

MEDIUM VOLTAGE DIN Fuse-Links

17.5kV, Current Limiting Back-Up Fuse-Links, 6.3 to 125 Amps

MV DIN



Catalogue Symbol:

- 17.5TDLSJ(amp)
- 17.5TFLSJ(amp)
- 17.5TDMEJ(amp)
- 17.5THMEJ(amp)
- 17.5TFMEJ(amp)
- 17.5TKMEJ(amp)

Class of Operation: Back-up as IEC 60282-1 (2005)

Dimensional Data:

Fuse Reference	A	C	D	Weight (Kg)
TDLSJ	292	54	51	1.7
TFLSJ	292	80	76	3.1
TDMEJ	442	54	51	2.5
THMEJ	442	67	64	3.7
TKMEJ	442	80	76	5.1

Standards/Approvals:

DIN 43625, VDE 0670 part 4, VDE 0670 part 402 and IEC 60282-1 (2005)

Description:

A range of medium voltage DIN Fuses, complete with sealed striker, suitable for transformer protection. The fuses can be used even where there is no secondary LV protection, provided they are used with fuse switches fitted with instantaneous striker tripping.

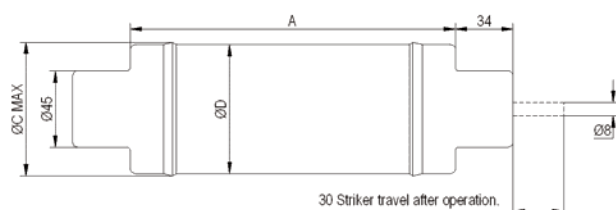
Packaging:

All fuse-links are packed in 3's.
MOQ: 3
Packaging 100% recyclable

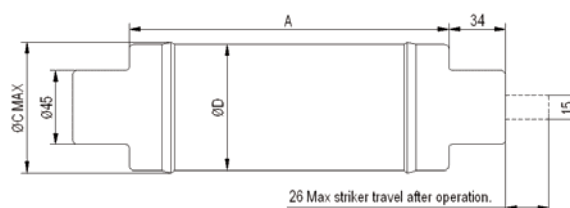
Technical Data:

DIN fuse-links
Rated voltage: 17.5kV
Amps: 6.3A to 125A
Rated breaking capacity: 35.5 kA to 50kA
Rated frequency: 50 - 60Hz
Suitable for indoor and outdoor use

EJ Outline



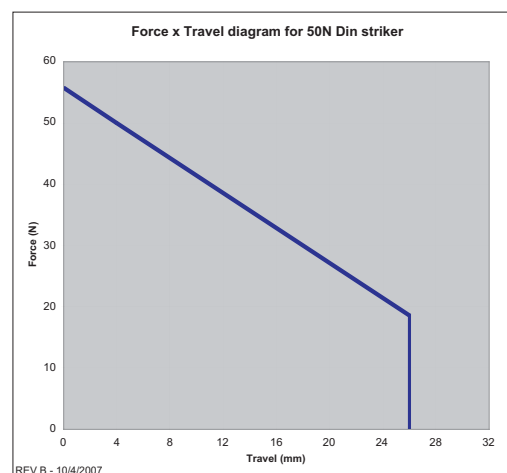
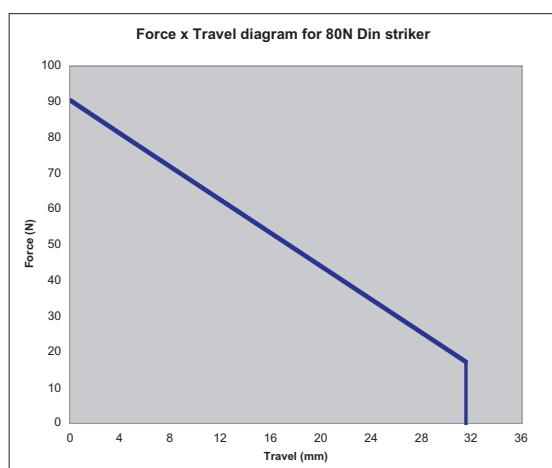
SJ Outline



Striker Diagrams:

E = Spring Striker 80N to IEC 60282-1 designation "medium"

S = Spring Striker 50N to DIN 43625 and IEC 60282-1 designation "medium"



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Table of Ratings:

Standard Approvals: DIN 43625, VDE 0670 part 4, VDE 0670 part 402 and IEC 60282-1 (2005)

