

# LIT 2-12


Order No.: 2804694



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2804694>


Surge protection in one-piece 6.2 mm wide DIN rail module for two floating signal wires. Tested in acc. with the protection types in Ex areas: Ex ia IIC / Ex iaD.



Commercial data	
GTIN (EAN)	 4 046356 462198
Note	Made-to-order
sales group	J342
Pack	10 pcs.
Customs tariff	85363010
Catalog page information	Page 98 (TT-2009)

**Product notes**

WEEE/RoHS-compliant since: 10/27/2008



<http://www.download.phoenixcontact.com>  
 Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data	
<b>General</b>	
Housing material	PBT
Inflammability class acc. to UL 94	V0
Color	black

Standards for air and creepage distances	IEC 60664-1
	EN 60079-11
Total surge current (8/20) $\mu$ s	20 kA
Total surge current (10/350) $\mu$ s	1 kA
Ambient temperature (operation)	-40 °C ... 80 °C
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Mounting type	DIN rail: 35 mm
Design	Rail-mountable module, one-piece
Degree of protection	IP20
Direction of action	Line-Line & Line-Earth Ground
Width	6.20 mm
Height	102.50 mm
Length	93.00 mm

**Protective circuit**

IEC category	C1
	C2
	C3
	D1
Nominal voltage $U_N$	12 V DC
Maximum continuous operating voltage $U_C$	13 V AC
	18 V DC
Nominal current $I_N$	500 mA (40°C)
Operating effective current $I_C$ at $U_C$	$\leq 2 \mu$ A (per path)
Ground conductor current $I_{PE}$	$\leq 2 \mu$ A
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Core)	350 A
Nominal discharge surge current $I_n$ (8/20) $\mu$ s (Core-Earth)	5 kA
	10 kA (Total)
Total surge current (8/20) $\mu$ s	20 kA
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (Core-Core)	350 A
Max. discharge surge current $I_{max}$ (8/20) $\mu$ s maximum (Core-Earth)	10 kA
	20 kA ((Total))
Nominal pulse current $I_{an}$ (10/1000) $\mu$ s (Core- Core)	70 A

Nominal pulse current $I_{an}$ (10/1000) $\mu$ s (Core-Earth)	50 A
	100 A (Total)
Lightning test current (10/350) $\mu$ s, peak value $I_{imp}$	500 A
Output voltage limitation at 1 kV/ $\mu$ s (Core-Core) spike	$\leq 50$ V
Output voltage limitation at 1 kV/ $\mu$ s (Core-Earth) spike	$\leq 650$ V
Residual voltage at $I_n$ , (conductor-conductor)	$\leq 50$ V
Residual voltage with $I_{an}$ (10/1000) $\mu$ s (conductor-conductor)	$\leq 50$ V
Protection level $U_p$ (Core-Core)	$\leq 50$ V (C1 - 500 V / 250 A)
	$\leq 50$ V (C3 - 10 A)
Protection level $U_p$ (Core-Earth)	$\leq 650$ V (C1 - 500 V / 250 A)
	$\leq 650$ V (C2 - 10 kV / 5 kA)
	$\leq 700$ V (D1 - 500 A)
Response time $t_A$ (Core-Core)	$\leq 1$ ns
Response time $t_A$ (Core-Earth)	$\leq 100$ ns
Input attenuation $a_E$ , sym.	Typ. 0.1 dB (1 MHz / 50 $\Omega$ )
	Typ. 0.1 dB (300 kHz / 150 $\Omega$ )
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 50 Ohm system	Typ. 5 MHz
Cut-off frequency $f_g$ (3 dB), asym. (GND) in 100 Ohm system	Typ. 1.5 MHz
Capacity	$\leq 1.5$ nF (per path)
Resistance in series	0 $\Omega$
Max. required back-up fuse	500 mA
Surge carrying capacity in acc. with IEC 61643-21 (Core-Core)	C1 (500 V / 250 A)
	C3 (25 A)
Surge carrying capacity in acc. with IEC 61643-21 (Core-Earth)	C2 (10 kV/5 kA)
	C3 (25 A)
	D1 (500 A)
Alternating current carrying capacity in acc. with IEC 61643-21 (Core-Earth)	5 A - 1 s
<b>Connection data</b>	
Connection method	Screw connection

Connection type IN	Screw terminal blocks
Connection type OUT	Screw terminal blocks
Screw thread	M3
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max	12

**Connection, equipotential bonding**

Connection method	DIN rail NS35
-------------------	---------------

**Connection, protective circuit**

Standards/regulations	IEC 61643-21
	DIN EN 61643-21

**Certificates / Approvals**

Certification	UL Listed
Certification Ex:	IECEX, KEMA-EX

**Accessories**

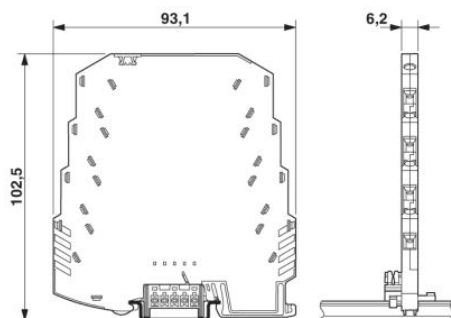
Item	Designation	Description
<b>General</b>		
1857919	IMC 1,5/ 5-ST-3,81	Plug component, Nominal current: 8 A, Rated voltage (III/2): 160 V, Number of positions: 5, Pitch: 3.81 mm, Connection method: Screw connection, Color: green
2969401	ME 6,2 TBUS-2 1,5/5-ST-3,81KMGY	DIN rail bus connector for potential bridging of devices arranged next to one another across all modules.

**Marking**

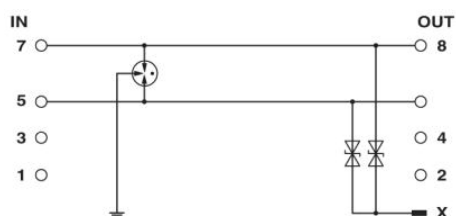
0818085	UC-TM 6	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: white
0818344	UC-TM 6 BU	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: blue
0818360	UC-TM 6 GN	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: green
0818328	UC-TM 6 OG	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: orange
0818357	UC-TM 6 RD	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: red
0818331	UC-TM 6 YE	UniCard materials for labeling terminal blocks with a marker groove,80-section, can be labeled with BLUEMARK X1 and CMS-P1-PLOTTER, color: yellow

**Diagrams/Drawings**

## Dimensioned drawing



## Circuit diagram



**Address**

PHOENIX CONTACT Inc., USA  
586 Fulling Mill Road  
Middletown, PA 17057, USA  
Phone (800) 888-7388  
Fax (717) 944-1625  
<http://www.phoenixcon.com>



© 2011 Phoenix Contact  
Technical modifications reserved;

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)