



ELECTRICAL SAFETY  
OF STREET LIGHT

# FUSE LINKS FOR STREET LIGHT PROTECTION



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# MERSEN PROFILE & RANGE MAPPING

## Expertise in Power Protection

Mersen, a global expert in electrical power and advanced materials, designs innovative solutions to address its client's specific needs to enable them to optimize their manufacturing performance in sectors such as energy, transportation, electronics, chemicals, pharmaceuticals and process industries.

Mersen is a world leader in fuse technology and has a powerful presence in the circuit protection market. Mersen Electrical Protection and Control business unit offers innovative solutions to enhance the safety of low voltage installations and equipment.

Above and beyond the supply of products, the company also provides added value in the form of technical support for OEMs, electrical contractors, panel builders, plant maintenance departments and utilities.

As a global player, Mersen has established production facilities on every continent to optimize the availability of products (France, Tunisia, United States, Canada, Mexico, India, Japan and P.R. of China). All these locations are united around a global quality, safety and environment policy.

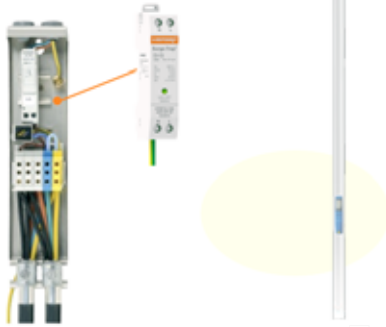
Mersen is committed to providing world-class quality. Its products are designed, tested and approved to highest international and national safety and quality standards. The solutions ensure the integrity of the equipment, the devices protected and the safety of people working around them. To protect customer's electrical equipment and installations over long term, Mersen provides the widest range of safe & reliable electrical and thermal protection solutions.

Mersen solutions are sold all over the world at over 4500 points of sale through professional distributors of electrical common equipment.

Mersen provides high quality products in compliance with UL and BS standards. All the circuit Protection solutions shown in this catalogue are, ASTA certified and comply with the RoHS European Directive.

## Mersen fuse links for Street Light Protection

The majority of existing street lighting networks are normally protected by a common Feeder Protection Device (FPD). FPD is based on a simple overcurrent unidirectional technique to protect against faults on the street lighting cables. The Mersen fuse technology ensure safety in street lighting applications by providing better coordination, immediate isolation and ensure fire safety through safe & sure fuse link.



### Range Mapping

CATALOGUE NUMBER	VOLTAGE AC	AMPS	BREAKING CAPACITY kA	STANDARDS
BLD 24 V ....	240 V	6,10,16,20,25	16.5	IEC 60269 Pt 1 & 2, BS 88 Pt 1 & 2
BLD 24 V ....	240 V	30	16.5	BSHD 60269-3 (BS1361)
BMD 42 V ....	415 V	2,4,6,8,10,20,25,32	80.0	IEC 60269 Pt 1 & 2 BS 88 Pt 1 & 2
BLST 24 V ....	240 V	2,4,6,10,16,20,25,32	33.0	IEC 60269 Pt 1 & 2 BS 88 Pt 1 & 2

BLD	24 V	10	BMD	42 V	10	BLST	24 V	10
FUSE FAMILY	VOLTAGE	AMP RATING	FUSE FAMILY	VOLTAGE	AMP RATING	FUSE FAMILY	VOLTAGE	AMP RATING
	240 V	10 A		415 V	10 A		240 V	10 A

### Comparison Chart for BLD/BMD/BLST Fuse Links

COMPETITORS	MERSEN	RATINGS
LD 6-25,240 V	C 3030-240 V	BLD24 V... 6,10,16,20,25
LD 30	C 3030-240 V	BLD24 V... 30
LST 2-32,240 V	STD 2-32,240 V	BLST24 V... 2,4,6,10,16,20,25,32
MD 2-32,415 V	SMD 2-32,415 V	BMD42 V... 2,4,6,8,10,16,20,25,32