Technical Data: 6.3, 10, 16, 20, 25, 31.5, 40, 50, 63, 80, 100, 125 Amps

Part Number	Current Rating I_n (A)	Breaking Capacity I_1 (kA)	Minimum Breaking Capacity I_3 (A)	Cold Resistance & Watts Loss in Free Air		Joule Integral (I^2t)		Length mm	Diameter mm	Weight kg
				mΩ	W	Minimum Pre-Arcing	Maximum Operating			
17.5TDLSJ6.3*	6.3	35.5	23	313	15	4.8×10^1	6.1×10^2	292	51	1.7
17.5TDLSJ10*	10	35.5	19	185	23	2.8×10^2	4.0×10^3	292	51	1.7
17.5TDLSJ16*	16	35.5	59	104	34	2.9×10^2	2.0×10^3	292	51	1.7
17.5TDLSJ20*	20	35.5	80	69.2	38	5.7×10^2	4.4×10^3	292	51	1.7
17.5TDLSJ25*	25	35.5	100	55.4	48	8.9×10^2	6.6×10^3	292	51	1.7
17.5TDLSJ31.5*	31.5	35.5	118	41.4	58	5.1×10^2	1.1×10^4	292	51	1.7
17.5TDLSJ40*	40	35.5	148	31.1	76	8.0×10^2	1.8×10^4	292	51	1.7
17.5TFLSJ50*	50	35.5	225	17.3	62	8.1×10^3	6.0×10^4	292	76	3.1
17.5TDMEJ6.3	6.3	50	25	324	14	9.8×10^1	1.0×10^3	442	51	2.5
17.5TDMEJ10	10	50	36	192	24	2.8×10^2	2.3×10^3	442	51	2.5
17.5TDMEJ16	16	50	55	79.6	23	2.6×10^2	3.9×10^3	442	51	2.5
17.5TDMEJ20	20	50	69	57.0	27	5.2×10^2	5.4×10^3	442	51	2.5
17.5TDMEJ25	25	50	87	45.5	34	8.1×10^2	8.4×10^3	442	51	2.5
17.5TDMEJ31.5	31.5	50	87	34.1	41	1.4×10^3	1.5×10^4	442	51	2.5
17.5TDMEJ40	40	50	111	25.0	53	2.4×10^3	2.5×10^4	442	51	2.5
17.5TDMEJ50	50	50	174	19.7	69	2.8×10^3	3.1×10^4	442	51	2.5
17.5TDMEJ63	63	50	200	15.4	89	4.3×10^3	4.7×10^4	442	51	2.5
17.5THMEJ80	80	50	270	11.5	108	7.9×10^3	9.1×10^4	442	64	3.7
17.5THMEJ100	100	50	376	8.38	127	2.0×10^4	1.4×10^5	442	64	3.7
17.5TKMEJ125	125	50	467	5.95	146	3.4×10^4	3.5×10^5	442	76	5.1

* Not compliant with VDE 0670 part 402

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Cross-Reference

Bussmann	EFEN	SIBA	MESA	ETI (80N Striker)	ETI (50N Striker)	Merlin Gerin	eimren	INAE	ABB
17.5TDL SJ6.3	N/A	3025513	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531003M0001
17.5TDL SJ10	N/A	3025513	CFR-17,5/10	N/A	N/A	51006 522 M0	N/A	IB-D1	1YMB531003M0002
17.5TDL SJ16	N/A	3025513	CFR-17,5/16	N/A	N/A	51006 523 M0	N/A	IB-D1	1YMB531003M0003
17.5TDL SJ20	N/A	3022113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531003M0013
17.5TDL SJ25	N/A	3022113	CFR-17,5/25	N/A	N/A	51006 524 M0	N/A	IB-D1 & IB-D2	1YMB531003M0004
17.5TDL SJ31.5	N/A	3022113	CFR-17,5/31.5	N/A	N/A	51006 525 M0	N/A	IB-D1 & IB-D2	1YMB531003M0014
17.5TDL SJ40	N/A	3022113	CFR-17,5/40	N/A	N/A	51006 526 M0	N/A	IB-D1 & IB-D2	1YMB531003M0021
17.5TFL SJ50	N/A	3022113	N/A	N/A	N/A	N/A	N/A	IB-D2	1YMB531003M0022
17.5TDMEJ6.3	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0001
17.5TDMEJ10	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0002
17.5TDMEJ16	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0003
17.5TDMEJ20	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0013
17.5TDMEJ25	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0004
17.5TDMEJ31.5	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0014
17.5TDMEJ40	N/A	3023113	N/A	N/A	N/A	N/A	N/A	IB-D1	1YMB531037M0021
17.5TDMEJ50	N/A	3023213	N/A	N/A	N/A	N/A	N/A	N/A	1YMB531037M0006
17.5TDMEJ63	N/A	3023213	N/A	N/A	N/A	N/A	N/A	IB-D2	1YMB531037M0007
17.5THMEJ80	N/A	3023213	N/A	N/A	N/A	N/A	N/A	N/A	1YMB531037M0008
17.5THMEJ100	N/A	3023313	N/A	N/A	N/A	N/A	N/A	IB-D2	1YMB531003M0009
17.5TKMEJ125	N/A	3023314	N/A	N/A	N/A	N/A	N/A	N/A	1YMB531003M0010

