

# PTFIX 6/12X2,5-G BK - Distribution block



3273496

<https://www.phoenixcontact.com/us/products/3273496>

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Distribution block, Basic terminal block with supply, nom. voltage: 450 V, nominal current: 24 A, number of connections: 13, connection method: Push-in connection, Load contact, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, Push-in connection, Line contact, Rated cross section: 6 mm<sup>2</sup>, cross section: 0.5 mm<sup>2</sup> - 10 mm<sup>2</sup>, mounting type: adhesive, color: black

## Your advantages

- Flexible use, thanks to DIN rail mounting, direct mounting or adhesive mounting
- Clear wiring, thanks to eleven different color variants
- Time-saving conductor connection, thanks to tool-free Push-in direct connection technology
- Time savings of up to 80 %, thanks to ready-to-mount blocks without manual bridging
- Space savings of up to 50 % on the DIN rail, thanks to transverse mounting

## Commercial data

Item number	3273496
Packing unit	1 pc
Minimum order quantity	8 pc
Sales key	BE09
Product key	BEA123
Catalog page	Page 444 (C-1-2019)
GTIN	4055626393247
Weight per piece (including packing)	30.96 g
Weight per piece (excluding packing)	30.96 g
Customs tariff number	85369010
Country of origin	PL

# PTFIX 6/12X2,5-G BK - Distribution block



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## Technical data

### Notes

General	the blocks can be bridged with one another via the conductor shaft, for corresponding plug-in bridges, see accessories
General	
Note	The maximum load current of a single clamping unit must not be exceeded.  For power distribution applications, IEC 60364-4-43:2008; modified + corrigendum Okt. 2008 (DIN VDE 0100-430:2010-10) section 433.2 ff must be observed!

### Product properties

Product type	Distributor terminal block
Number of connections	13
Number of rows	1
Potentials	1

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Electrical properties

Rated surge voltage	6 kV
Maximum power dissipation for nominal condition	0.77 W

### Connection data

Service Entrance	yes
Number of connections per level	13
Nominal cross section	2.5 mm <sup>2</sup>
Rated cross section AWG	14

### Load contact

Stripping length	8 mm ... 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section AWG	26 ... 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	26 ... 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Nominal current	24 A
Maximum load current	32 A (with 4 mm <sup>2</sup> conductor cross section)
Maximum total current	57 A (with 10 mm <sup>2</sup> conductor cross section)

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Nominal voltage	450 V
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## Line contact

Stripping length	10 mm ... 12 mm
Connection in acc. with standard	IEC 60998-2-2
Conductor cross section rigid	0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Cross section AWG	20 ... 8 (converted acc. to IEC)
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Conductor cross section, flexible [AWG]	20 ... 10 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.5 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Conductor cross-section flexible (2 conductors with the same cross-section, with TWIN ferrule and plastic sleeve)	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Nominal current	41 A (with 6 mm <sup>2</sup> conductor cross section)
Maximum load current	57 A (with 10 mm <sup>2</sup> conductor cross section)
Nominal cross section	6 mm <sup>2</sup>

## Load contact Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross section, rigid [AWG]	24 ... 12 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>

## Line contact Connection cross sections directly pluggable

Conductor cross section rigid	1 mm <sup>2</sup> ... 10 mm <sup>2</sup>
Conductor cross-section flexible (ferrule without plastic sleeve)	1 mm <sup>2</sup> ... 6 mm <sup>2</sup>
Flexible conductor cross section (ferrule with plastic sleeve)	1 mm <sup>2</sup> ... 6 mm <sup>2</sup>

## Dimensions

Width	41 mm
Height	28.6 mm
Depth	22.7 mm

## Material specifications

Color	black
Flammability rating according to UL 94	V0
Insulating material group	I
Insulating material	PA
Static insulating material application in cold	-60 °C
Temperature index of insulation material (DIN EN 60216-1 (VDE 0304-21))	130 °C
Relative insulation material temperature index (Elec., UL 746 B)	130 °C
Fire protection for rail vehicles (DIN EN 45545-2) R22	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R23	HL 1 - HL 3

