Eaton's Bussmann series 7.2 kV Medium voltage fuse links



Product description

Eaton's Bussmann series range of 7.2 kV DIN Medium voltage fuse links are suitable for transformer protection.
These fuse links can be used even where there is no secondary LV protection, provided they are used with fuse switches fitted with instantaneous striker tripping.

Standard features

- Cool running, low watts loss and power dissipation thanks to the M-effect ensuring high levels of substation utilisation.
- Silver elements ensuring high conductivity and low power (revenue) loss.
- 100% X-ray, all our medium voltage fuse links are X-rayed ensuring the highest possible standards are maintained.

Powering Business Worldwide

Catalogue symbol:

- 7.2TDLSJ(amp)
- 7.2TFLSJ(amp)

Technical data:

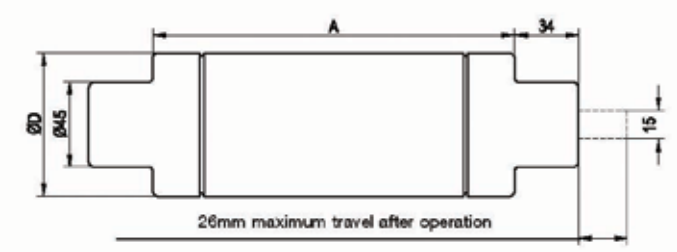
- Volts: 7.2 kV
- Amps: 6.3 to 160 A
- Breaking capacity: 40 kA
- Class of operation: Back-up as IEC 60282-1 (2005)
- Suitable for outdoor and indoor use
- RoHS compliant

Standards/Approvals:

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

Packaging: MOQ 3

Dimensions - mm



Fuse reference	A	C	D	Weight (Kg)
TDLSJ	292	54	51	1.63
TFLSJ	292	80	76	3.1

Table 1. Technical data

				Cold resistance & Watts loss in free air		Joule integral (I^2t)				
Part numbers	Current I_n (A)	Breaking capacity I_1 (kA)	Minimum breaking current I_3 (A)	mΩ	W	Minimum Pre-arcing	Maximum operating	Length mm	Diameter mm	Weight kg
7.2TDLSJ6.3	6.3	40	20	205	11	4.8×10^1	6.5×10^3	292	51	1.63
7.2TDLSJ10	10	40	31	99.7	19	2.5×10^2	2.7×10^3	292	51	1.63
7.2TDLSJ16	16	40	49	65.1	23	5.5×10^2	8.2×10^3	292	51	1.63
7.2TDLSJ20	20	40	49	48.9	27	9.7×10^2	1.1×10^4	292	51	1.63
7.2TDLSJ25	25	40	80	32.6	28	5.7×10^2	8×10^3	292	51	1.63
7.2TDLSJ31.5	31.5	40	100	26	36	8.9×10^2	1×10^4	292	51	1.63
7.2TDLSJ40	40	40	114	16	36	2×10^3	2.2×10^4	292	51	1.63
7.2TDLSJ50	50	40	143	12.9	46	3.2×10^3	3.2×10^4	292	51	1.63
7.2TDLSJ63	63	40	180	8.14	45	8×10^3	7.5×10^4	292	51	1.63
7.2TFLSJ80	80	40	264	61	54	5×10^3	6.5×10^4	292	76	3.1
7.2TFLSJ100	100	40	338	4.65	64	9.1×10^3	1.1×10^5	292	76	3.1
7.2TFLSJ125	125	40	375	3.60	79	1.5×10^4	1.7×10^5	292	76	3.1
7.2TFLSJ160	160	40	525	2.73	97	3×10^4	3.1×10^5	292	76	3.1

Striker diagram

S = Spring diagram 50N to DIN 43625 and IEC 60282-1 designation 'medium'