Watts Loss Comparison

Lowest Watts Loss

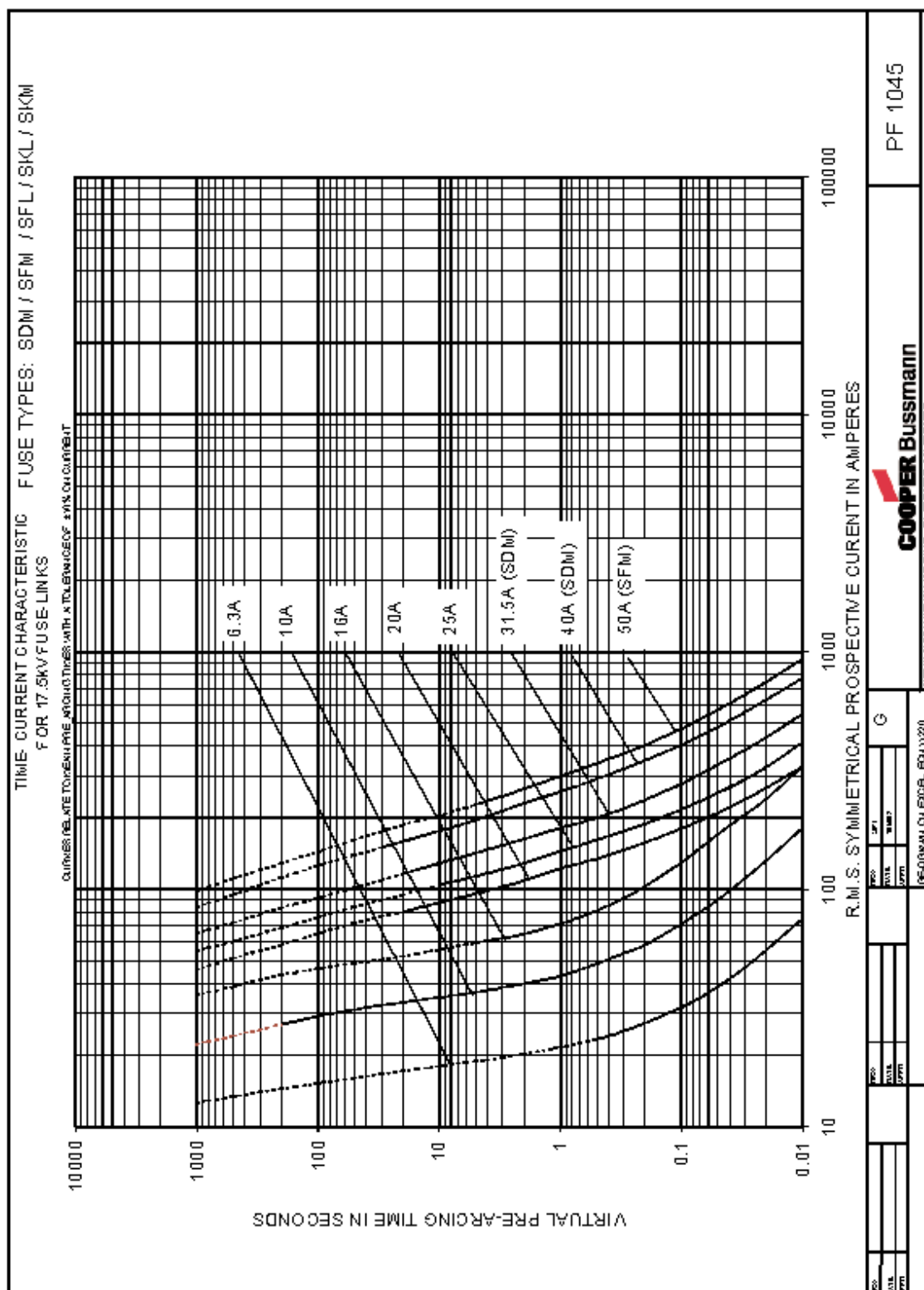
Bussmann	Bussmann	EFEN	SIBA	MESA	ETI	Merlin Gerin	eimren	INAE	ABB
Part Number	Watts Loss	Watts Loss	Watts Loss	Watts Loss	Watts Loss	Watts Loss	Watts Loss	Watts Loss	Watts Loss
17.5TDL SJ6.3	15	-	25	-	-	-	-	-	54
17.5TDL SJ10	23	-	48	23	-	23	-	-	41
17.5TDL SJ16	34	-	37	47	-	47	-	-	67
17.5TDL SJ20	38	-	40	-	-	-	-	-	52.6
17.5TDL SJ25	48	-	56	72	-	72	-	-	64
17.5TDL SJ31.5	58	-	65	78	-	78	-	-	56.7
17.5TDL SJ40	76	-	84	90	-	90	-	-	80
17.5TFL SJ50	62	-	101	-	-	-	-	-	90
17.5TDMEJ6.3	14	-	31	-	-	-	-	-	54
17.5TDMEJ10	24	-	48	-	-	-	-	-	41
17.5TDMEJ16	23	-	37	-	-	-	-	-	67
17.5TDMEJ20	27	-	42	-	-	-	-	-	52.6
17.5TDMEJ25	34	-	56	-	-	-	-	-	64
17.5TDMEJ31.5	41	-	69	-	-	-	-	-	56.7
17.5TDMEJ40	53	-	84	-	-	-	-	-	80
17.5TDMEJ50	69	-	101	-	-	-	-	-	90
17.5TDMEJ63	89	-	106	-	-	-	-	-	100
17.5THMEJ80	106	-	137	-	-	-	-	-	124
17.5THMEJ100	128	-	182	-	-	-	-	-	136
17.5TKMEJ125	146	-	229	-	-	-	-	-	175