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Fire protection for rail vehicles (DIN EN 45545-2) R24	HL 1 - HL 3
Fire protection for rail vehicles (DIN EN 45545-2) R26	HL 1 - HL 3
Calorimetric heat release NFPA 130 (ASTM E 1354)	28 MJ/kg
Surface flammability NFPA 130 (ASTM E 162)	passed
Specific optical density of smoke NFPA 130 (ASTM E 662)	passed
Smoke gas toxicity NFPA 130 (SMP 800C)	passed

## Mechanical properties

### Mechanical data

Open side panel	No
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## Mechanical tests

### Attachment on the carrier

DIN rail/fixing support	NS 35/NS 15
Result	Test passed
Note	<p>When aligning several blocks, it is recommended to either place a DIN rail adapter underneath the connection point or a flange element between the blocks.</p> <p>For versions with 6 or 7 connections, it is enough to place one DIN rail adapter centrally per block and place flange elements after every other block.</p> <p>When using the DIN rail adapter PTFIX-NS35, an aligned block must not protrude by more than a half.</p>

## Environmental and real-life conditions

### Needle-flame test

Time of exposure	30 s
Result	Test passed

### Oscillation/broadband noise

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Spectrum	Service life test category 2, bogie-mounted
Frequency	$f_1 = 5 \text{ Hz}$ to $f_2 = 250 \text{ Hz}$
ASD level	$6.12 \text{ (m/s}^2\text{)}^2\text{/Hz}$
Acceleration	3.12g
Test duration per axis	5 h
Test directions	X-, Y- and Z-axis
Result	Test passed

### Shocks

Specification	DIN EN 50155 (VDE 0115-200):2008-03
Pulse shape	Half-sine
Acceleration	30g
Shock duration	18 ms
Number of shocks per direction	3

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Test directions	X-, Y- and Z-axis (pos. and neg.)
Result	Test passed

## Ambient conditions

Ambient temperature (storage/transport)	-25 °C ... 60 °C (for a short time, not exceeding 24 h, -60 °C to +70 °C)
Ambient temperature (assembly)	-5 °C ... 70 °C
Ambient temperature (actuation)	-5 °C ... 70 °C
Permissible humidity (storage/transport)	30 % ... 70 %

## Standards and regulations

Connection in acc. with standard	IEC 60998-2-2
	IEC 60998-2-2

## Mounting

Mounting type	adhesive
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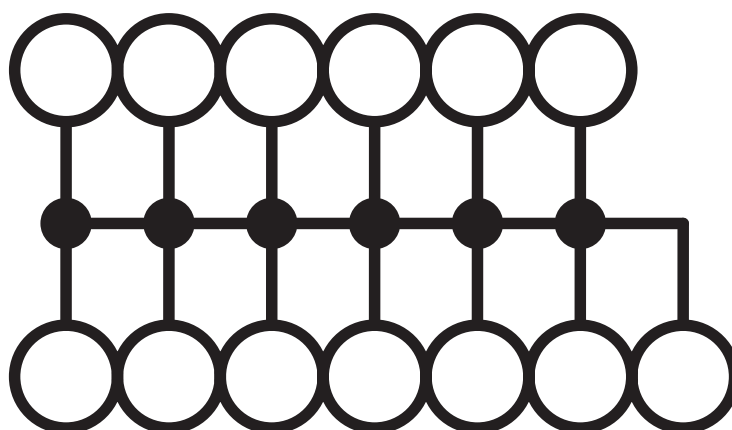
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## Drawings

Circuit diagram



# PTFIX 6/12X2,5-G BK - Distribution block





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## Approvals


To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/3273496>


 <b>CSA</b> Approval ID: 13631				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group D				
Input	600 V	5 A	20 - 8	-
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-
Use group C				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-

