ASwich | Safety Is On

DC Fuse Holeder

EDFH series Fuse 1000V

Leading Manufacturer Protects Solar Power Safety

Rev1.0 2022/04/11

EDFH series DC Fuse 1000V

Product Application

EDFH series fuse holder is made of refractory material, and meets the standard of IEC 60947-3. The maximum rated voltage is 1000V and the maximum current is 30A. As a short circuit and over-current protector, it is widely used in the high and low voltage distribution system, control system, and electrical equipments, like distribution box and inverter.

Product Benefits

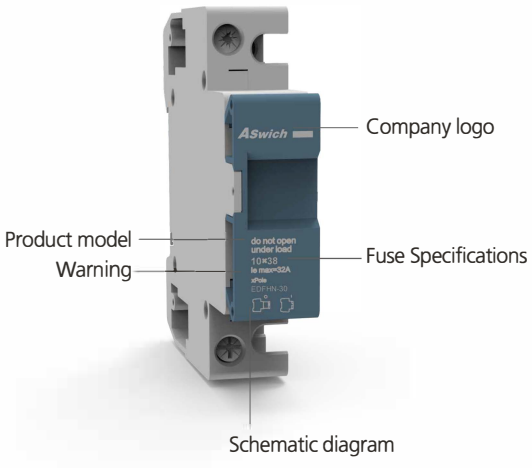
- DIN35 Rail Installation, Easy to Install
- Adjustable terminal block, Wiring firm
- Fire-retardant shell, high temperature resistance
- Flexible installation, Easy to replace

Select Code

E	D	FH	□ - □ / □
1	2	3	4 5 6

Code	Name	Description
1	ASwich brand	E
2	DC	D
3	Product Code	FH: Fuse Holder
4	Rated voltage	N: 1000VDC
5	Rated current	30: 30A
6	Pole	1:1P 2:2P

Appearance Introduction



DC FUSE HOLEDER

EDFH series Fuse 1000V

Technical Data

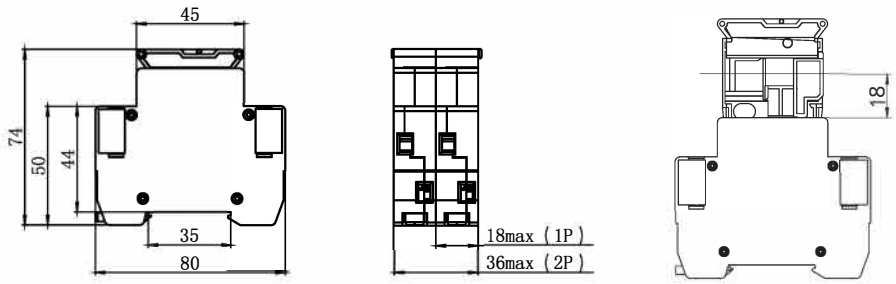
PV DC EDFH Fuse Holder Pole	1P
According to	IEC60947-3

Electrical Characteristics	
Rated Working Voltage	1000V DC
Rated Current	30A
Breaking Capacity	20kA
Max Power Dissipation	3W

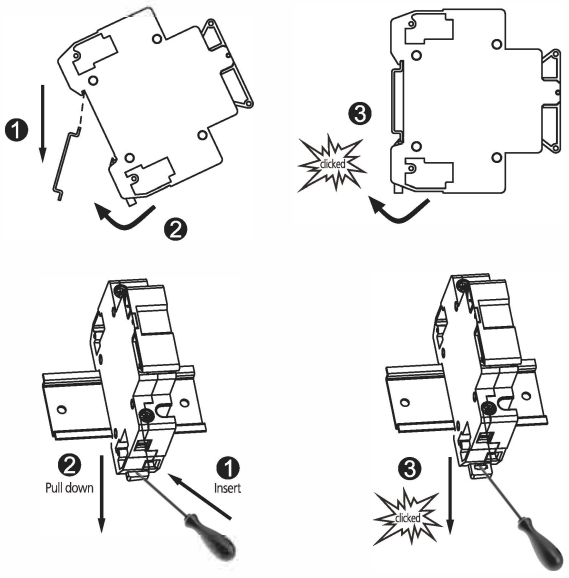
Control and Indication	
Connection and InstallationWire	2.5mm²- 6.0mm²
Terminal Screws	M3.5
Torque	0.8~1.2N·m
Degree of Protection	IP20

