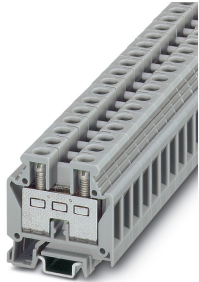


## Mini feed-through terminal block - MBK 6/E - 0552024

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Mini feed-through terminal block, nom. voltage: 500 V, nominal current: 41 A, connection method: Screw connection, number of connections: 2, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, AWG: 20 - 8, width: 8.2 mm, color: gray, mounting type: NS 15

### Your advantages

- ✔ Separating disks, partition plates, and test sockets complete the range of accessories
- ✔ Clear arrangement thanks to marking of all terminal points
- ✔ Space saving thanks to compact design and mounting option on a 15 mm DIN rail
- ✔ Easy potential distribution thanks to standardized plug-in bridges



### Key Commercial Data

Packing unit	1 pc
Minimum order quantity	50 pc
GTIN	 4 017918 002893
GTIN	4017918002893
Weight per Piece (excluding packing)	13.850 g
Custom tariff number	85369010
Country of origin	Germany

### Technical data

#### General

Number of levels	1
Number of connections	2
Potentials	1
Nominal cross section	6 mm <sup>2</sup>

# Mini feed-through terminal block - MBK 6/E - 0552024

## Technical data

### General

Color	gray
Insulating material	PA
Flammability rating according to UL 94	V2
Rated surge voltage	6 kV
Degree of pollution	3
Overvoltage category	III
Insulating material group	I
Maximum power dissipation for nominal condition	1.31 W
Maximum load current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal current I <sub>N</sub>	41 A
Nominal voltage U <sub>N</sub>	500 V
Open side panel	Yes
Shock protection test specification	DIN EN 50274 (VDE 0660-514):2002-11
Back of the hand protection	guaranteed
Finger protection	guaranteed
Result of surge voltage test	Test passed
Surge voltage test setpoint	7.2 kV
Result of power-frequency withstand voltage test	Test passed
Power frequency withstand voltage setpoint	1.89 kV
Result of the test for mechanical stability of terminal points (5 x conductor connection)	Test passed
Result of flexion and pull-out test	Test passed
Bending test rotation speed	10 rpm
Bending test turns	135
Bending test conductor cross section/weight	0.5 mm <sup>2</sup> / 0.3 kg
	6 mm <sup>2</sup> / 1.4 kg
Tensile test result	Test passed
Conductor cross section tensile test	0.5 mm <sup>2</sup>
Tractive force setpoint	20 N
Conductor cross section tensile test	6 mm <sup>2</sup>
Tractive force setpoint	80 N
Conductor cross section tensile test	10 mm <sup>2</sup>
Tractive force setpoint	90 N
Result of tight fit on support	Test passed
Tight fit on carrier	NS 15
Setpoint	5 N
Result of voltage-drop test	Test passed

# Mini feed-through terminal block - MBK 6/E - 0552024

## Technical data

### General

Requirements, voltage drop	$U_1 \leq 3.2 \text{ mV}; U_2 \leq 1.5 \times U_1$
Result of temperature-rise test	Test passed
Requirement temperature-rise test	Increase in temperature $\leq 45 \text{ K}$
Short circuit stability result	Test passed
Conductor cross section short circuit testing	6 mm <sup>2</sup>
Short-time current	0.72 kA
Result of thermal test	Test passed
Proof of thermal characteristics (needle flame) effective duration	30 s
Test specification, oscillation, broadband noise	DIN EN 50155 (VDE 0115-200):2018-05
Test spectrum	Service life test category 2, bogie-mounted
Test frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	6.12 (m/s <sup>2</sup> ) <sup>2</sup> /Hz
Acceleration	3.12 g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Shock form	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3
Test directions	X-, Y- and Z-axis (pos. and neg.)
Relative insulation material temperature index (Elec., UL 746 B)	125 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	125 °C
Static insulating material application in cold	-40 °C

### Dimensions

Width	8.2 mm
End cover width	1.5 mm
Length	35 mm
Height NS 15	36 mm

### Connection data

Connection	1 level
Connection method	Screw connection
Screw thread	M4
Stripping length	10 mm
Tightening torque, min	1.5 Nm
Tightening torque max	1.8 Nm
Connection in acc. with standard	IEC 60947-7-1

## Mini feed-through terminal block - MBK 6/E - 0552024

### Technical data

#### Connection data

Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Min. AWG conductor cross section, flexible	20
Max. AWG conductor cross section, flexible	10
Conductor cross section flexible, with ferrule without plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule without plastic sleeve max.	6 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve min.	0.25 mm <sup>2</sup>
Conductor cross section flexible, with ferrule with plastic sleeve max.	6 mm <sup>2</sup>
Cross section with insertion bridge, solid max.	6 mm <sup>2</sup>
Cross section with insertion bridge, stranded max.	4 mm <sup>2</sup>
2 conductors with same cross section, solid min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, solid max.	2.5 mm <sup>2</sup>
2 conductors with same cross section, stranded min.	0.5 mm <sup>2</sup>
2 conductors with same cross section, stranded max.	2.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section, flexible, with TWIN ferrules, with plastic sleeve, maximum	2.5 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, minimum	0.5 mm <sup>2</sup>
Two conductors with the same cross section stranded, with ferrule and without plastic sleeve, maximum	2.5 mm <sup>2</sup>
Connection in acc. with standard	IEC/EN 60079-7
Conductor cross section solid min.	0.5 mm <sup>2</sup>
Conductor cross section solid max.	10 mm <sup>2</sup>
Conductor cross section AWG min.	20
Conductor cross section AWG max.	8
Conductor cross section flexible min.	0.5 mm <sup>2</sup>
Conductor cross section flexible max.	6 mm <sup>2</sup>
Internal cylindrical gage	A5