MEDIUM VOLTAGE DIN Fuse-Links

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MV DIN

Time Current Curves

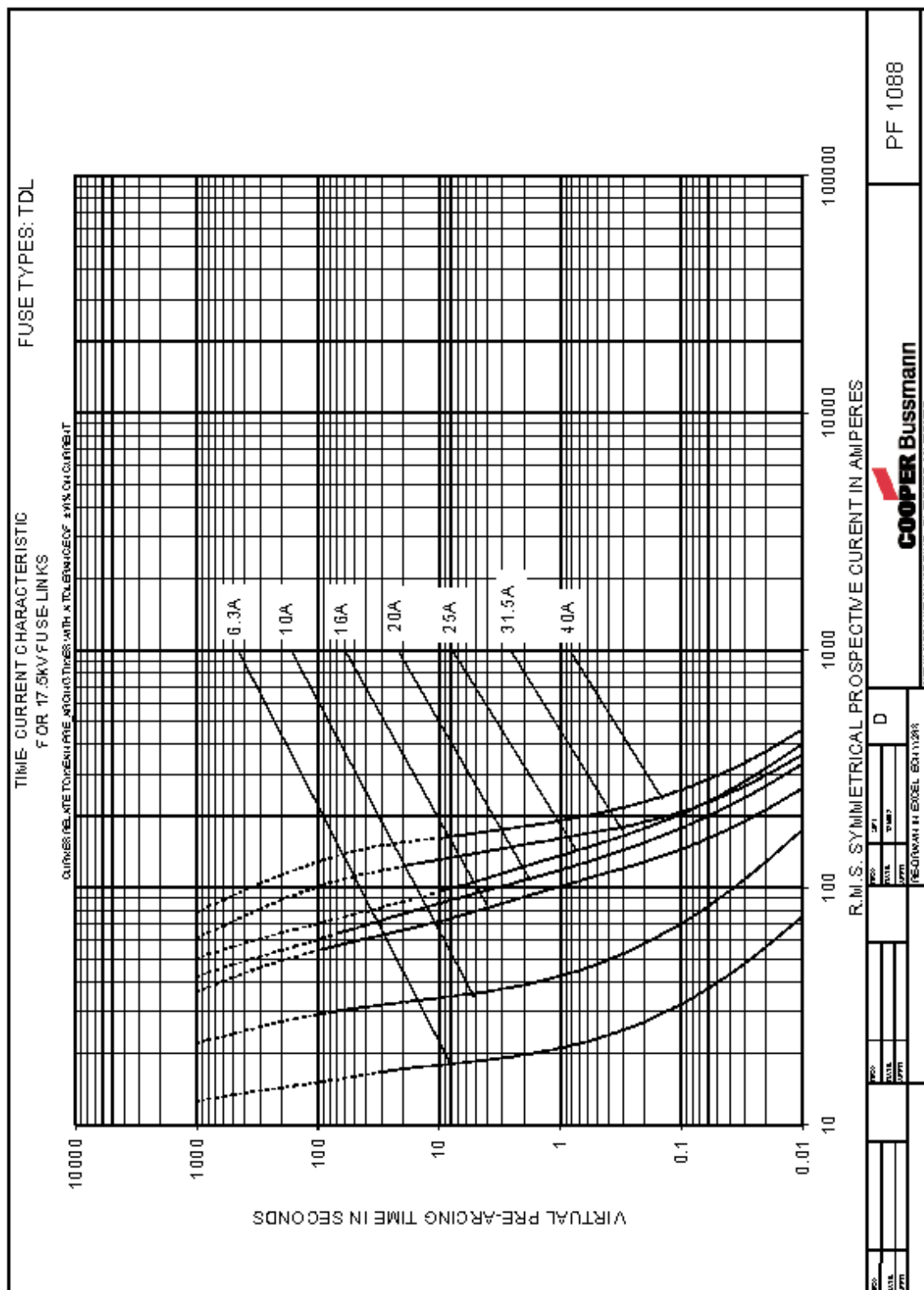


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17.5kV, Current Limiting Back-Up Fuse-Links, 6.3 to 125 Amps

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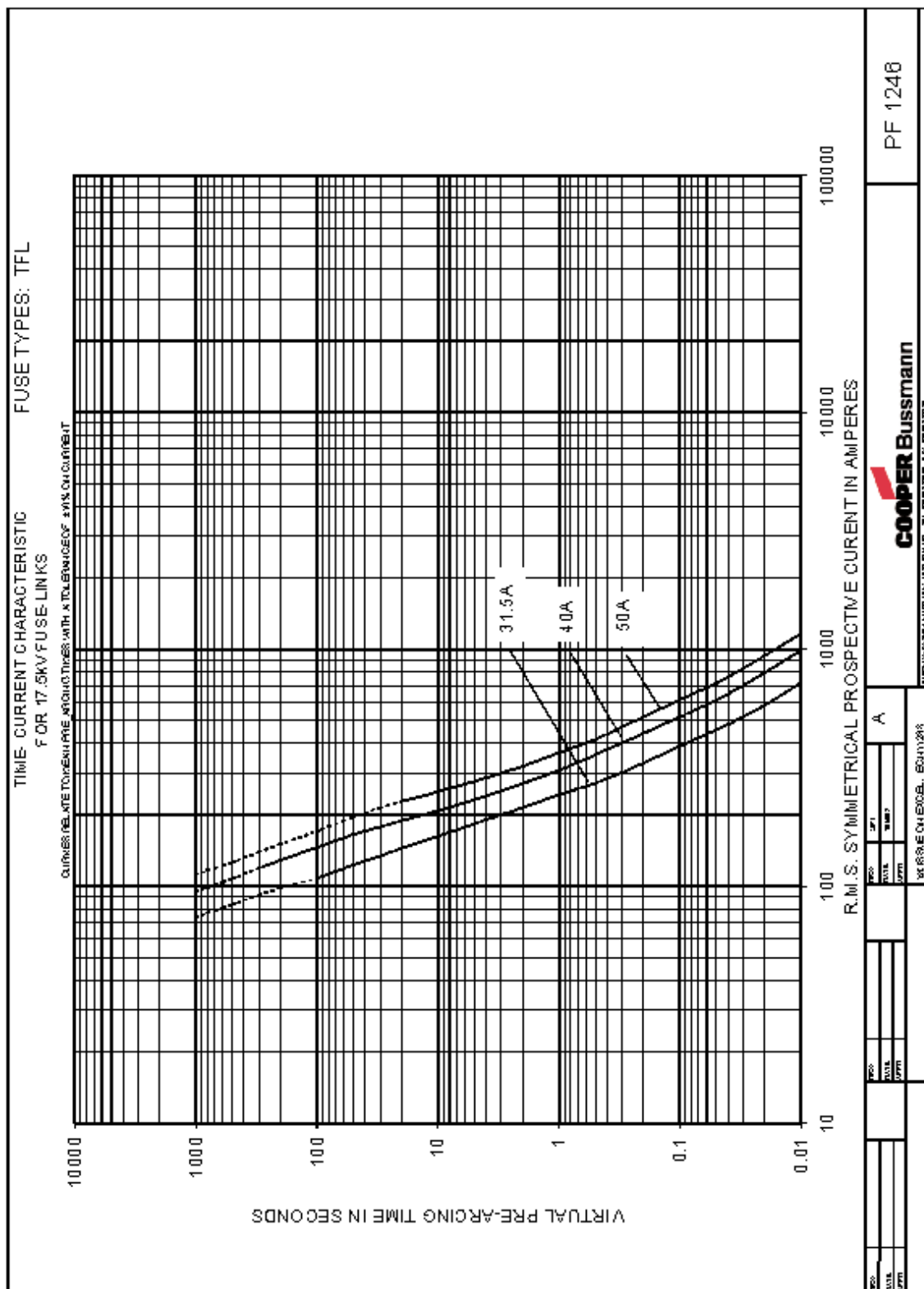


