</b> Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored</p>	 <p><b>Item No.: 216-243</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	 <p><b>Item No.: 216-263</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; red</p>	 <p><b>Item No.: 216-203</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>
 <p><b>Item No.: 216-223</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red</p>	 <p><b>Item No.: 216-103</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated</p>	 <p><b>Item No.: 216-143</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92</p>	 <p><b>Item No.: 216-123</b> Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored</p>
 <p><b>Item No.: 216-204</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>	 <p><b>Item No.: 216-224</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black</p>	 <p><b>Item No.: 216-244</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	 <p><b>Item No.: 216-264</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>
 <p><b>Item No.: 216-284</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 4/09.90; black</p>	 <p><b>Item No.: 216-124</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated</p>	 <p><b>Item No.: 216-144</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; electrolytic copper; gastight crimped; acc. to DIN 46228, Part 1/08.92; silver-colored</p>	 <p><b>Item No.: 216-104</b> Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated; silver-colored</p>

### 1.1.1.1 Ferrule



**Item No.: 216-106**

Ferrule; Sleeve for 2.5 mm<sup>2</sup> / AWG 14; un-insulated; electro-tin plated; silver-colored

### 1.1.2 Marking

#### 1.1.2.1 Marking strip



**Item No.: 210-332/500-202**

Marking strips; as a DIN A4 sheet; MARKED; 1-16 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-205**

Marking strips; as a DIN A4 sheet; MARKED; 1-32 (80x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-204**

Marking strips; as a DIN A4 sheet; MARKED; 17-32 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white



**Item No.: 210-332/500-206**

Marking strips; as a DIN A4 sheet; MARKED; 33-48 (160x); Height of marker strip: 3 mm; Strip length 182 mm; Horizontal marking; Self-adhesive; white

### 1.1.3 Test and measurement

#### 1.1.3.1 Testing accessories



**Item No.: 231-126**

Testing plug module with contact stud; for 280, 736, 737, 738, 780 Series; Pin spacing 5 mm / 0.197 in; 2,50 mm<sup>2</sup>; gray



**Item No.: 231-155**

Testing plug module with contact stud; Pin spacing 5 mm / 0.197 in; 2,50 mm<sup>2</sup>; gray

### 1.1.4 Tool

#### 1.1.4.1 Operating tool



**Item No.: 210-658**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; angled; short; multicoloured



**Item No.: 210-720**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured



**Item No.: 210-657**

Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; short; multicoloured

### Installation Notes

#### Conductor termination



Inserting a conductor via 3.5 mm screwdriver.  
Screwdriver actuation parallel to conductor entry

## Installation



Low space requirements due to high-density design  
Double-deck PCB terminal strip – 736 Series

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (736 Series) and triple-deck PCB terminal strips (737 Series) upon request

**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request



**Possible combination:**  
Double- (737 Series) and quadruple-deck PCB terminal strips (738 Series) upon request

## Marking



## Testing



Testing via contact area above the conductors.