#### Ambient conditions

Operating temperature	-60 °C ... 105 °C (max. short-term operating temperature 125°C)
Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Permissible humidity (storage/transport)	30 % ... 70 %

# Mini feed-through terminal block - MBK 6/E - 0552024

## Technical data

### Ambient conditions

Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C

### Standards and Regulations

Connection in acc. with standard	CSA
	IEC 60947-7-1
	IEC/EN 60079-7
Flammability rating according to UL 94	V2

### Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

### Circuit diagram



## Classifications

### eCl@ss

eCl@ss 10.0.1	27141120
eCl@ss 11.0	27141120
eCl@ss 4.0	27141100
eCl@ss 4.1	27141100
eCl@ss 5.0	27141100
eCl@ss 5.1	27141100
eCl@ss 6.0	27141100
eCl@ss 7.0	27141120
eCl@ss 9.0	27141120

### ETIM

ETIM 2.0	EC000897
ETIM 3.0	EC000897
ETIM 4.0	EC000897
ETIM 6.0	EC000897
ETIM 7.0	EC000897

# Mini feed-through terminal block - MBK 6/E - 0552024

## Classifications

### UNSPSC

UNSPSC 6.01	30211811
UNSPSC 7.0901	39121410
UNSPSC 11	39121410
UNSPSC 12.01	39121410
UNSPSC 13.2	39121410
UNSPSC 18.0	39121410
UNSPSC 19.0	39121410
UNSPSC 20.0	39121410
UNSPSC 21.0	39121410

## Approvals

### Approvals


#### Approvals


CSA / UL Recognized / cUL Recognized / cULus Recognized

#### Ex Approvals

IECEX / EAC Ex / NEPSI / ATEX / CCC

### Approval details

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	13631
Nominal voltage UN		300 V	
Nominal current IN		50 A	
mm <sup>2</sup> /AWG/kcmil		26-8	

UL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	50 A	50 A	5 A

## Mini feed-through terminal block - MBK 6/E - 0552024

### Approvals

	B	C	D
mm <sup>2</sup> /AWG/kcmil	26-8	26-8	26-8

cUL Recognized		<a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a>	FILE E 60425
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	B	C	D
Nominal voltage UN	300 V	300 V	600 V
Nominal current IN	50 A	50 A	5 A
mm <sup>2</sup> /AWG/kcmil	26-8	26-8	26-8

cULus Recognized	
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### Accessories

#### Accessories

#### DIN rail

DIN rail, unperforated - NS 15 UNPERF 2000MM - 1401695



DIN rail, unperforated, Standard profile, width: 15 mm, height: 5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

DIN rail perforated - NS 15 PERF 2000MM - 1401682



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, length: 2000 mm, color: silver

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

DIN rail perforated - NS 15 AL PERF 2000MM - 1401763



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Aluminum, uncoated, length: 2000 mm, color: silver

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DIN rail perforated - NS 15 WH PERF 2000MM - 1204096



DIN rail perforated, Standard profile, width: 15 mm, height: 5.5 mm, acc. to EN 60715, material: Steel, Galvanized, white passivated, length: 2000 mm, color: silver

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### End block

End clamp - E/MBK - 1401637



End clamp, width: 6.2 mm, color: gray

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End clamp - E/MK - 1421633



End clamp, width: 6.2 mm, color: gray

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End clamp - E/MK 1 - 1421659



End clamp width: 6 mm, color: gray

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## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

#### End cover

End cover - D-MBK 6/E - 1413049



End cover, length: 35 mm, width: 1.5 mm, height: 30.1 mm, color: gray

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#### Insertion bridge

Insertion bridge - EB 2- 8 - 0202154



Insertion bridge, pitch: 8 mm, number of positions: 2, color: gray

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Insertion bridge - EB 3- 8 - 0202141



Insertion bridge, pitch: 8 mm, number of positions: 3, color: gray

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Insertion bridge - EB 10- 8 - 0202138



Insertion bridge, pitch: 8 mm, number of positions: 10, color: gray

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Insertion bridge - EB 4- 8 - 0202142



Insertion bridge, pitch: 8 mm, number of positions: 4, color: gray

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

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Insertion bridge - EB 1/3/5/7-8 - 3072340



Insertion bridge, pitch: 16.4 mm, length: 24 mm, width: 55.4 mm, number of positions: 4, pin assignment: 1, 3, 5, 7, color: gray

