

https://www.phoenixcontact.com/us/products/3210091



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Plug, nom. voltage: 500 V, nominal current: 24 A, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm²- 4 mm², color: gray

#### Product description

Connector element center, left housing with engagement pin, right opened without cover

#### Your advantages

- · Large-surface labeling option
- · The Push-in technology COMBI plugs for self-assembly provide solutions that users can implement themselves
- · Tested for railway applications

#### Commercial data

Item number	3210091
Packing unit	50 pc
Minimum order quantity	50 pc
Sales key	BE22
Product key	BE2244
Catalog page	Page 299 (C-1-2019)
GTIN	4046356333504
Weight per piece (including packing)	3.605 g
Weight per piece (excluding packing)	3.5 g
Customs tariff number	85366990
Country of origin	PL



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#### Technical data

#### Product properties

Product type	Terminal plug
Number of positions	1
Pitch	5.2 mm
Potentials	1
Insulation characteristics	
Overvoltage category	III
Degree of pollution	3

#### Electrical properties

Rated surge voltage	6 kV

#### Connection data

Nominal cross section	2.5 mm²
Normital Gross Section	2.5 11111

#### 1 level

Stripping length	8 mm 10 mm
Internal cylindrical gage	A3
Connection in acc. with standard	IEC 61984
Conductor cross section rigid	0.14 mm² 4 mm²
Cross section AWG	26 12 (converted acc. to IEC)
Conductor cross section flexible	0.14 mm² 2.5 mm²
Conductor cross section, flexible [AWG]	26 14 (converted acc. to IEC)
Conductor cross-section flexible (ferrule without plastic sleeve)	0.14 mm² 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.14 mm² 2.5 mm²
2 conductors with the same cross section, flexible, with TWIN ferrule with plastic sleeve	0.5 mm <sup>2</sup>
Nominal current	24 A
Maximum load current	24 A (with 4 mm² conductor cross section)
Nominal voltage	500 V
Nominal cross section	2.5 mm²

#### 1 level Connection cross sections directly pluggable

Conductor cross section rigid	0.34 mm² 4 mm²
Conductor cross-section flexible (ferrule without plastic sleeve)	0.34 mm² 2.5 mm²
Flexible conductor cross section (ferrule with plastic sleeve)	0.34 mm² 2.5 mm²

#### **Dimensions**

Width	5.2 mm
Height	15.8 mm
Depth	40.2 mm
Length	15.8 mm



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Pitch	5.2 mm
aterial specifications	
Color	gray
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
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

#### Environmental and real-life conditions

#### Ambient conditions

Ambient temperature (operation)	-60 °C (max. operating temperature see derating curve)
Ambient temperature (storage/transport)	-25 °C 60 °C (for a short time, no longer than 24 h, -60°C to +70°C)
Ambient temperature (assembly)	-5 °C 70 °C
Ambient temperature (actuation)	-5 °C 70 °C
Permissible humidity (operation)	20 % 90 %
Permissible humidity (storage/transport)	30 % 70 %

#### Standards and regulations

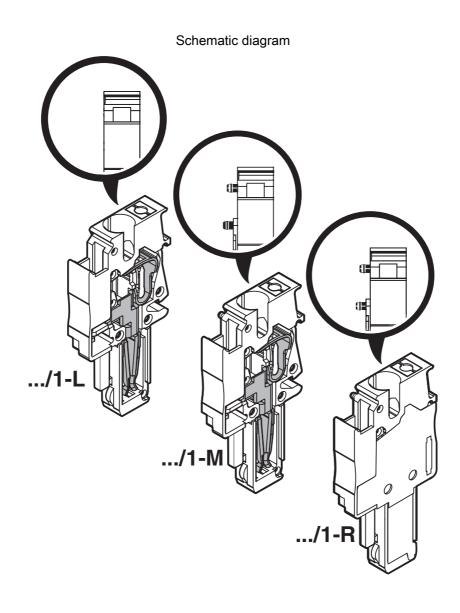
Connection in acc. with standard	IEC 61984

