## **Special Purpose** HelioProtection® Photovoltaic fuse-links

### DC10HEL 900 to 1200VDC 8 to 25A

Mersen DC10HEL photovoltaic (PV) fuse series was engineered and designed specifically for the protection of photovoltaic systems. Its enhanced fuse construction makes it ideal for continuous temperature and current cycling withstand adding to system longevity. The 1200VDC rated DC10HEL, designed for low minimum breaking capacity capabilities of 1.30 times the fuse rated current value, allows for safe circuit interruption under typical low fault current conditions produced by PV arrays. Protect your off-grid or grid tied PV system from unexpected ground faults and line faults using Mersen HelioProtection® fuse line.



#### **Benefits**

Globally accepted Low fault current interrupting capability

Temperature cycle withstand capability

Durable construction for enhanced system longevity

Guaranteed operation at temperature extremes (-30°C to +70°C)

#### **Applications**

All photovoltaic applications Combiner box applications PV string/array level protection In-line PV module protection Inverters Battery charge controllers

Rated Voltage (V)	Nominal Current (A)	Class	Catalog Number	Reference Number
1200	8	gPV	DC10HEL12C8	D1014188
1200	10	gPV	DC10HEL12C10	T1012017
1200	12.5	gPV	DC10HEL12C12.5*	X1008754*
1200	16	gPV	DC10HEL12C16*	Y1008755*
1200	20	gPV	DC10HEL12C20*	Z1008756*
900	25	gPV	DC10HEL9C25	A1008757

<sup>\*</sup>Available per 10 pieces on request

#### Ratings

1200VDC: 25A, L/R = 2ms

IR: 12kA I.R. DC

Minimum Breaking Capacity:

1.30 x In

#### **Approvals**

IEC 60269-6 **RoHS Component** 





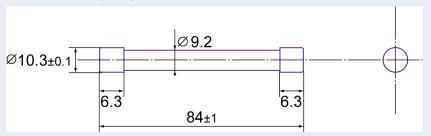


#### **Related products**

Clips: MR10/ MR10CI

Packaging: 1 box of 45 pieces

#### **Dimensions (mm)**



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www.ferrazshawmut.mersen.com





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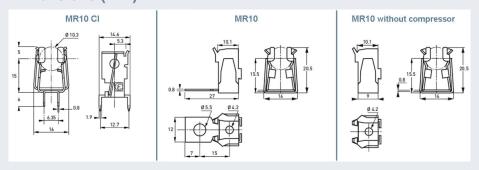
### DC10HEL 900 to 1200VDC 8 to 25A

Rated	Nominal	Pre-arcing	Clearing I <sup>2</sup> t @	Watts Loss @	Watts Loss @	Watts Loss @
Voltage (V)	Current (A)	I2t (A2s)	Rated Voltage (A2s)	100% In (W)	80% In (W)	70% In (W)
1200	8	163.7	210	2.8	1.7	1.2
1200	10	399.7	520	2.8	1.7	1.2
1200	12.5	162	310	3.1	1.8	1.3
1200	16	338	640	3.5	1.9	1.4
1200	20	578	1100	4.1	2.4	1.8
900	25	968	1680	5.2	3	2.2

#### **Accessories**

Description	Catalog Number	Reference Number	Weight (g)	Pack.
MR10 CI	MR10CIRESSORT	Y098507	4.5	200
MR10	MR10RESSORT	B098004	7.0	20
MR10 without compressor	MR10RESSORTSP	C098994	5.7	20

#### **Dimensions (mm)**



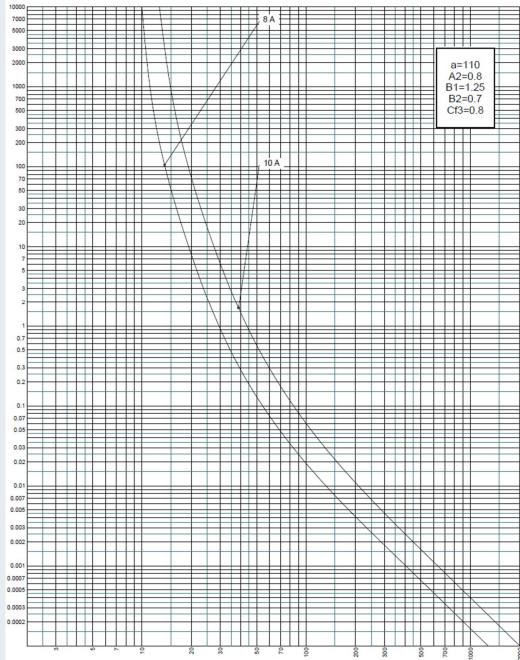






DC10HEL 900 to 1200VDC 8 to 25A

## Time current characteristics 1200VDC 8 to 10A



Actual prearcing time (s)