Installation Environment	
Fuse Size	10x38mm
Operating Temperature Range	-30°C~+70°C
Mounting	DIN rail IEC/EN 60715
Pollution Degree	3
Relative Humidity	+20°C ≤95%, +40°C ≤50%
Installation Class	III
Weight	0.07kg Per pole

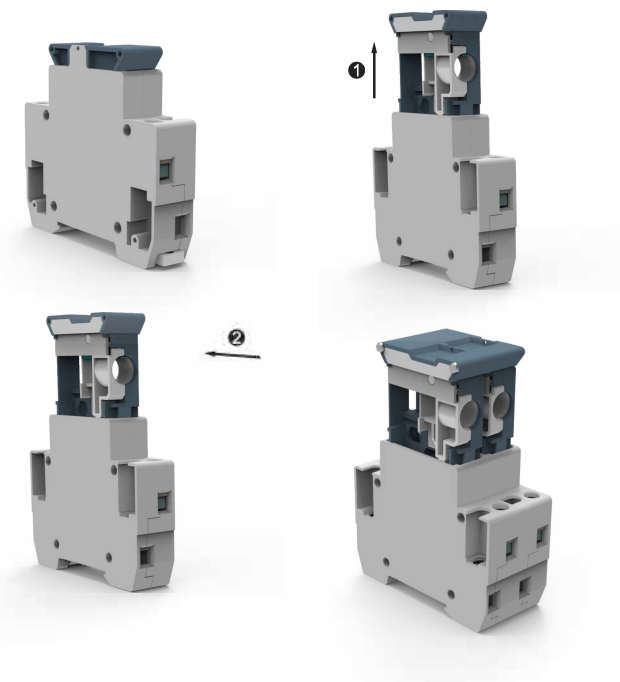
Dimensions



Installation



Replacement Fuse



EDFH series Fuse 1000V

Product Application

EDFH series fuse holder is made of refractory material, and meets the standard of IEC 60947-3. The maximum rated voltage is 1000V and the maximum current is 30A. As a short circuit and over-current protector, it is widely used in the high and low voltage distribution system, control system, and electrical equipments, like distribution box and inverter.

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Select Code

E	D	FH	□	-	□	/	□	□
1	2	3	4		5		6	7

Code	Name	Description
1	ASwich brand	E
2	DC	D
3	Product Code	FH: Fuse Holder
4	Rated voltage	N: 1000VDC
5	Fuse Rated current	32: 32A
6	Pole	1: 1P
7	Light	L: with light Nil: with out light

Appearance Introduction

EDFH series Fuse 1000V

Technical Data

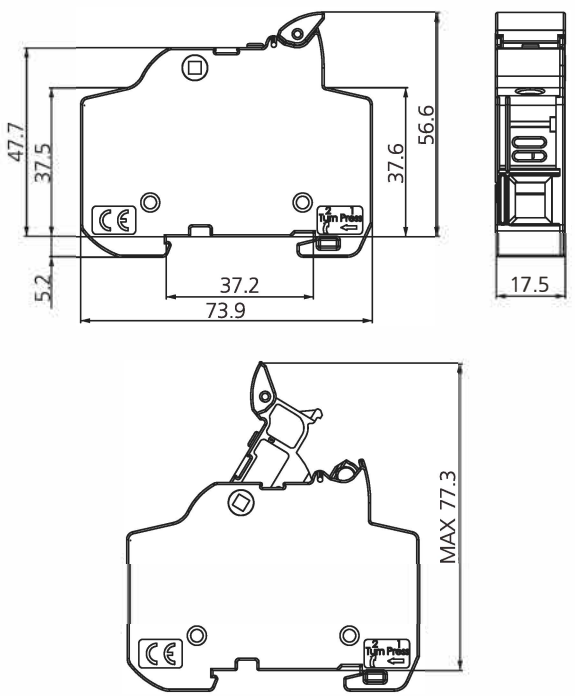
PV DC EDFH Fuse Holder Pole	1P
According to	IEC60947-3

Electrical Characteristics	
Rated Working Voltage	1000V DC
Rated Current	32A
Breaking Capacity	20kA
Max Power Dissipation	3W

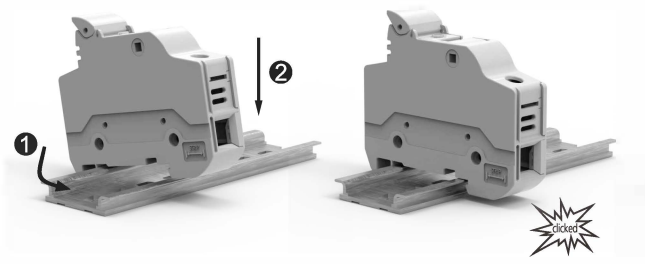
Control and Indication	
Operating State/Fault Indication	Indicator Light OFF/Indicator Light ON
Connection and InstallationWire	1.5mm²- 10mm²
Terminal Screws	M3.5
Torque	0.8~1.2N·m
Degree of Protection	IP20