# REFERENCE DATA: BLD

## Reference Data: BLD

### Cylindrical Type BLD Fuse Links

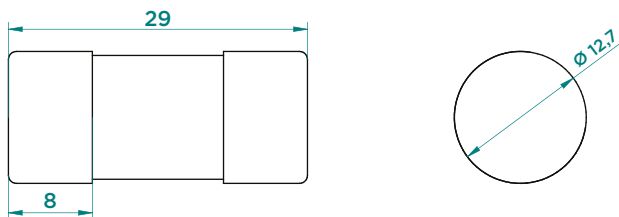
Rated Voltage: 240 V ac Breaking Capacity: 16.5 kA

Full Range Protection, gG



PART REFERENCE	PART DESCRIPTIONS	VOLTAGE (VOLTS)	RATINGS (AMPS)		STANDARD PACKING
			IEC 60269-Pt 1&2	BSTD 602693 (BS 1361)	
M1065693	BLD24 V6	240V	6	--	10
N1065694	BLD24 V10		10	--	10
P1065695	BLD24 V16		16	--	10
Q1065696	BLD24 V20		20	--	10
R1065697	BLD24 V25		25	--	10
T1065699	BLD24 V30		--	30	10

### Dimensions



### Cylindrical Type BLD Fuse Links

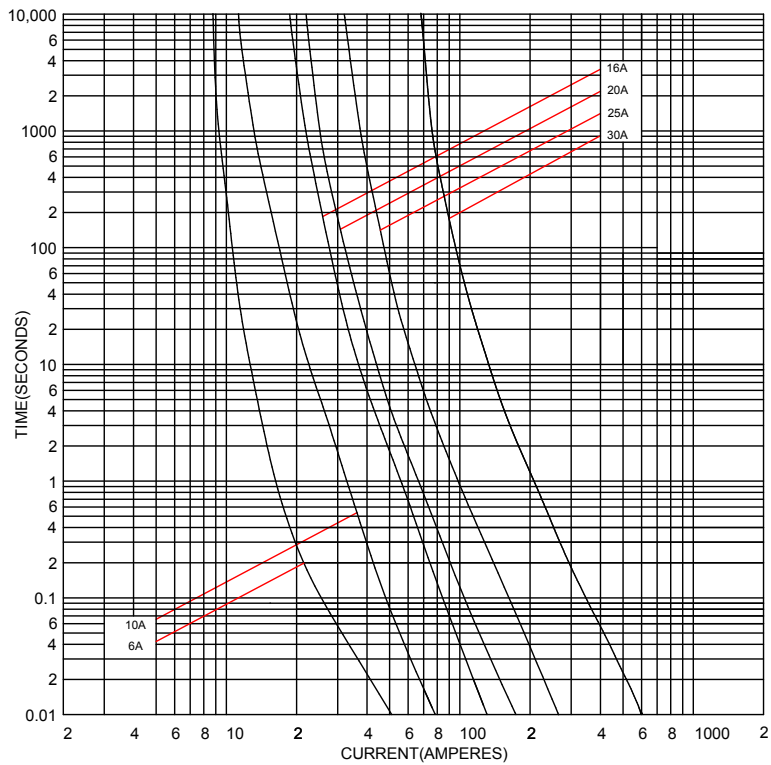
FUSE TYPE	CURRENT RATINGS AMPS	DIMENSIONS IN MM		
		A MAX	B MAX	C MAX
BLD	6,10,16,20,25,32	29.4	12.8	8.5