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Time Current Curves

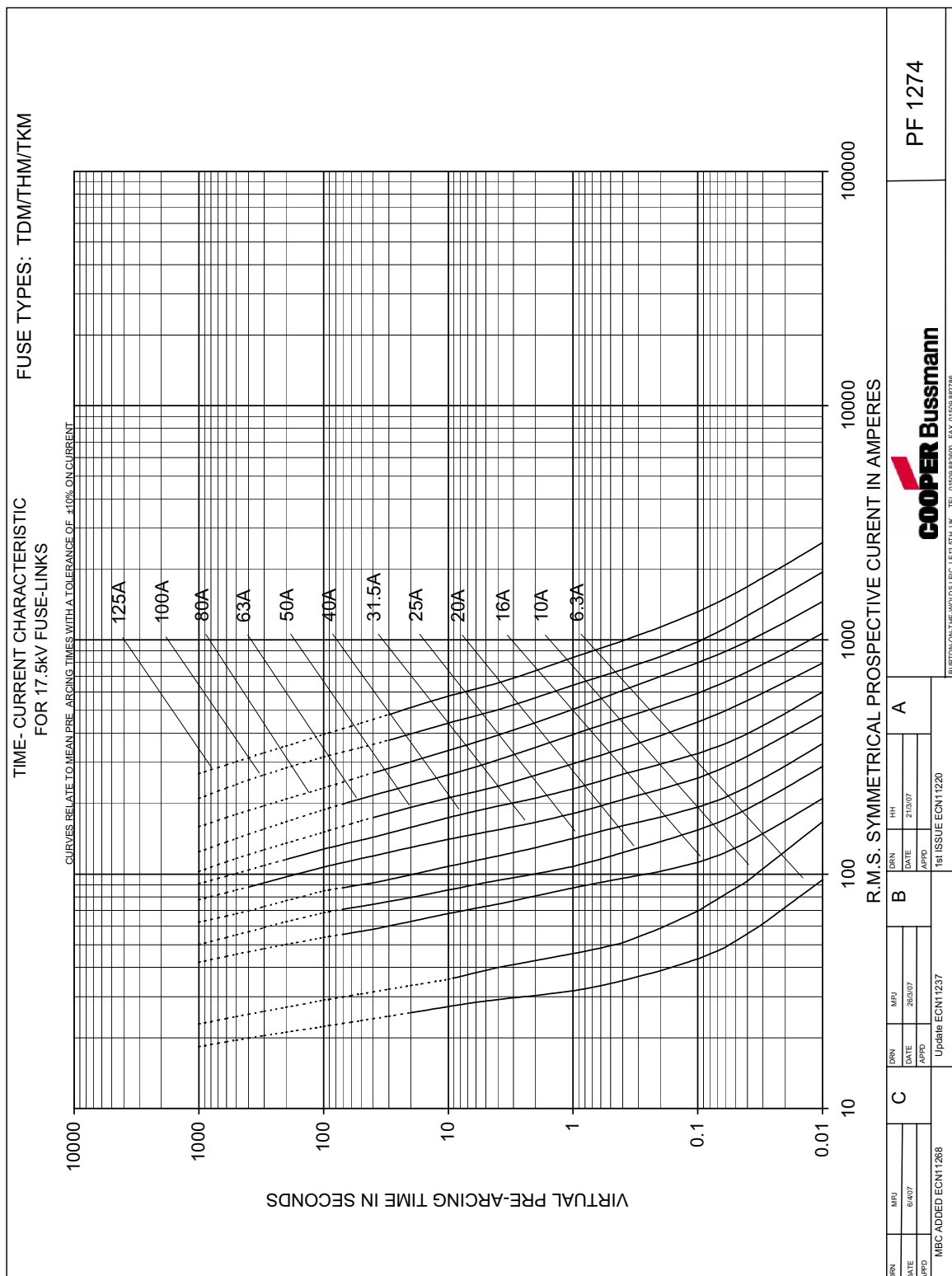


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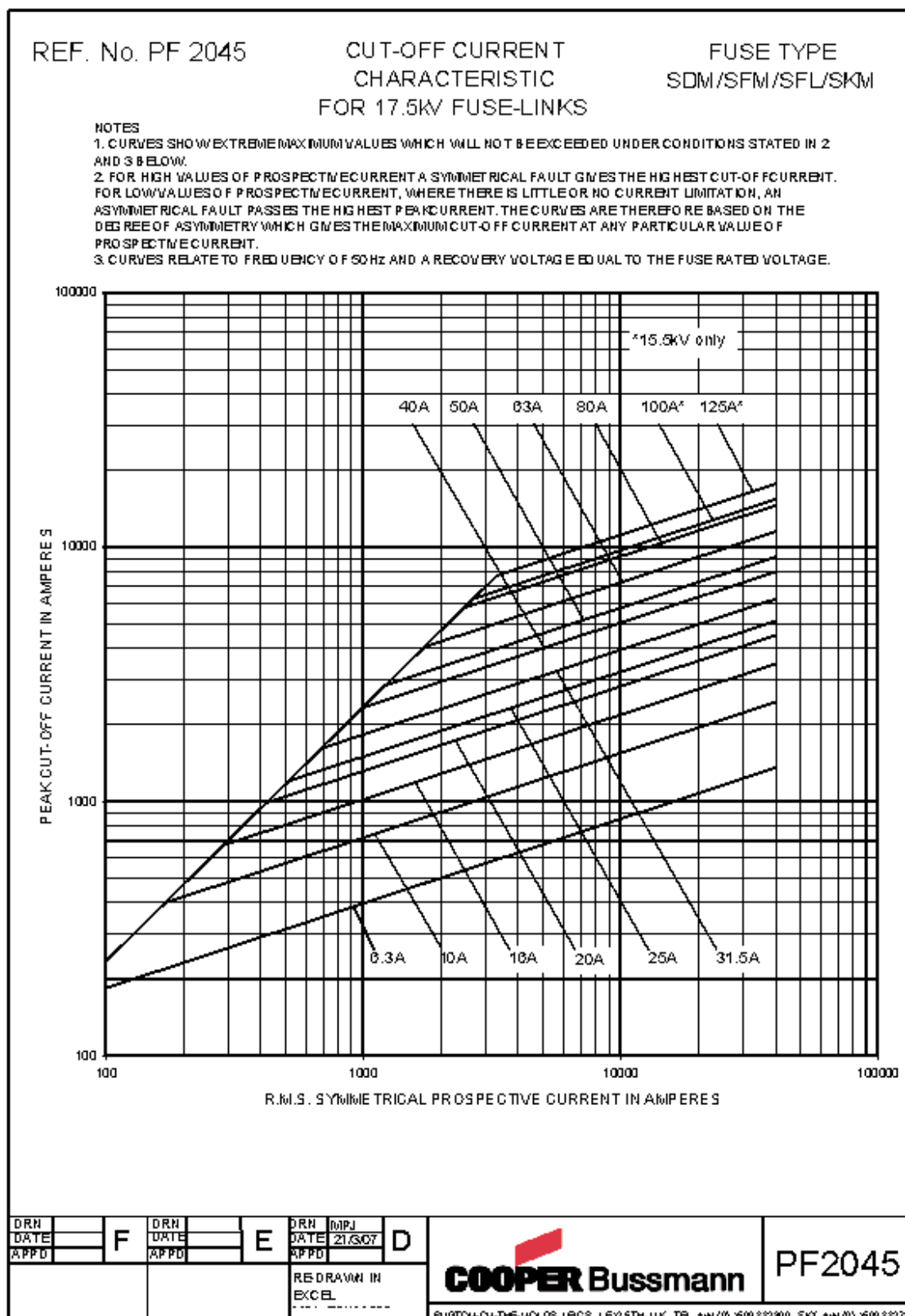


