# BUSSMANN SERIES

# 14x65mm photovoltaic fuses — 1500/1300Vdc, 2.25-32A



### Catalog symbols / mounting style:

- · PV-(amp)A14LF (cylindrical)
- PV-(amp)A14L-T (cylindrical with tags)
- PV-(amp)A14LF10F (cylindrical with 10mm fixings)
- · PV-(amp)A-CT\_\_ (in-line with crimp terminals)

#### **Description:**

Eaton's Bussmann® series of 14x65mm package PV fuses are specifically designed for protecting and isolating photovoltaic strings. These fuse links are capable of interrupting low overcurrents associated with faulted PV systems (reverse current, multi-array fault).

Available with four mounting styles for application flexibility.

#### Basic fuse size

· 14x65mm

#### **Ratings**

- Volts
  - 1500Vdc (2.25-20A)
  - 1300Vdc (25-32A)
- · Amps 2.25-32A
- · Interrupting rating 10kA
- · Time constant 1-3ms



#### **Operating class**

· gPV and UL PV fuse links

#### **Agency information**

- · UL Listed 2579\*
- IEC 60269-6 gPV
- · CSA pending
- · CCC pending
- · RoHS compliant
- \* Crimp terminal version is UL Recognized to UL 2579.

#### Packaging (carton quantity):

- PV-(amp)A14LF, PV-(amp)A14L-T, PV-(amp)A14LF10F: 10
- PV-(amp)A-CT: 75

#### **Technical data**

PV fuse coordination with thin film cells, and 4", 5" and 6" crystalline silicon cells.

#### **Features:**

- Specifically designed to provide fast-acting protection under low fault current conditions associated with PV systems
- · High DC voltage rating
- · Variety of mounting options for flexibility
- Demonstrated performance in extreme temperature cycling conditions
- Wide range of available amp ratings makes it easy to standardize wire harness protection
- Fuses meet UL and IEC photovoltaic standards for global product acceptance
- Low watts loss for greater PV system efficiency
- Low heat rise permits more precise sizing for greater electrical protection
- In-line crimp terminal version is easy to apply in wire harness construction.

#### **Typical applications:**

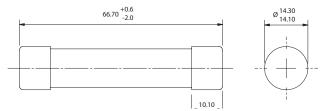
- · Combiner boxes
- Inverters
- PV wire harnesses

#### **Specifications:**

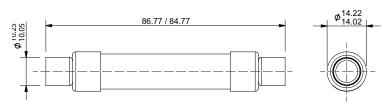
Part numbers / configurations					V 16	Energy integrals I <sup>2</sup> t (A <sup>2</sup> s)		Watts loss	
Cylindrical	Cylindrical with tags	Cylindrical with 10mm fixings	In-line with crimp terminals	Current rating (amps)	Voltage rating (Vdc)	Pre-arcing	Total at rated voltage	0.8 I <sub>n</sub>	I <sub>n</sub>
PV-2.25A14LF	PV-2.25A14L-T	PV-2.25A14LF10F	PV-2.25A-CT	2.25	1500	4	8	1.4	2.3
PV-2.5A14LF	PV-2.5A14L-T	PV-2.5A14LF10F	PV-2.5A-CT	2.5	1500	5	10	1.5	2.5
PV-3A14LF	PV-3A14L-T	PV-3A14LF10F	PV-3A-CT	3.0	1500	8	14	1.7	2.8
PV-3.5A14LF	PV-3.5A14L-T	PV-3.5A14LF10F	PV-3.5A-CT	3.5	1500	12	23	1.8	3.0
PV-4A14LF	PV-4A14L-T	PV-4A14LF10F	PV-4A-CT	4.0	1500	18	34	2.0	3.3
PV-15A14LF	PV-15A14L-T	PV-15A14LF10F	PV-15A-CT	15	1500	14	160	3.2	5.8
PV-20A14LF	PV-20A14L-T	PV-20A14LF10F	PV-20A-CT	20	1500	34	400	3.8	6.9
PV-25A14LF	PV-25A14L-T	PV-25A14LF10F	_	25	1300	65	550	4.1	7.5
PV-32A14LF	PV-32A14L-T	PV-32A14LF10F	_	32	1300	105	900	5.7	10.4