 <b>IECEE CB Scheme</b> Approval ID: DE1-63086				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	450 V	41 A	-	- 6

 <b>EAC</b> Approval ID: RU C-DE.BL08.B.00644				
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 <b>LR</b> Approval ID: LR2002627TA				
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 <b>VDE Zeichengenehmigung</b> Approval ID: 40047798				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
	450 V	41 A	-	-

 <b>cULus Recognized</b> Approval ID: E60425				
	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Use group B				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-
Use group C				
Output	300 V	20 A	26 - 12	-
Input	300 V	50 A	20 - 8	-

# PTFIX 6/12X2,5-G BK - Distribution block



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Use group D				
Output	600 V	5 A	26 - 12	-
Input	600 V	5 A	20 - 8	-



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## Classifications

### ECLASS

ECLASS-11.0	27141120
ECLASS-13.0	27250118

### ETIM

ETIM 8.0	EC000897
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

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

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## Accessories



Note: Applying some accessories below might limit this product.

### FBS 2-5 - Plug-in bridge

3030161

<https://www.phoenixcontact.com/us/products/3030161>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, length: 23 mm, color: red



Max. current carrying capacity: 24 A

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### FBS 2-5 GN - Plug-in bridge

3032143

<https://www.phoenixcontact.com/us/products/3032143>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: green



Max. current carrying capacity: 24 A

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## FBS 2-5 BU - Plug-in bridge

3036877

<https://www.phoenixcontact.com/us/products/3036877>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: blue

 Max. current carrying capacity: 24 A

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## FBS 2-5 GY - Plug-in bridge

3038969

<https://www.phoenixcontact.com/us/products/3038969>



Plug-in bridge, pitch: 5.2 mm, number of positions: 2, color: gray

 Max. current carrying capacity: 24 A

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## MPS-MT SN - Test plugs

3212251

<https://www.phoenixcontact.com/us/products/3212251>



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, tin-plated surface, number of positions: 1, color: silver

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## KLM 2 - Terminal strip marker carrier

0807575

<https://www.phoenixcontact.com/us/products/0807575>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using snap-in labels

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<https://www.phoenixcontact.com/us/products/3273496>



## KLM 3-L - Terminal strip marker carrier

0814788

<https://www.phoenixcontact.com/us/products/0814788>



Terminal strip marker carrier, adjustable height, for CLIPFIX 15, CLIPFIX 35, and CLIPFIX 35-5 end brackets, can be marked using labels in 20 x 8 mm format

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## SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

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<https://www.phoenixcontact.com/us/products/3273496>



## MPS-MT 1-S - Test plugs

1944372

<https://www.phoenixcontact.com/us/products/1944372>

Test plug, consisting of 1.0 mm Ø test pin and 2.0 mm Ø socket



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## PAI-4-N GY - Test adapter

3032871

<https://www.phoenixcontact.com/us/products/3032871>

4 mm test adapter, for terminal blocks with 5.2 mm, 6.2 mm and 8.2 mm pitch



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<https://www.phoenixcontact.com/us/products/3273496>



### MPS-MT - Test plugs

0201744

<https://www.phoenixcontact.com/us/products/0201744>



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, number of positions: 1, color: gray

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### MPS-IH WH - Insulating sleeve

0201663

<https://www.phoenixcontact.com/us/products/0201663>

Insulating sleeve, color: white





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## MPS-IH RD - Insulating sleeve

0201676

<https://www.phoenixcontact.com/us/products/0201676>

Insulating sleeve, color: red



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## MPS-IH BU - Insulating sleeve

0201689

<https://www.phoenixcontact.com/us/products/0201689>

Insulating sleeve, color: blue



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### MPS-IH YE - Insulating sleeve

0201692

<https://www.phoenixcontact.com/us/products/0201692>

Insulating sleeve, color: yellow



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### MPS-IH GN - Insulating sleeve