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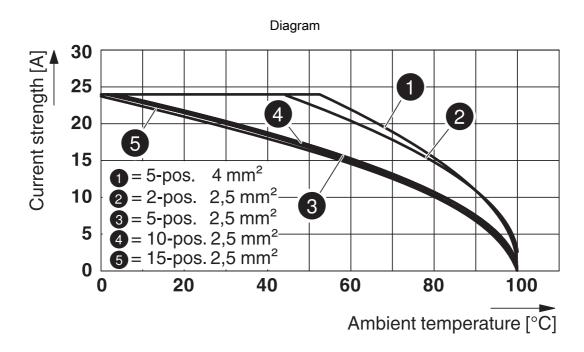


### Drawings



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Circuit diagram





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### **Approvals**

🌣 To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/3210091

Approval ID: TAE00003JE

CSA Approval ID: 2030668				
	Nominal voltage U <sub>N</sub>	Nominal current I <sub>N</sub>	Cross section AWG	Cross section mm <sup>2</sup>
Use group B				
	300 V	20 A	26 - 12	-
Use group C				
	300 V	20 A	26 - 12	-

**EAC** 

Approval ID: RU C-DE.BL08.B.00511



**cULus Recognized** Approval ID: E60425



LR

Approval ID: LR2371832TA



Approval ID: 14ME0912



ΒV

Approval ID: 25278/C1 BV

**ABS** 

Approval ID: 21-2192245-PDA



LR

Approval ID: 14/20056



cULus Recognized

Approval ID: E60425



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### Classifications

UNSPSC 21.0

#### **ECLASS**

ECLASS-11.0	27141151
ECLASS-12.0	27141151
ECLASS-13.0	27250306
ETIM	
ETIM 9.0	EC002021
UNSPSC	

39121400



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### Environmental product compliance

#### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



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#### Accessories

#### PZ/2 - Strain relief

3040627

https://www.phoenixcontact.com/us/products/3040627



Strain relief, width: 9.3 mm, height: 48.7 mm, number of positions: 2, color: black

#### PZ/4 - Strain relief

3040643

https://www.phoenixcontact.com/us/products/3040643



Strain relief, width: 19.6 mm, height: 48.7 mm, number of positions: 4, color: black



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#### PR - Latching

3040559

https://www.phoenixcontact.com/us/products/3040559



Latching, width: 4.4 mm, height: 29.8 mm, number of positions: 1, color: orange

#### PR/2 - Latching

3040630

https://www.phoenixcontact.com/us/products/3040630



Latching, width: 10 mm, height: 29.8 mm, number of positions: 2, color: orange



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#### PRT/2 - Latching

3040631

https://www.phoenixcontact.com/us/products/3040631



Latching, can only be released using a screwdriver, width: 9 mm, height: 23.2 mm, number of positions: 2, color: orange

#### PRZ - Latching

3040614

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Latching, number of positions: 2, length: 64 mm, color: orange



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#### PH 2,5/2 - Cable housing

#### 3209691

https://www.phoenixcontact.com/us/products/3209691



Cable housing, pitch: 10.4 mm, depth: 36.8 mm, width: 10.4 mm, height: 19.9 mm, number of positions: 2, color: gray

#### PH 2,5/3 - Cable housing

#### 3209701

https://www.phoenixcontact.com/us/products/3209701



Cable housing, pitch: 15.6 mm, depth: 36.8 mm, width: 15.6 mm, height: 19.9 mm, number of positions: 3, color: gray



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#### PH 2,5/4 - Cable housing

3209714

https://www.phoenixcontact.com/us/products/3209714



Cable housing, pitch: 20.8 mm, depth: 36.8 mm, width: 20.8 mm, height: 19.9 mm, number of positions: 4, color: gray