rms value of prearc current (A)  $\pm$  10%

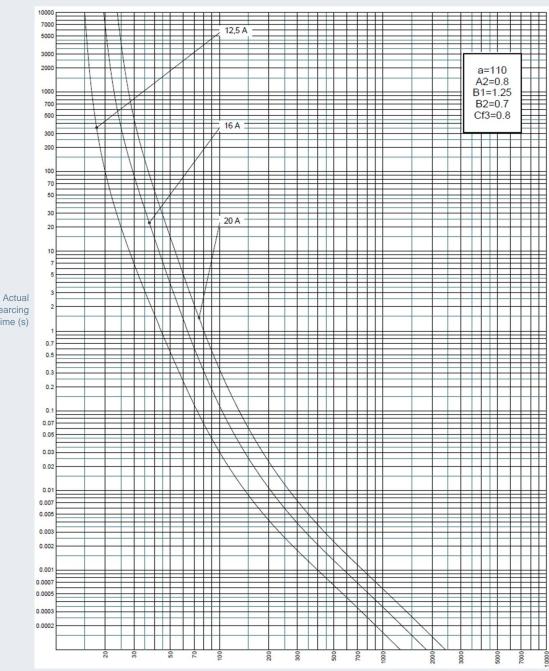






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#### **Time current characteristics** 1200VDC 12.5 to 20A



prearcing time (s)



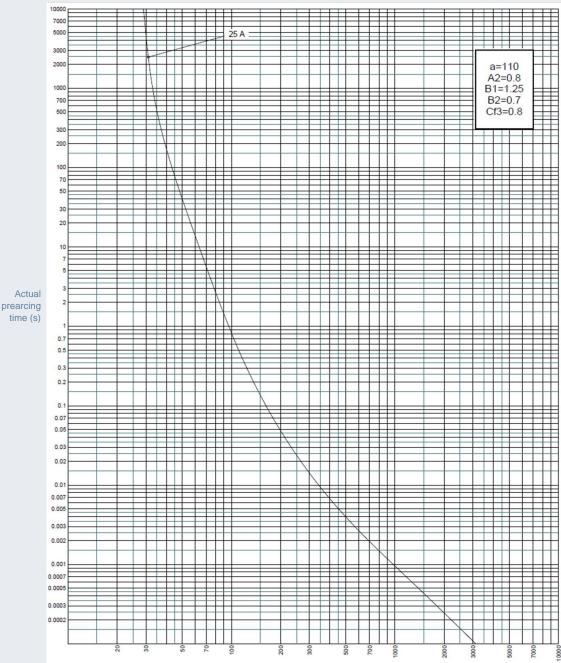






DC10HEL 900 to 1200VDC 8 to 25A

## Time current characteristics 900VDC 25A



rms value of prearc current (A) ± 10%

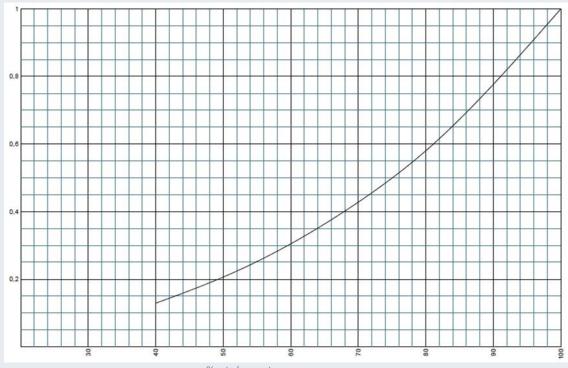


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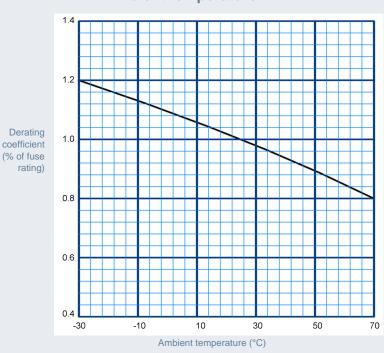
#### Watts loss vs % rated current



% rated current

#### Ampere rating vs. **Ambient temperature**

Correction Factor for Watts Loss



MERSEN