### Electrical Characteristics:

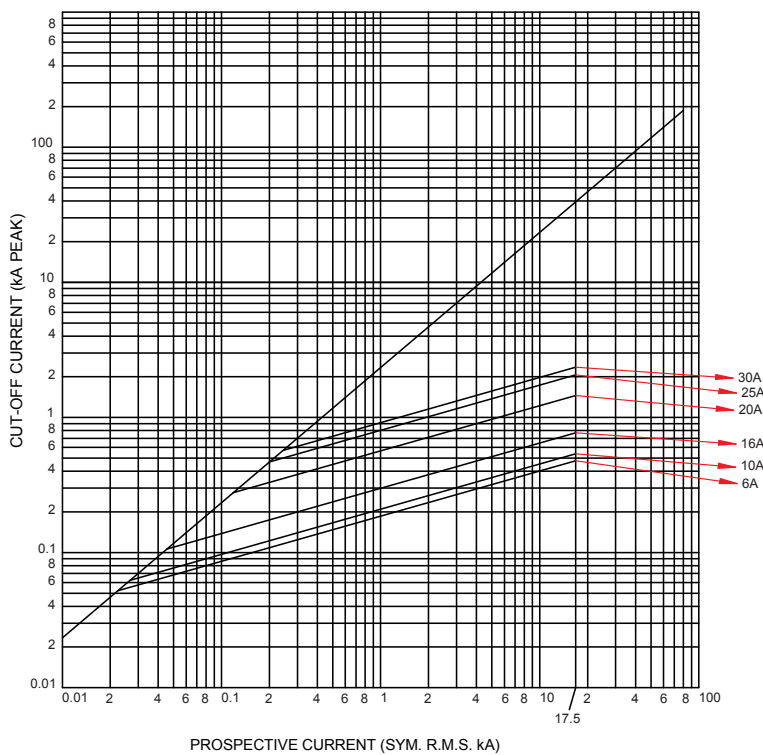
FUSE TYPE	VOLTAGE AC	CURRENT RATINGS AMPS	PRE - ARCING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	CLEARING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	WATT LOSS
BLD	240 V	6	13	20	1.98
		10	25	63	1.53
		16	204	510	1.54
		20	459	1148	1.54
		25	625	1563	2.14
		30	816	2041	2.85

# BLD TIME CURRENT / CUT-OFF CURVE

## BLD TIME CURRENT CURVES



## BLD CUT-OFF CURVE



# REFERENCE DATA: BMD

## Reference Data: BMD

### BS Cylindrical Type BMD Fuse Links

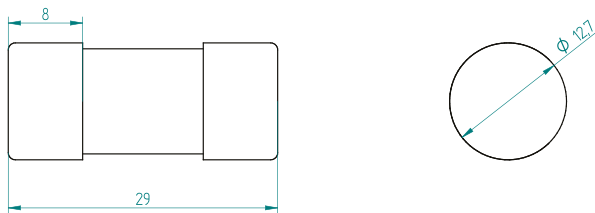
Rated Voltage: 415 V AC, Breaking Capacity: 80 kA

Full Range Protection, gG



PART REFERENCE	PART DESCRIPTIONS	VOLTAGE (VOLTS)	RATINGS (AMPS)	STANDARD PACKING
V1036973	BMD42 V2	415 V	2	10
W1036974	BMD42 V4		4	10
X1036975	BMD42 V6		6	10
P1065074	BMD42 V8		8	10
Y1036976	BMD42 V10		10	10
Z1036977	BMD42 V16		16	10
A1036978	BMD42 V20		20	10
B1036979	BMD42 V25		25	10
C1036980	BMD42 V32		32	10