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Insertion bridge - EB 1/3/5-8 - 3072341



Insertion bridge, pitch: 16.4 mm, length: 24 mm, width: 39 mm, number of positions: 3, pin assignment: 1,3,5, color: gray

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### Insulating sleeve

Bridge bar isolator - IS-K 10 - 1303337



Bridge bar isolator, color: gray

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### Labeled terminal marker

Zack marker strip - ZB 8 CUS - 0825011



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm, Number of individual labels: 10

---

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

#### Marker for terminal blocks - UC-TM 8 CUS - 0824597



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 56

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#### Marker for terminal blocks - UCT-TM 8 CUS - 0829616



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

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#### Zack marker strip - ZB 8,LGS:FORTL.ZAHLEN - 1052015



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm, Number of individual labels: 10

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#### Zack marker strip - ZB 8,QR:FORTL.ZAHLEN - 1052028



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm, Number of individual labels: 10

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#### Marker for terminal blocks - ZB 8,LGS:L1-N,PE - 1052413



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm, Number of individual labels: 10

---

### Partition plate

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Separating plate - TS-KK 3 - 2770215



Separating plate, length: 14 mm, width: 0.5 mm, height: 16 mm, color: gray

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Partition plate - ATP-MBK - 1413227



Partition plate, length: 42.5 mm, width: 2.5 mm, height: 30.5 mm, color: gray

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### Screw bridge

Jumper - ISSBI 10- 8 - 0301534



Jumper, pitch: 8 mm, number of positions: 10, color: silver

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Fixed bridge - FBI 2- 8 - 0200020



Fixed bridge, pitch: 8 mm, number of positions: 2, color: silver

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Fixed bridge - FBI 4- 8 - 0200046



Fixed bridge, pitch: 8 mm, number of positions: 4, color: silver

---

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Fixed bridge - FB 10- 8-EX - 3003185



Fixed bridge, pitch: 8 mm, number of positions: 10, color: silver

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Fixed bridge - FB 2- 8-EX - 3029224



Fixed bridge, pitch: 8 mm, number of positions: 2, color: silver

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Fixed bridge - FBI 10- 8 - 0203263



Fixed bridge, pitch: 8 mm, number of positions: 10, color: silver

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Fixed bridge - FB 10- 8 - 0202170



Fixed bridge, pitch: 8 mm, number of positions: 10, color: silver

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Fixed bridge - FBI 3- 8 - 0200059



Fixed bridge, pitch: 8 mm, number of positions: 3, color: silver

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### Screwdriver tools

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Screwdriver - SZS 1,0X4,0 VDE - 1205066



Screwdriver, slot-headed, VDE insulated, size: 1.0 x 4.0 x 100 mm, 2-component grip, with non-slip grip

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### Short-circuit connector

Short-circuit connector - KSS 8 - 0311540



Short-circuit connector, pitch: 8 mm, number of positions: 2, color: black

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### Switching jumper

Switching jumper - SBRN 2-9 - 1415238



Switching bridge, 2-pos.

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Switching jumper - SB 2- 8/13 - 0202235



Switching jumper, pitch: 13 mm, number of positions: 2, color: silver

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### Terminal marking

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

#### Zack marker strip - ZB 8:UNBEDRUCKT - 1052002



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 10.5 x 8.15 mm, Number of individual labels: 10

---

#### Marker for terminal blocks - UC-TM 8 - 0818072



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 56

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#### Marker for terminal blocks - UCT-TM 8 - 0828740



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: snap into tall marker groove, for terminal block width: 8.2 mm, lettering field size: 7.6 x 10.5 mm, Number of individual labels: 42

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### Test socket

#### Female test connector - PSBJ 4/15/6 FARBLOS - 0303419



Female test connector, color: transparent

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#### Female test connector - PSBJ 4/15/6 WH - 0303312



Female test connector, color: white

## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Female test connector - PSBJ 4/15/6 RD - 0303325



Female test connector, color: red

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Female test connector - PSBJ 4/15/6 BU - 0303354



Female test connector, color: blue

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Female test connector - PSBJ 4/15/6 YE - 0303367



Female test connector, color: yellow

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Female test connector - PSBJ 4/15/6 GN - 0303370



Female test connector, color: green

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Female test connector - PSBJ 4/15/6 VT - 0303383



Female test connector, color: violet

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## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Female test connector - PSBJ 4/15/6 GY - 0303396



Female test connector, color: gray

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Female test connector - PSBJ 4/15/6 BK - 0303406



Female test connector, color: black

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Female test connector - PSB 4/7/6 - 0303299



Female test connector, color: silver

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Warning label printed

Warning label - WS 5- 8 - 1004416

Warning plate, with 2 plastic screws, across 5 terminal blocks, pitch 8 mm



Warning label - WS 4- 8 - 1004212

Warning plate, with 2 plastic screws, across 4 terminal blocks, pitch 8 mm



## Mini feed-through terminal block - MBK 6/E - 0552024

### Accessories

Warning label - WS 3- 8 - 1004128

Warning plate, with 2 plastic screws, across 3 terminal blocks, pitch 8 mm



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