0201702

<https://www.phoenixcontact.com/us/products/0201702>

Insulating sleeve, color: green



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## MPS-IH GY - Insulating sleeve

0201728

<https://www.phoenixcontact.com/us/products/0201728>

Insulating sleeve, color: gray



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## MPS-IH BK - Insulating sleeve

0201731

<https://www.phoenixcontact.com/us/products/0201731>

Insulating sleeve, color: black



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## ISH 2,5/0,2 - Insulating sleeve

3002843

<https://www.phoenixcontact.com/us/products/3002843>

Insulating sleeve, color: white



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## ISH 2,5/0,5 - Insulating sleeve

3002856

<https://www.phoenixcontact.com/us/products/3002856>

Insulating sleeve, color: gray



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## ISH 2,5/1,0 - Insulating sleeve

3002869

<https://www.phoenixcontact.com/us/products/3002869>

Insulating sleeve, color: black



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## TML (EX3,8)R - Marker strip

0801837

<https://www.phoenixcontact.com/us/products/0801837>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, lettering field size: 30000 x 3.8 mm, Number of individual labels: 12

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## TML (104X3,8)R - Marker strip

0801833

<https://www.phoenixcontact.com/us/products/0801833>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 3.8 mm, Number of individual labels: 2500

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## TML (104X2,8)R - Marker strip

0801832

<https://www.phoenixcontact.com/us/products/0801832>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 104 mm, lettering field size: 104 x 2.8 mm, Number of individual labels: 2500

## PTFIX 6/12X2,5-G BK - Distribution block

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### TML (EX2,8)R - Marker strip

0801836

<https://www.phoenixcontact.com/us/products/0801836>



Marker strip, Roll, white, unlabeled, can be labeled with: THERMOMARK E.300 (D)/600 (D), THERMOMARK ROLL 2.0, THERMOMARK ROLL, THERMOMARK ROLL X1, THERMOMARK ROLLMASTER 300/600, THERMOMARK X1.2, mounting type: adhesive, for terminal block width: 30000 mm, lettering field size: continuous x 2.8 mm

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### SK 2,8 REEL P5,2 WH CUS - Marker card

8199986

<https://www.phoenixcontact.com/us/products/8199986>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 2.8 mm

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## SK 3,8 REEL P5,2 WH CUS - Marker card

8199989

<https://www.phoenixcontact.com/us/products/8199989>



Marker card, can be ordered: by card, white, labeled according to customer specifications, mounting type: adhesive, for terminal block width: 5.2 mm, lettering field size: continuous x 3.8 mm

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## US-TML (104X3,8) - Marker for terminal blocks

0830768

<https://www.phoenixcontact.com/us/products/0830768>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 3.8 mm, Number of individual labels: 22



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## US-TML (104X2,8) - Marker for terminal blocks

0830767

<https://www.phoenixcontact.com/us/products/0830767>



Marker for terminal blocks, Card, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: adhesive, lettering field size: 104 x 2.8 mm, Number of individual labels: 26

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## SK U/3,8 WH:UNBEDRUCKT - Marker card

0803906

<https://www.phoenixcontact.com/us/products/0803906>



Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 3.8 mm, Number of individual labels: 1440

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## SK U/2,8 WH:UNBEDRUCKT - Marker card

0803883

<https://www.phoenixcontact.com/us/products/0803883>

Marker card, Din A4, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, Office printing systems, mounting type: adhesive, for terminal block width: 210 mm, lettering field size: 186 x 2.8 mm, Number of individual labels: 3600



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## MM-TML (EX3,8)R C1 WH/BK - Label

1092026

<https://www.phoenixcontact.com/us/products/1092026>

Label, Roll, white/black, unlabeled, can be labeled with: THERMOFOX, THERMOMARK GO, THERMOMARK GO.K, mounting type: adhesive, lettering field size: continuous x 2.8 mm



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