### Dimensions



### Cylindrical Type BLD Fuse Links

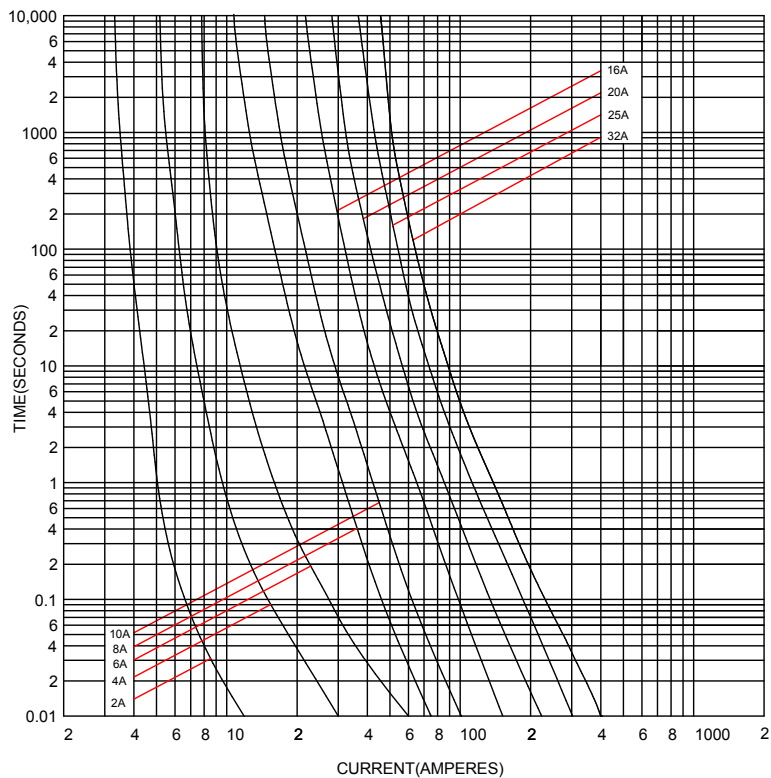
FUSE TYPE	CURRENT RATINGS AMPS	DIMENSIONS IN MM		
		A MAX	B MAX	C MAX
BMD	2,4,6,8,10,16,20,25,30,32	29.4	12.8	8.5

### Electrical Characteristics:

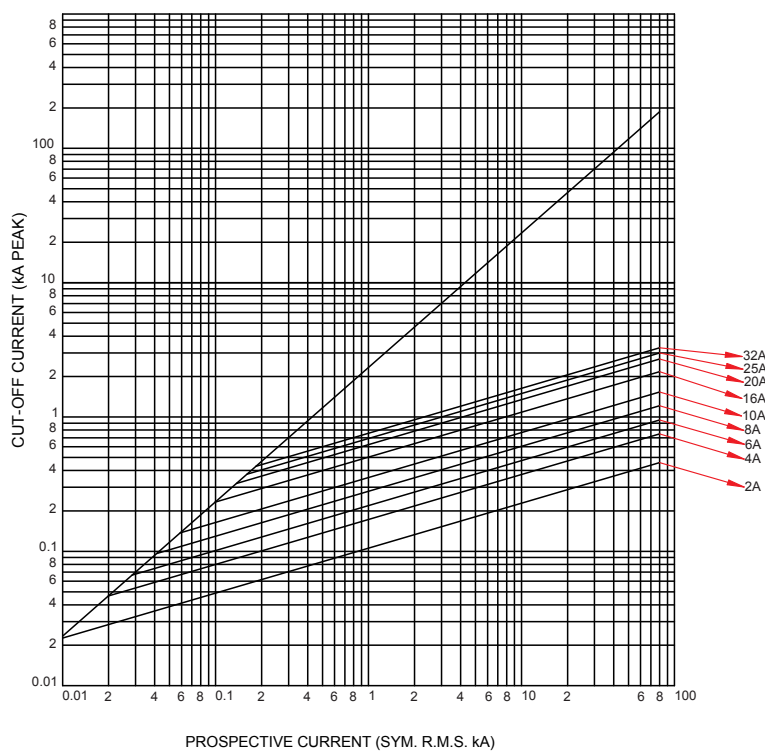
FUSE TYPE	VOLTAGE AC	CURRENT RATINGS AMPS	PRE - ARCING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	CLEARING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	WATT LOSS
BMD	415 V	2	1	3.5	1.17
		4	8	27	1.48
		6	22	77	1.54
		8	13	55	1.01
		10	27	113	1.42
		16	107	451	1.43
		20	241	1015	1.52
		25	428	1805	2.28
		32	668	2821	2.64

# BMD TIME CURRENT / CUT-OFF CURVE

## BMD TIME CURRENT CURVES



## BMD CUT- OFF CURVE



# REFERENCE DATA: BLST

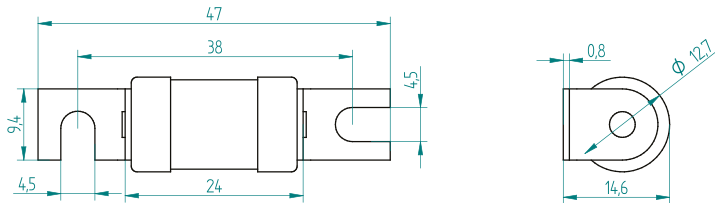
## Reference Data: BLST Offset Bolted Tag BLST Fuse Links