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MV DIN

Cut-Off Characteristics

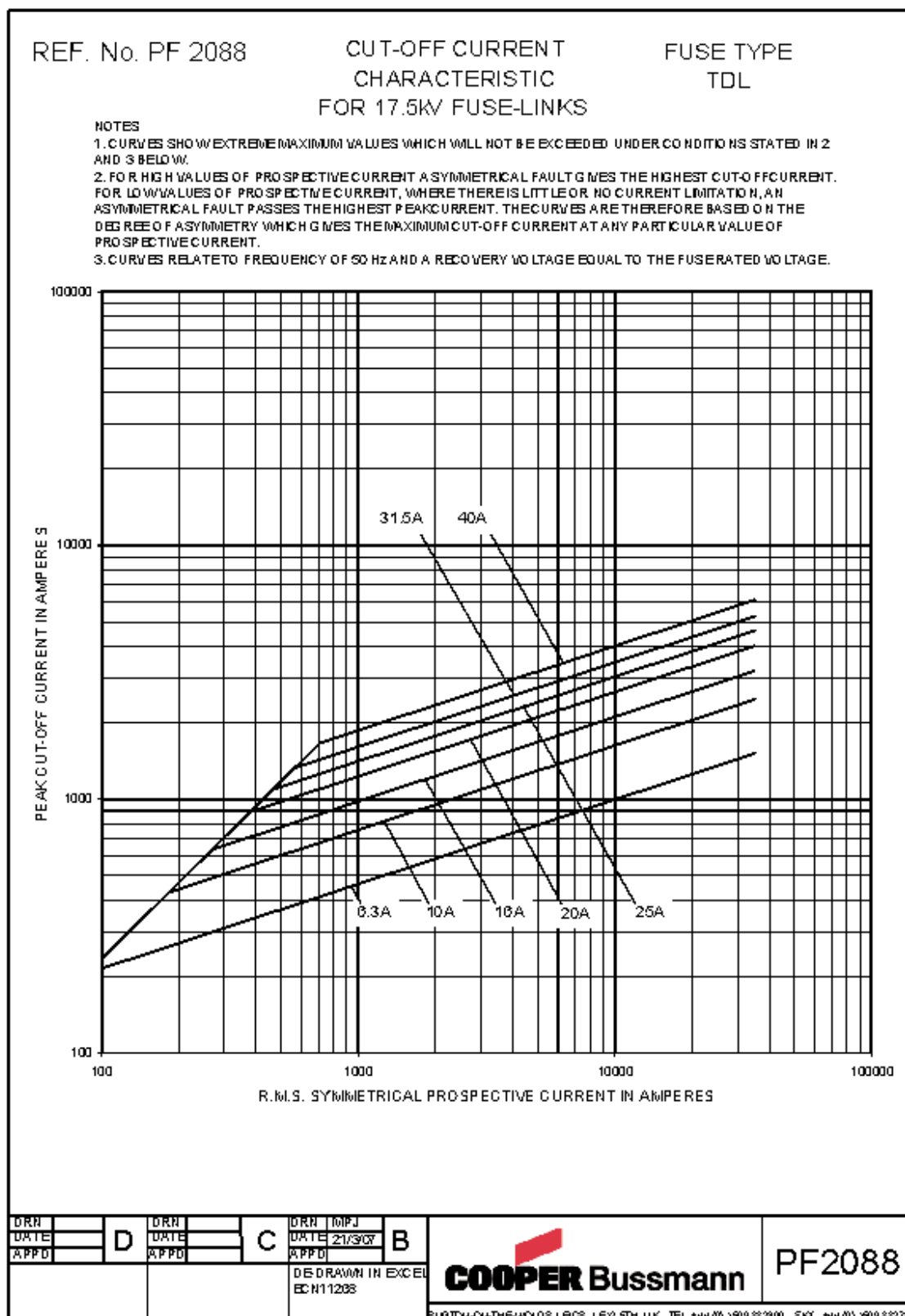


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Cut-Off Characteristics

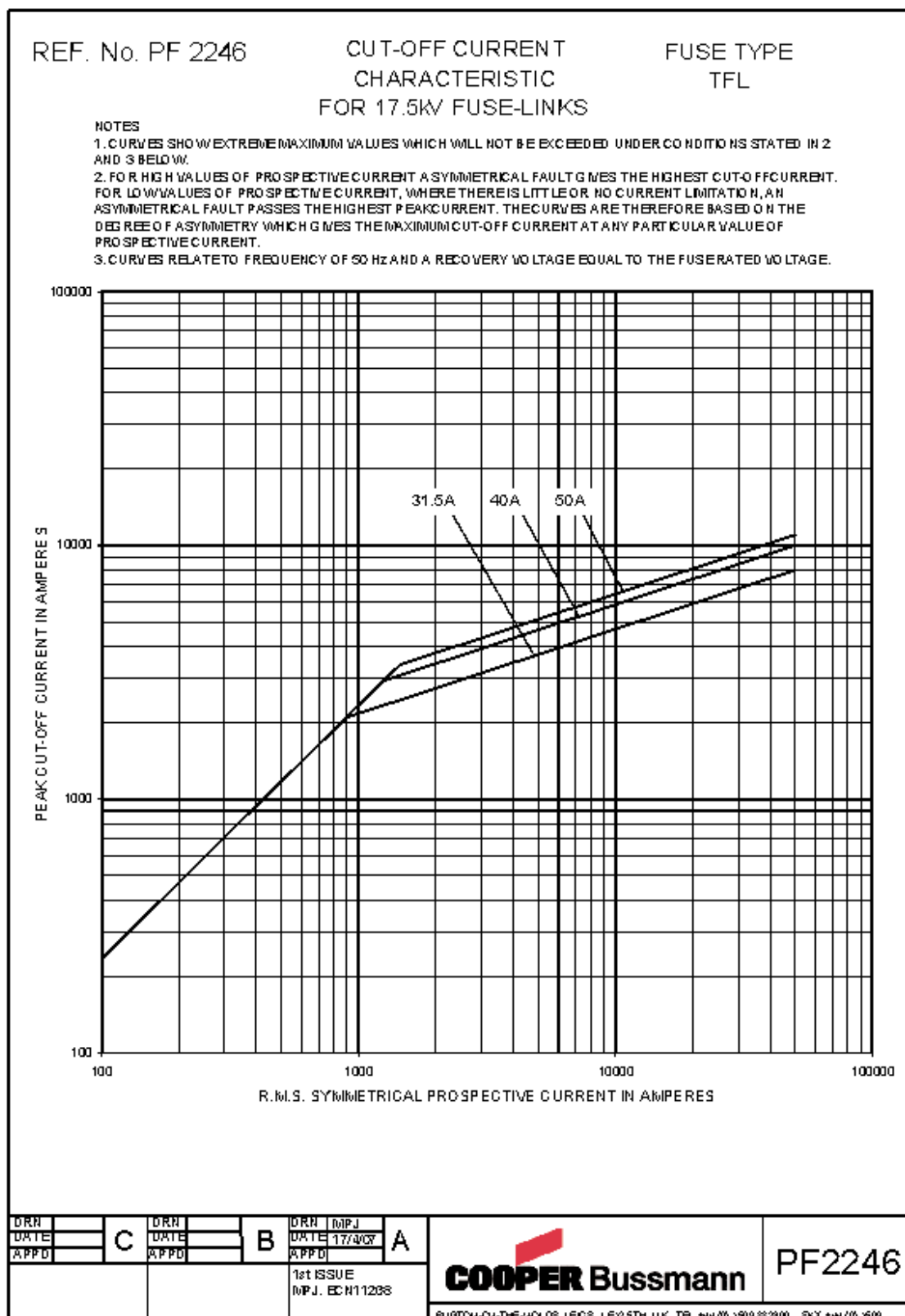


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Cut-Off Characteristics



MEDIUM VOLTAGE DIN Fuse-Links

17.5kV, Current Limiting Back-Up Fuse-Links, 6.3 to 125 Amps

MV DIN

ASTA Certificate

ASTA

CERTIFICATE OF SELECTED TYPE TESTS

Laboratory Ref. No: DHK007-02

Certificate No. 16596

APPARATUS: Eight Homogeneous Series of Air Insulated High Voltage Current Limiting Back-up Fuses Fitted with Spring Operated Medium Striker Devices.

Ratings :-	Series 1, Type 17.5TOMEJ6.3	Rated Voltage 17.5kV	Rated Current 6.3A	Rated Frequency 50Hz
	Series 2, Type 17.5TOMEJ10	Rated Voltage 17.5kV	Rated Current 10A	Rated Frequency 50Hz
	Series 3, Type 17.5TOMEJ16	Rated Voltage 17.5kV	Rated Current 16A	Rated Frequency 50Hz