#### PH 2,5/5 - Cable housing

3209727

https://www.phoenixcontact.com/us/products/3209727



Cable housing, pitch: 26 mm, depth: 36.8 mm, width: 26 mm, height: 19.9 mm, number of positions: 5, color: gray



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#### PH 2,5/6 - Cable housing

3209730

https://www.phoenixcontact.com/us/products/3209730



Cable housing, pitch: 31.2 mm, depth: 36.8 mm, width: 31.2 mm, height: 19.9 mm, number of positions: 6, color: gray

#### PH 2,5/7 - Cable housing

3209743

https://www.phoenixcontact.com/us/products/3209743



Cable housing, pitch: 36.4 mm, depth: 36.8 mm, width: 36.4 mm, height: 19.9 mm, number of positions: 7, color: gray



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#### PH 2,5/8 - Cable housing

3209756

https://www.phoenixcontact.com/us/products/3209756



Cable housing, pitch: 41.6 mm, depth: 36.8 mm, width: 41.6 mm, height: 19.9 mm, number of positions: 8, color: gray

#### PH 2,5/9 - Cable housing

3209507

https://www.phoenixcontact.com/us/products/3209507



Cable housing, pitch: 46.8 mm, depth: 36.8 mm, width: 46.8 mm, height: 19.9 mm, number of positions: 9, color: gray



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#### PH 2,5/10 - Cable housing

3209769

https://www.phoenixcontact.com/us/products/3209769



Cable housing, pitch: 52 mm, depth: 36.8 mm, width: 52 mm, height: 19.9 mm, number of positions: 10, color: gray

#### PH 2,5/11 - Cable housing

3209772

https://www.phoenixcontact.com/us/products/3209772



Cable housing, pitch: 57.2 mm, depth: 36.8 mm, width: 57.2 mm, height: 19.9 mm, number of positions: 11, color: gray



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#### PH 2,5/12 - Cable housing

3209785

https://www.phoenixcontact.com/us/products/3209785



Cable housing, pitch: 62.4 mm, depth: 36.8 mm, width: 62.4 mm, height: 19.9 mm, number of positions: 12, color: gray

#### PH 2,5/13 - Cable housing

3209798

https://www.phoenixcontact.com/us/products/3209798



Cable housing, pitch: 67.6 mm, depth: 36.8 mm, width: 67.6 mm, height: 19.9 mm, number of positions: 13, color: gray



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#### PH 2,5/14 - Cable housing

3209808

https://www.phoenixcontact.com/us/products/3209808



Cable housing, pitch: 72.8 mm, depth: 36.8 mm, width: 72.8 mm, height: 19.9 mm, number of positions: 14, color: gray

#### PH 2,5/15 - Cable housing

3209811

https://www.phoenixcontact.com/us/products/3209811



Cable housing, pitch: 78 mm, depth: 36.8 mm, width: 78 mm, height: 19.9 mm, number of positions: 15, color: gray



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#### PP-H 2,5/1-L - Plug

#### 3210062

https://www.phoenixcontact.com/us/products/3210062



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², color: gray

#### PP-H 2,5/1-L BU - Plug

#### 3210075

https://www.phoenixcontact.com/us/products/3210075



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, color: blue



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#### PP-H 2,5/1-L GNYE - Plug

3210088

https://www.phoenixcontact.com/us/products/3210088



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², color: green-yellow

#### PP-H 2,5/1-M - Plug

3210091

https://www.phoenixcontact.com/us/products/3210091



Plug, nom. voltage: 500 V, nominal current: 24 A, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm²- 4 mm², color: gray



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#### PP-H 2,5/1-M BU - Plug

3210101

https://www.phoenixcontact.com/us/products/3210101



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², color: blue

#### PP-H 2,5/1-M GNYE - Plug

3210114

https://www.phoenixcontact.com/us/products/3210114



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section:  $2.5 \text{ mm}^2$ , cross section:  $0.14 \text{ mm}^2$  -  $4 \text{ mm}^2$ , color: green-yellow