Rated Voltage: 240V AC Breaking Capacity: 33 kA  
Full Range Protection - gG



PART REFERENCE	PART DESCRIPTIONS	VOLTAGE (VOLTS)	RATINGS (AMPS)	STANDARD PACKING
D1065685	BLST24 V2	240 V	2	10
E1065686	BLST24 V4		4	10
F1065687	BLST24 V6		6	10
G1065688	BLST24 V10		10	10
H1065689	BLST24 V16		16	10
J1065690	BLST24 V20		20	10
K1065691	BLST24 V25		25	10
L1065692	BLST24 V32		32	10

### Dimensions



### Off Set Bolted Tag Type BLST Fuse Links

FUSE TYPE	CURRENT RATINGS AMPS	DIMENSIONS IN MM						
		A MAX	B MAX	D MAX	E MAX	F MAX	G MAX	K MAX
BLST	2,4,6,10,16,20,25,32	24.4	12.8	47.4	9.65	0.83	38.4	15

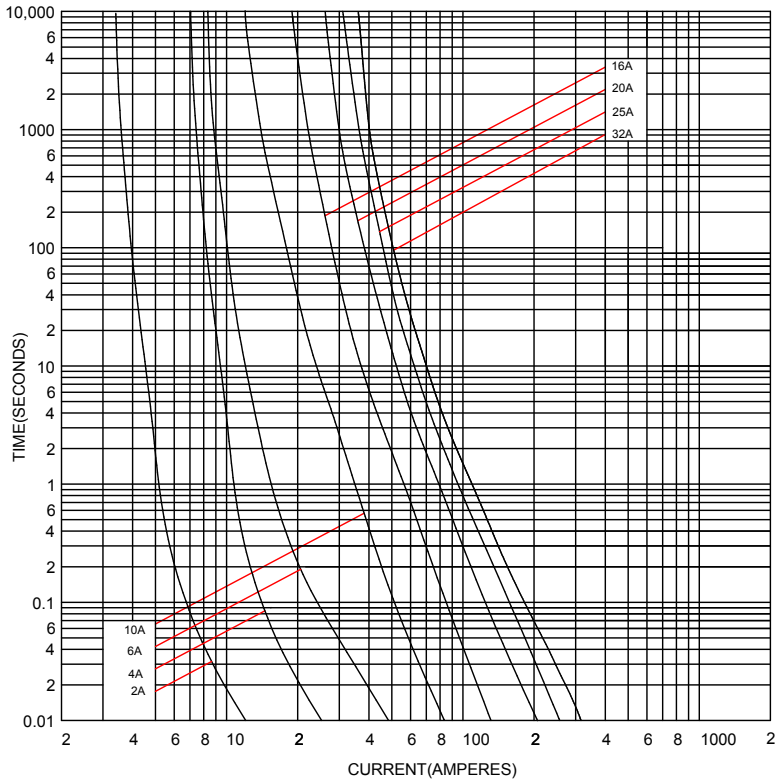
### Electrical Characteristics:

FUSE TYPE	VOLTAGE AC	CURRENT RATINGS AMPS	PRE - ARCING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	CLEARING I <sup>2</sup> t (AMPERE <sup>2</sup> SECONDS)	WATT LOSS
BLST	240 V	2	0.6	1	1.02
		4	5	7	1.29
		6	10	16	1.33
		10	29	67	1.40
		16	152	348	1.79
		20	533	1225	1.04
		25	725	1668	1.80
		32	947	2178	2.64