	Type 17.5TOMEJ20	Rated Voltage 17.5kV	Rated Current 20A	Rated Frequency 50Hz
	Type 17.5TOMEJ25	Rated Voltage 17.5kV	Rated Current 25A	Rated Frequency 50Hz
	Type 17.5TOMEJ31.5	Rated Voltage 17.5kV	Rated Current 31.5A	Rated Frequency 50Hz
	Type 17.5TOMEJ40	Rated Voltage 17.5kV	Rated Current 40A	Rated Frequency 50Hz
	Series 4, Type 17.5TOMEJ50	Rated Voltage 17.5kV	Rated Current 50A	Rated Frequency 50Hz
	Series 5, Type 17.5TOMEJ63	Rated Voltage 17.5kV	Rated Current 63A	Rated Frequency 50Hz
	Series 6, Type 17.5THMEJ80	Rated Voltage 17.5kV	Rated Current 80A	Rated Frequency 50Hz
	Series 7, Type 17.5THMEJ100	Rated Voltage 17.5kV	Rated Current 100A	Rated Frequency 50Hz
	Series 8, Type 17.5TKMEJ125	Rated Voltage 17.5kV	Rated Current 125A	Rated Frequency 50Hz

DESIGNATION: Types "17.5TOMEJ6.3 to 63, 17.5THMEJ80 to 100, 17.5TKMEJ125"

MANUFACTURER: Cooper Bussmann India Private Limited, Evr Street, Sedarapet, Pondicherry - 605111, India.