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#### PP-H 2,5/1-R - Plug

3210127

https://www.phoenixcontact.com/us/products/3210127



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², color: gray

#### PP-H 2,5/1-R BU - Plug

3210130

https://www.phoenixcontact.com/us/products/3210130



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm<sup>2</sup>, cross section: 0.14 mm<sup>2</sup> - 4 mm<sup>2</sup>, color: blue



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#### PP-H 2,5/1-R GNYE - Plug

3210143

https://www.phoenixcontact.com/us/products/3210143



Plug, nom. voltage: 500 V, nominal current: 24 A, number of connections: 1, number of positions: 1, connection method: Push-in connection, 1 level, Rated cross section: 2.5 mm², cross section: 0.14 mm² - 4 mm², color: green-yellow

#### MPS-MT - Test plug

0201744

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



Test plug, 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



#### 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



#### 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



#### 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



#### 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

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

3002869

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



Insulating sleeve, color: black

3210091

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#### ZBF 5:UNBEDRUCKT - Zack Marker strip, flat

#### 0808642

https://www.phoenixcontact.com/us/products/0808642



Zack Marker strip, flat, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.1 x 5.2 mm, Number of individual labels: 10

#### ZBF 5 CUS - Zack Marker strip, flat

#### 0825025

https://www.phoenixcontact.com/us/products/0825025



Zack Marker strip, flat, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10



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#### ZBF 5,LGS:FORTL.ZAHLEN - Zack Marker strip, flat

#### 0808671

https://www.phoenixcontact.com/us/products/0808671



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

#### ZBF 5,QR:FORTL.ZAHLEN - Zack Marker strip, flat

#### 0808697

https://www.phoenixcontact.com/us/products/0808697



Zack Marker strip, flat, Strip, white, labeled, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 91 ... 100, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10



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#### ZBF 5,LGS:GERADE ZAHLEN - Zack Marker strip, flat

0810821

https://www.phoenixcontact.com/us/products/0810821



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: consecutive even numbers 2 ... 20, 22 ... 40, etc. up to 82 ... 100, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10

#### ZBF 5,LGS:UNGERADE ZAHLEN - Zack Marker strip, flat

0810863

https://www.phoenixcontact.com/us/products/0810863



Zack Marker strip, flat, Strip, white, labeled, printed horizontally: Odd numbers 1 - 19, 21 - 39, etc. up to 81 - 99, mounting type: snapped, for terminal block width: 5 mm, lettering field size: 5.15 x 5.15 mm, Number of individual labels: 10



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#### UC-TMF 5 - Marker for terminal blocks

0818153

https://www.phoenixcontact.com/us/products/0818153



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: snapped, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

#### UC-TMF 5 CUS - Marker for terminal blocks

0824638

https://www.phoenixcontact.com/us/products/0824638



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.6 x 5.1 mm, Number of individual labels: 96

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https://www.phoenixcontact.com/us/products/3210091



#### UCT-TMF 5 - Marker for terminal blocks

0828744

https://www.phoenixcontact.com/us/products/0828744



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: snapped, for terminal block width: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72

#### UCT-TMF 5 CUS - Marker for terminal blocks

0829658

https://www.phoenixcontact.com/us/products/0829658



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into flat marker groove, for terminal block width: 5.2 mm, lettering field size: 4.4 x 4.7 mm, Number of individual labels: 72



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#### ST-BW - Actuation tool

1207608

https://www.phoenixcontact.com/us/products/1207608



Actuation tool, for all 2.5 mm<sup>2</sup> - 4.0 mm<sup>2</sup> spring-cages

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Phoenix Contact USA 586 Fulling Mill Road Middletown, PA 17057, United States (+717) 944-1300 info@phoenixcon.com