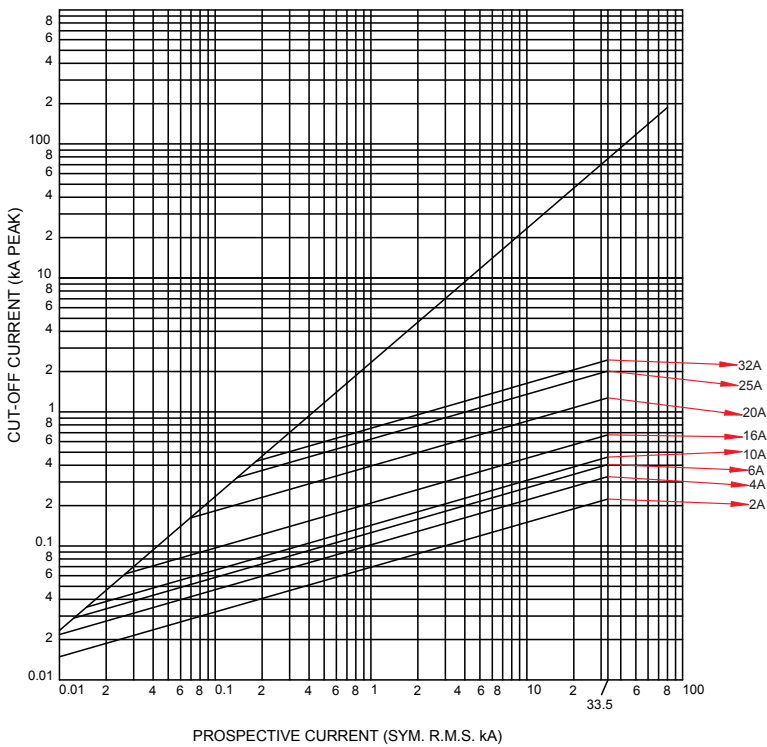


# BLST TIME CURRENT / CUT-OFF CURVE

## BLST TIME CURRENT CURVES



## BLST CUT- OFF CURVE



**Intertek** Certificate No. 22420

## ASTA Certificate of Short-Circuit Tests

**Laboratory Ref. No.:** CPRIPLSTNB19T0287

**APPARATUS:** A 6A Cylindrical Fuse-links, for use in Alternating Current Electricity Supply Circuits  
 Rated Voltage: 240V AC; Rated Current: 6A; Rated Frequency: 50Hz  
 Rated Breaking capacity: 16.5kA

**DESIGNATION:** BLD

**MANUFACTURER:** Mersen India Pvt. Ltd., Plot No. 19, 4<sup>th</sup> Cross, Bommasandra Industrial Area, Bengaluru- 560 099

**TESTED BY:** Central Power Research Institute Switchgear Testing & Development Station, Govindpura Bhopal, Madhya Pradesh- 462023, India

**DATE(S) OF TESTS:** 7<sup>th</sup>, 8<sup>th</sup>, 11<sup>th</sup> and 18<sup>th</sup> February 2019

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with

**BS HD 60269-3: 2010 + A1:2013 and IEC 60269-1 Edition 4.2 2014-06**  
**Clause 8.5**

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated above. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

**Breaking Range and Utilization Category:** gG  
**Rated Breaking capacity:** 16.5kA at 240VAC

This Certificate comprises this front sheet, 33 pages and 1 drawing as detailed on page 2

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 **Anupam Awasthi**  
ASTA Observer

 **Certification Manager**

20<sup>th</sup> September 2019 Date

**Intertek** Certificate No. 22423

## ASTA Certificate of Short-Circuit Tests

**Laboratory Ref. No.:** CPRIPLSTNB19T0524

**APPARATUS:** 8A and 32A Cylindrical Fuse-links, for use in Alternating Current Electricity Supply Circuits, which represent the minimum and maximum ratings of a homogenous series.  
 Rated Voltage: 415V AC; Rated Current: 8A, 10A, 16A, 20A, 25A and 32A;  
 Rated Frequency: 50Hz  
 Rated Breaking Capacity: 80kA

**DESIGNATION:** BMD

**MANUFACTURER:** Mersen India Pvt. Ltd., Plot No. 19, 4<sup>th</sup> Cross, Bommasandra Industrial Area, Bengaluru- 560 099