Installation Environment	
Fuse Size	10x38mm
Operating Temperature Range	-30℃~+70℃
Mounting	DIN rail IEC/EN 60715
Pollution Degree	3
Relative Humidity	+20℃ ≤95%, +40℃ ≤50%
Installation Class	III
Weight	0.07kg Per pole

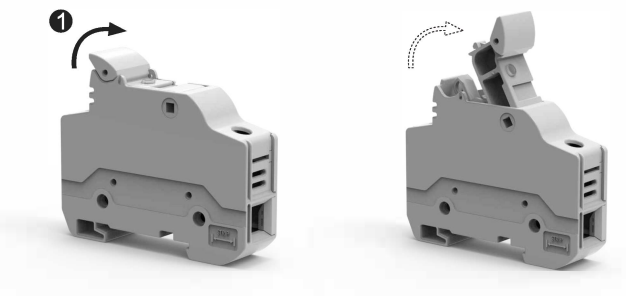
Dimensions



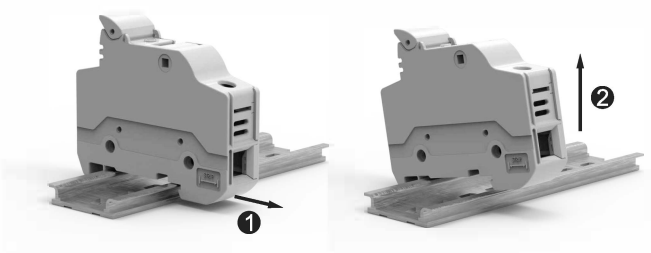
Installation

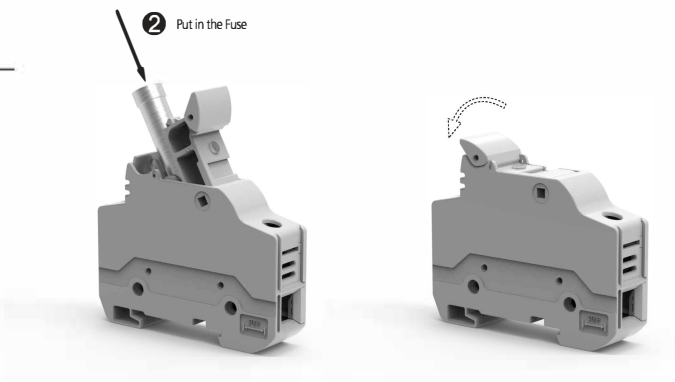


Replacement Fuse



Disassemble





10x38mm Photovoltaic Fuses

Product Benefits

- Amps:1~32A Volts: 1000VDC Breaking Capacity:30kA @1000DC
- Compact design.Low power loss.Excellent DC performance
- Low arc voltage and low energy let-through(I2t)
- Product storage temperature: -40℃~120℃. At 40℃, the relative humidity is not more than 70%, below 30℃, not more than 80%, below 20℃, not more than 90%
- Packaging and storage temperature: -40℃~80℃. The relative humidity is not more than 90%, and there is no condensation

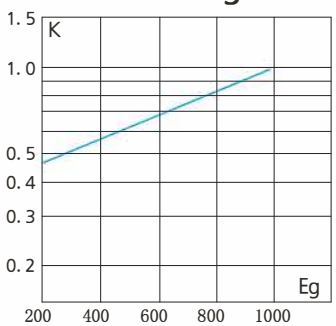
Altitude

- 2000 - 4500m
- Higher altitude mainly leads to insulation deterioration, heat dissipation condition deterioration and air pressure change.
  A) The temperature rise of the fuse increases by 0.1-0.5k every 100m above sea level.
  B) For every 100m increase in altitude, the average ambient temperature decreases by about 0.5K.
  C) In open environment, the influence of altitude on rated current can be ignored.
  D) When used in a closed environment, if the air temperature or box temperature does not decrease with the increase of altitude and still reaches more than 40℃, the rated current needs to be reduced. The rated current shall be reduced by 2%-5% for every 1000m increase in altitude.
- Effect of altitude on air insulation strength (breakdown strength)
  A) Within 2000-4500m, the insulation strength decreases by 12-15% for every 1000m increase in altitude
  B) the insulation gap between the fuse and other live structures and to the ground shall be considered by the user.