TESTED BY: Dean H. Klohr Low Power Test Facility, Burton-on-the-Wolds, Loughborough, Leicestershire, LE12 5TH, United Kingdom.

DATE OF TESTS: 12th October 2006 to 15th February 2007

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

IEC 60282-1:2005	Sub-clause 6.5	- Temperature-rise tests and power-dissipation measurement
	Sub-clause 6.7	- Tests for time-current characteristics
	Sub-clause 6.8	- Tests of strikers
	Sub-clause 7.3	- Thermal shock tests
	Sub-clause 7.5	- Waterproof test - (ingress of moisture)
	Sub-clause 7.6.2	- Pre-arcing temperature rise tests

The results are shown in the Record of Proving Tests and the oscillograms attached hereto. The values obtained and the general performance are considered to comply with the above Standard(s) and to justify the ratings and characteristics assigned by the manufacturer as listed on page number 1.

The record of Proving Tests applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designation with that tested rests with the Manufacturer.

This Certificate comprises 55 pages, 1 diagram, 3 oscillograms, 7 photographs, 16 drawings and no other sheets as detailed in page 2.

Only integral reproduction of this Certificate, or reproductions of this page accompanied by any page(s) on which are stated the assigned rated characteristics of the apparatus tested, are permitted without written permission from ASTA BEAB Certification Services, Hilton House, Corporation Street, Rugby. CV21 2DN England.



010

J. Gould
ASTA Observer
J. Gould
C. Diack-Evans
Director
C. Diack-Evans
20th April 2007
Date

MEDIUM VOLTAGE DIN Fuse-Links

17.5kV, Current Limiting Back-Up Fuse-Links, 6.3 to 125 Amps

MV DIN

KEMA Certificate



**Type test Certificate of
breaking performance**

**Cooper Bussmann India
Private Limited**
Sedarapet, Pondicherry, India

has successfully passed the type test sequence on

Current limiting fuses

Type: 17.5TDLEJ6.3, 17.5TDMEJ6.3, 17.5TDLEJ10,
17.5TDMEJ10, 17.5TDMEJ16, 17.5TDMEJ20,
17.5TDMEJ25, 17.5TDMEJ31.5, 17.5TDMEJ40,
17.5TDMEJ50, 17.5TDMEJ63, 17.5THMEJ80,
17.5THMEJ100, 17.5TKMEJ125

Rating: 17,5 kV – 50 kA – 50 Hz

The test object passed the specification of test duties of

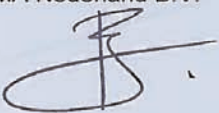
IEC 60282-1

The test results are recorded in Certificate No.

104-06

This Certificate is issued on 17 April 2007

KEMA Nederland B.V.



P.G.A. Bus
KEMA T&D Testing Services
Managing Director



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Please note that this document has been issued for information purposes only, and that the original bound and sealed paper copy of the Certificate including the results of the tests of the apparatus will prevail. This document does not imply that KEMA has certified or approved any apparatus other than the specimen tested.

Experience you can trust.

MEDIUM VOLTAGE DIN Fuse-Links

17.5kV, Current Limiting Back-Up Fuse-Links, 6.3 to 125 Amps

MV DIN

KEMA Certificate



104-06

TYPE TEST CERTIFICATE OF BREAKING PERFORMANCE

APPARATUS Current limiting fuses

Designation	Rated voltage kV	Rated breaking capacity kA	Rated current A	Minimum breaking current A	Rated frequency Hz
17.5TDLEJ6.3, 17.5TDMEJ6.3 (1)	17,5	50	6,3	25	50
17.5TDLEJ10, 17.5TDMEJ10 (1)	17,5	50	10	36	50
17.5TDMEJ16 (1)	17,5	50	16	55	50
17.5TDMEJ20 (1)	17,5	50	20	69	50
17.5TDMEJ25 (1)	17,5	50	25	87	50
17.5TDMEJ31.5 (1)	17,5	50	31,5	87	50
17.5TDMEJ40 (1)	17,5	50	40	111	50
17.5TDMEJ50	17,5	50	50	174	50
17.5TDMEJ63	17,5	50	63	200	50
17.5THMEJ80	17,5	50	80	270	50
17.5THMEJ100	17,5	50	100	376	50
17.5TKMEJ125	17,5	50	125	467	50

(1) See notes on page 7.

MANUFACTURER Cooper Bussmann India Private Limited,
Sedarapet, Pondicherry, India

TESTED FOR Cooper Bussmann (UK) Limited,
Burton-on-the-Wolds, United Kingdom

TESTED BY KEMA HIGH-POWER LABORATORY
Utrechtseweg 310 - 6812 AR Arnhem - The Netherlands

DATE(S) OF TESTS 6, 7, 8 September 2006 and 15, 16 January, 1 February 2007

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

IEC 60282-1 clause 6.6 (test duty 1, 2 and 3).

This Type Test Certificate has been issued by KEMA following exclusively the STL Guides.

The results are shown in the record of Proving Tests and the oscillograms attached hereto. The values obtained and the general performance are considered to comply with the above Standard and to justify the ratings assigned by the manufacturer as listed on page 6.

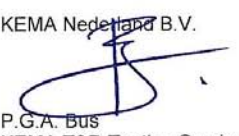
The Certificate applies only to the apparatus tested. The responsibility for conformity of any apparatus having the same designations with that tested rests with the Manufacturer.

This Certificate consists of 195 sheets in total.

This Certificate falls under the scope of the accreditation certificate L 020 of the Dutch Council for Accreditation. See information sheet (page 2).

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KEMA Nederland B.V.



P.G.A. Bus
KEMA T&D Testing Services
Managing Director

Arnhem, 17 April 2007