**TESTED BY:** Central Power Research Institute Switchgear Testing & Development Station, Govindpura Bhopal, Madhya Pradesh- 462023, India

**DATE(S) OF TESTS:** 12<sup>th</sup> and 13<sup>th</sup> March 2019

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with


**BS HD 60269-3: 2010 + A1:2013 and IEC 60269-1 Edition 4.2 2014-06**  
**Clause 8.5**


The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated above. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

**Breaking Range and Utilization Category:** gG  
**Rated Breaking Capacity:** 80kA at 415VAC

This Certificate comprises this front sheet, 38 pages and 1 drawing as detailed on page 2

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 **Anupam Awasthi**  
ASTA Observer

 **Certification Manager**

21<sup>st</sup> September 2019 Date

**Intertek** Certificate No. 22422

## ASTA Certificate of Short-Circuit Tests

**Laboratory Ref. No.:** CPRIPLSTNB19T0523

**APPARATUS:** 2A and 6A Cylindrical Fuse-links, for use in alternating current electricity supply circuits, which represent the minimum and maximum ratings of a homogenous series.  
 Rated Voltage: 415V AC; Rated Current: 2A, 4A and 6A;  
 Rated Frequency: 50Hz; Rated Breaking Capacity: 80kA

**DESIGNATION:** BMD

**MANUFACTURER:** Mersen India Pvt. Ltd., Plot No. 19, 4<sup>th</sup> Cross, Bommasandra Industrial Area, Bengaluru- 560 099

**TESTED BY:** Central Power Research Institute Switchgear Testing & Development Station, Govindpura Bhopal, Madhya Pradesh- 462023, India

**DATE(S) OF TESTS:** 12<sup>th</sup> and 13<sup>th</sup> March 2019

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with


**BS HD 60269-3: 2010 + A1:2013 and IEC 60269-1 Edition 4.2 2014-06**  
**Clause 8.5**


The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated above. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

**Breaking Range and Utilization Category:** gG  
**Rated Breaking capacity:** 80kA at 415VAC

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 **Anupam Awasthi**  
ASTA Observer

 **Certification Manager**

23<sup>rd</sup> September 2019 Date

**Intertek** Certificate No. 22421

## ASTA Certificate of Short-Circuit Tests

**Laboratory Ref. No.:** CPRIPLSTNB19T0288

**APPARATUS:** 10A and 25A Cylindrical Fuse-links, for use in Alternating Current Electricity Supply Circuits, which represent the minimum and maximum ratings of a homogenous series.  
 Rated Voltage: 240V AC; Rated Current: 10, 16, 20 and 25A  
 Rated Frequency: 50Hz; Rated Breaking capacity: 16.5kA

**DESIGNATION:** BLD

**MANUFACTURER:** Mersen India Pvt. Ltd., Plot No. 19, 4<sup>th</sup> Cross, Bommasandra Industrial Area, Bengaluru- 560 099

**TESTED BY:** Central Power Research Institute Switchgear Testing & Development Station, Govindpura Bhopal, Madhya Pradesh- 462023, India

**DATE(S) OF TESTS:** 7<sup>th</sup>, 8<sup>th</sup>, 11<sup>th</sup> and 18<sup>th</sup> February 2019

The apparatus, constructed in accordance with the description, drawings and photographs incorporated in this certificate has been subjected to the series of proving tests in accordance with

**BS HD 60269-3: 2010 + A1:2013 and IEC 60269-1 Edition 4.2 2014-06**  
**Clause 8.5**

The results are shown in the record of Proving Tests attached hereto. The values obtained and the general performance is considered to comply with the above Standard(s) and to justify the ratings assigned by the manufacturer as stated above. This Certificate applies only to the apparatus tested. Responsibility for conformity of any apparatus having the same or other designations rests with the Manufacturer.

**Breaking Range and Utilization Category:** gG  
**Rated Breaking capacity:** 16.5kA at 240VAC

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 **Anupam Awasthi**  
ASTA Observer

 **Certification Manager**

20<sup>th</sup> September 2019 Date





GLOBAL EXPERT  
IN ELECTRICAL POWER  
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