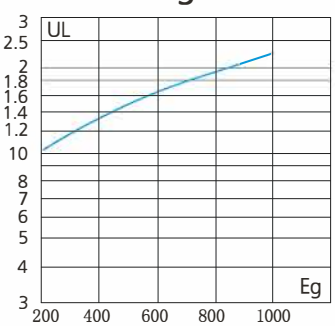
Vibration and Shock Resistance

- It has good resistance to vibration and impact, and can withstand more than 20g Comply with the IT application environment of rail transit and the use of general motor vehicles.
- In the application environment with strong vibration, the corresponding test can be negotiated, which generally needs a long period.

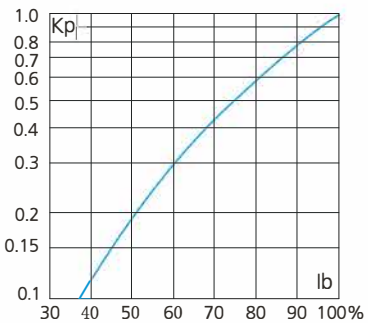
Total clearing I^2t



Arc Voltage



Power Losses



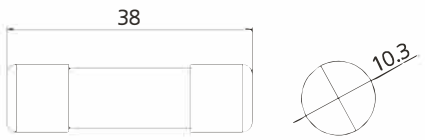
10x38mm Photovoltaic Fuses

Electrical Characteristics

Designed to: UL248-19/IEC60269-6 GB/T13539-6

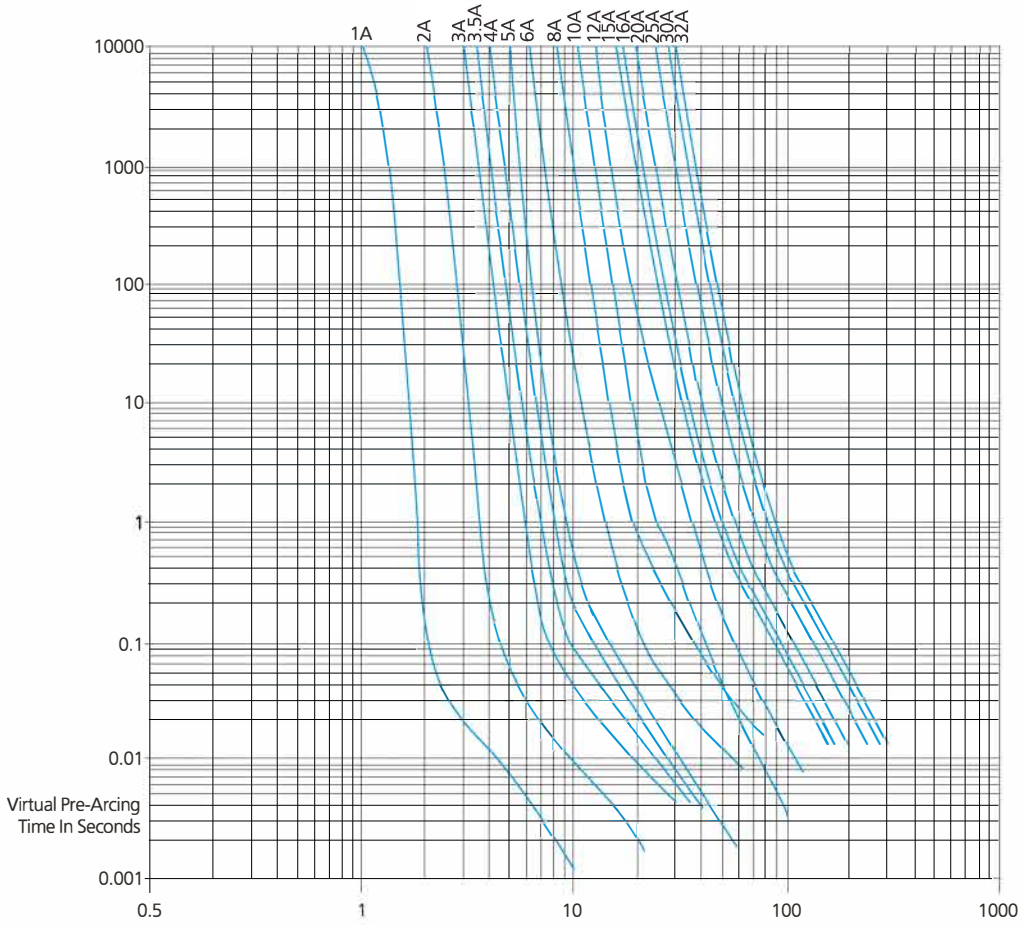
Serial number	Part Number	Rated Current(A)	Energy Integrals I^2t		Watts Loss		Use bolts	Installation torque
			Pre-Arcing	Clearing at 1000V	0.8In	1In		
1	1000VDC/10X38/1A	1	0.15	0.4	0.6	1.0	–	–
2	1000VDC/10X38/2A	2	1.3	3.4	0.7	1.1	–	–
3	1000VDC/10X38/3A	3	4	12	0.8	1.3	–	–
4	1000VDC/10X38/3.5A	3.5	6.5	20	0.9	1.4	–	–
5	1000VDC/10X38/4A	4	10	28	1.1	1.4	–	–
6	1000VDC/10X38/5A	5	19	50	1.1	1.4	–	–
7	1000VDC/10X38/6A	6	28	85	1.2	1.8	–	–
8	1000VDC/10X38/8A	8	32	93	1.2	2.2	–	–
9	1000VDC/10X38/10A	10	57	100	1.3	2.3	–	–
10	1000VDC/10X38/12A	12	60	150	1.5	2.8	–	–
11	1000VDC/10X38/15A	15	149	230	1.8	3	–	–
12	1000VDC/10X38/16A	16	155	260	2.0	3.2	–	–
13	1000VDC/10X38/20A	20	230	360	2.5	3.8	–	–
14	1000VDC/10X38/25A	25	400	500	3.2	4	–	–
15	1000VDC/10X38/30A	30	550	780	3.3	4.5	–	–
16	1000VDC/10X38/32A	32	612	940	3.5	5.5	–	–