### **Dimensions/configurations - mm:**

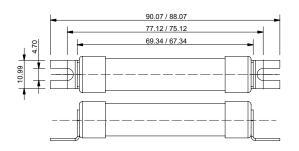
#### Cylindrical PV-(amp)A14LF



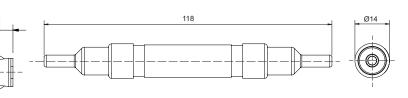
## Cylindrical with 10mm fixings PV-(amp)A14LF10F



#### Cylindrical with tags PV-(amp)A14L-T



#### In-line with crimp terminals PV-(amp)A-CT



The in-line crimp terminal version can be electrically insulated with customer supplied overmolding or approved heat-shrink.

#### Operating temperature range:

· -40°C to 90°C

#### Wire range and type:

Single conductor, 12-10AWG 75°C/90°C Cu stranded PV

#### Overmolding temperature parameters:

· 233°C for 180 sec Max.

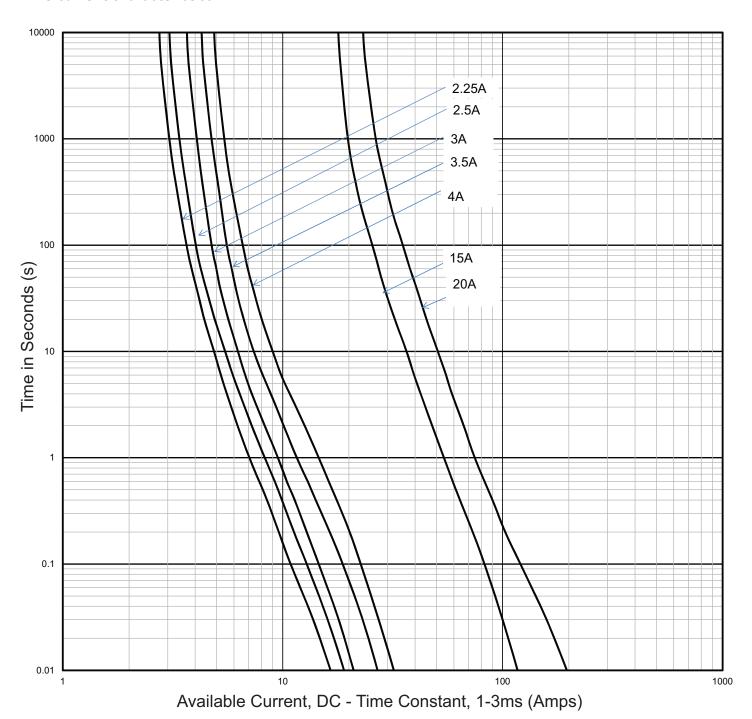
#### Terminals:

· Crimp terminals for 12-10AWG copper PV conductors

#### Recommended tools:

· Sta-Kon terminal crimping tool, catalog # ERG4002

#### **Time-current characteristics**



# **Recommended fuseclips:**

Part number	Description/data sheet No.
1A3400-09 (up to 20A) 1A3400-10 (up to 30A) 1A3400-12 (up to 15A)	PCB Fuseclips for PV-(amp)A14LF10F with 10mm fixings # 2131

Technical Data 1172 Effective June 2015

The only controlled copy of this data sheet is the electronic read-only version located on the Eaton network drive. All other copies of this document are by definition uncontrolled. This bulletin is intended to clearly present comprehensive product data and provide technical information that will help the end user with design applications. Eaton reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Eaton also reserves the right to change or update, without notice, any technical information contained in this bulletin. Once a product has been selected, it should be tested by the user in all possible applications.

Eaton 1000 Eaton Boulevard Cleveland, OH 44122 Eaton.com

Bussmann Division 114 Old State Road Ellisville, MO 63021 United States Eaton.com/bussmannseries

© 2015 Eaton All Rights Reserved Printed in USA Publication No. 1172 — BU-SB14108 June 2015



All other trademarks are property of their respective owners.