Dimension(mm)



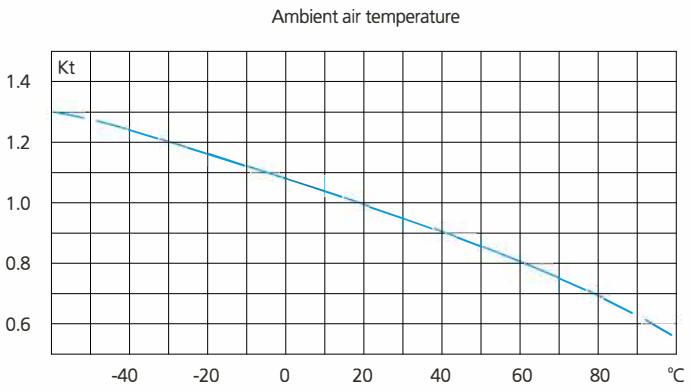
10x38mm Photovoltaic Fuses

Prospective Current In Amps RMS



Operating conditions

- When the fuse exceeds the service conditions, some parameters may need to be corrected, and our company should be consulted.
- It is recommended that the current value of long-term through current shall not be greater than 75% of the rated current.
- Normal service conditions: -5℃~ 40℃, allowable service conditions: -40℃~80℃.
- Parameters of air temperature change: when working below -5℃, the pre arc time of low times overload current of fuse is slightly prolonged and the rated current is slightly increased. Unless the working range is above -5℃, it is generally necessary to increase the rated current of fuse
- When the fuse works above 40℃, the rated current needs additional correction, and the correction factor is - KT



DC FUSE HOLEDER

EDFH series Fuse 1500V

Product Application

This series of fuse is suitable for solar photovoltaic power generation system,rated voltage up to 1500V,rated current to 50A,connected with photovoltaic panels and batteries ,to charge variable flow system for short circuit breaking protection in photovoltaic station and photovoltaic power generation system.the rated breaking capacity is 20KA,products confirms to UL248-19 IEC 60269-6

Product Benefits

- Ambient Temperature:-40°C- + 90°C.
- Equipment installation height:less than 2000m (if you want use exceedng this height,pls tell us in advance,we can design according to your requirements).
- Fuse Link is made of pure silver,welding low tin and encapsulated in the high-strength porcelain,the fuse tube filled with high pure quartz sand with chemically processed as a arc medium,fuse body is connected with contacting terminals by spot welding.

Select Code

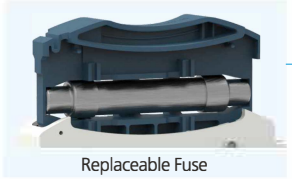
E	D	FH	-	□	□ / □	□
1	2	3		5	6 7	8

Code	Name	Description
1	ASwich brand	E
2	DC	D
3	Product Code	FH: Fuse Holder
5	Rated voltage	T: 1500V
6	Rated current	32: 32A
7	Pole	1:1P
8	Light	L: with light Nil: with out light

Appearance Introduction

Short-cicuit indicator

Optional: with light or without light



Replaceable Fuse

Detachable opening closing

Heat sink hole

Relese heat of inside

Latch

35mm Din rail bolt mounting

Electrical Characteristics	
Rated Working Voltage	1500V DC
Rated Current	50A
Breaking Capacity	20KA
Wire Range	1-16mm²

Installation Environment	
Operating Temperature Range	-40°C~+90°C
Material	PC Flame Retardant PC
Torque	2.5N·m
Standard	UL248-19 IEC 60269-6

10x85mm 2~32A

14x85mm 30~50A

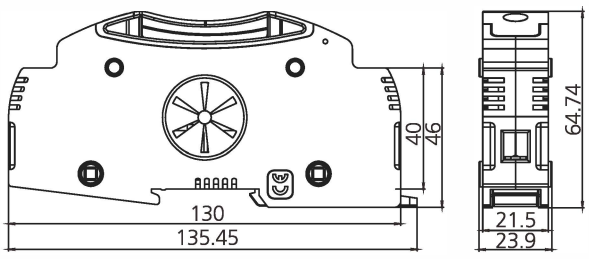
Fuse Specifications		
Rated Working Voltage	1500V DC	
Rated Current	2~32A	30~50A
Breaking Capacity	20KA	
Class	GPV	
Time Constant	1-3ms	

Testing Method

GPV The appointed time and current of Fuse

GPV Fuse current rated	Appointed Time	Appointed Current	
		Inf	If
In≤63A	1	1500	15
63A<In≤160A	2		
160A<In≤400A	3		
In > 400A	4		

Dimensions



EDFHN-T32/1L EDFHN-T32/1

EDFH series Fuse 1500V

Electrical Characteristics

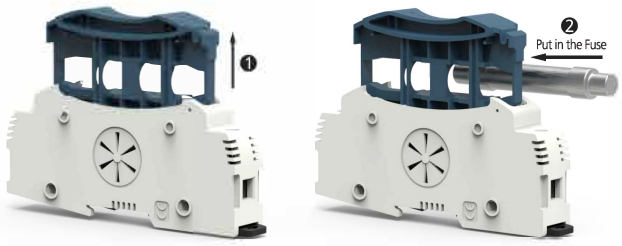
Designed to: UL248-19/IEC60269-6 GB/T13539-6

Serial number	Model	Rated Current(A)	Watts loss		Energy Integrals	
			0.8In (w)	1.0In (w)	Pre-arcing $I^2t(A^2s)$	Total $I^2t(A^2s)$
1	1500VDC/10X85/2A	2	1.7	3.20	4	8
2	1500VDC/10X85/3A	3	1.77	3.32	6	11
3	1500VDC/10X85/4A	4	1.69	3.19	8	14
4	1500VDC/10X85/5A	5	1.71	3.22	11	22
5	1500VDC/10X85/6A	6	1.73	3.25	15	30
6	1500VDC/10X85/8A	8	1.79	3.36	9	35
7	1500VDC/10X85/10A	10	1.99	3.74	10	98
8	1500VDC/10X85/12A	12	2.28	4.29	12	120
9	1500VDC/10X85/15A	15	2.63	4.95	14	170
10	1500VDC/10X85/16A	16	2.69	5.06	16	190
11	1500VDC/10X85/20A	20	3	5.65	34	400
12	1500VDC/10X85/25A	25	4.35	7.9	65	550
13	1500VDC/10X85/30A	30	4.68	8.5	85	680
14	1500VDC/10X85/32A	32	5.01	9.1	90	700

Serial number	Model	Rated Current(A)	Watts loss		Energy Integrals	
			0.8In (w)	1.0In (w)	Pre-arcing $I^2t(A^2s)$	Total $I^2t(A^2s)$
1	1500VDC/14X85/30A	30	4.57	8.6	90	720
2	1500VDC/14X85/32A	32	4.72	8.85	95	730
3	1500VDC/14X85/35A	35	5.12	9.35	95	750
4	1500VDC/14X85/40A	40	6.63	12.5	125	800
5	1500VDC/14X85/50A	50	7.25	13.65	125	920

Installation

Replacement Fuse



Disassemble