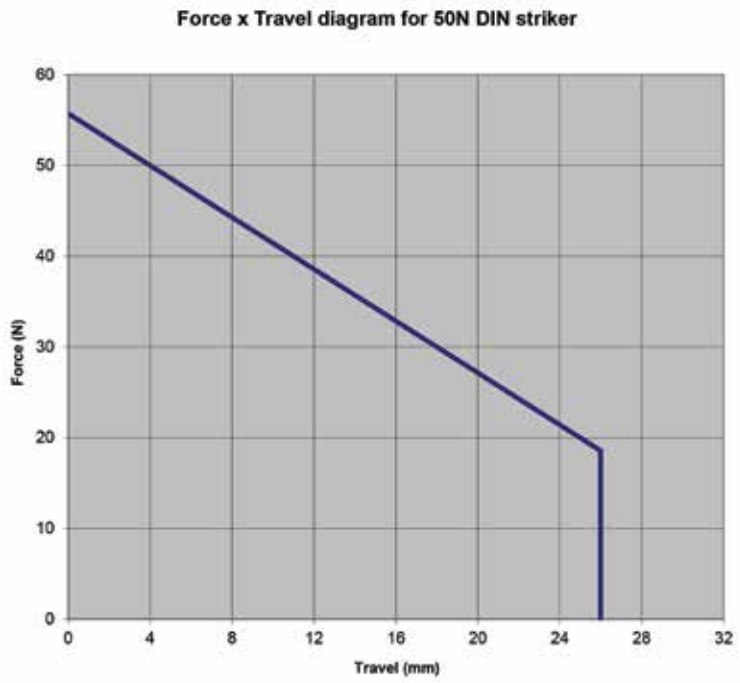


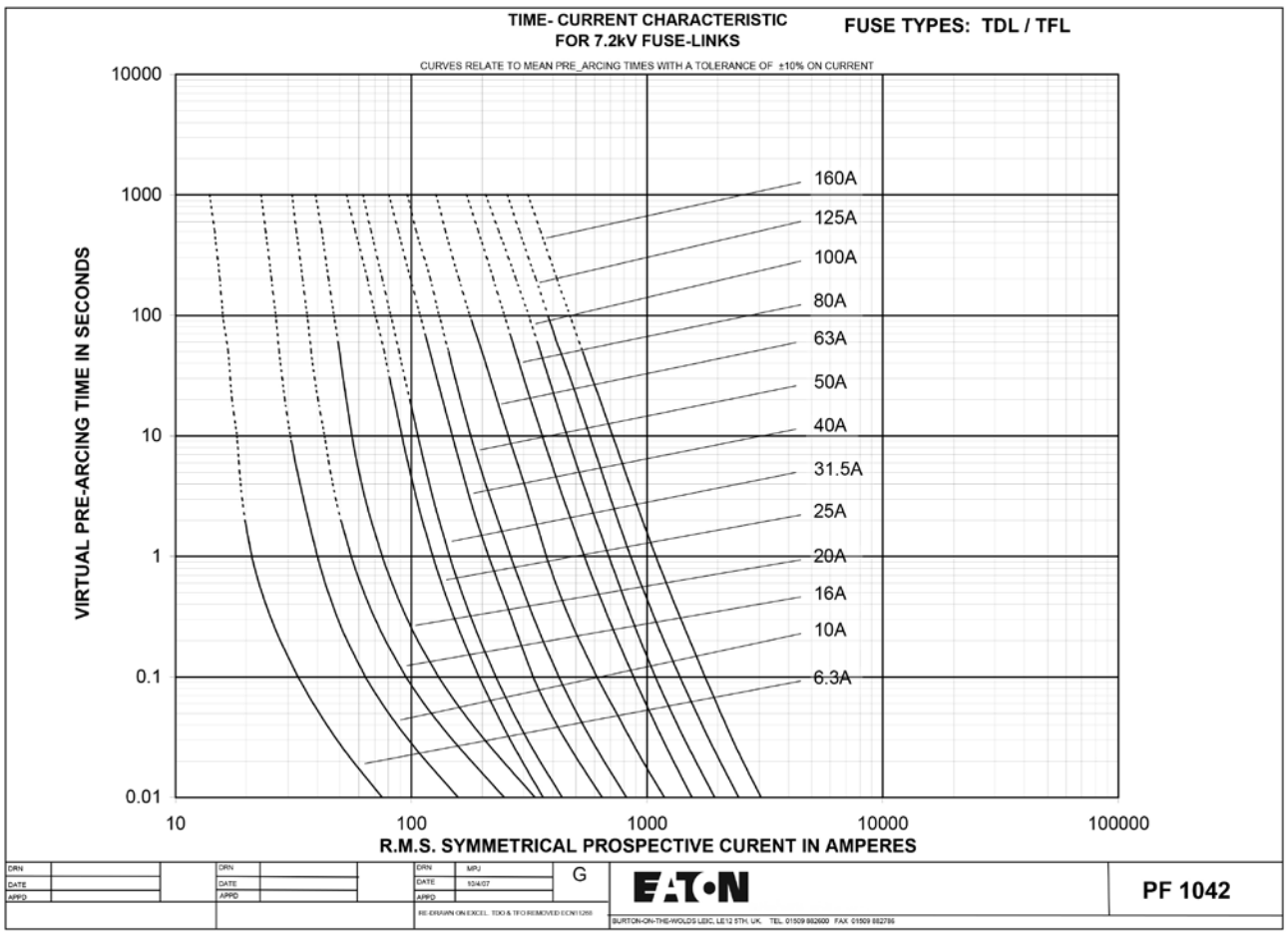
Table 2. Cross reference

Eaton's Bussmann series	SIBA	MESA	Merlin Gerin	ABB
7.2TDLSJ6.3	3009813	N/A	N/A	1YMB531034M0001
7.2TDLSJ10	3009813	N/A	N/A	1YMB531034M0002
7.2TDLSJ16	3009813	N/A	N/A	1YMB531034M0003
7.2TDLSJ20	3009813	N/A	N/A	
7.2TDLSJ25	3009813	N/A	N/A	1YMB531034M0004
7.2TDLSJ31.5	3009813	N/A	N/A	
7.2TDLSJ40	3009813	N/A	N/A	1YMB531034M0005
7.2TDLSJ50	3009813	N/A	N/A	1YMB531034M0006
7.2TDLSJ63	3009913	N/A	N/A	1YMB531034M0007
7.2TFLSJ80	3009913	N/A	N/A	1YMB531034M0008
7.2TFLSJ100	3009913	N/A	N/A	1YMB531034M0009
7.2TFLSJ125	3009913	CF-7,2/125	757352 BN	1YMB531034M0010
7.2TFLSJ160	3010013	CF-7,2/160	757352 BP	1YMB531034M0011

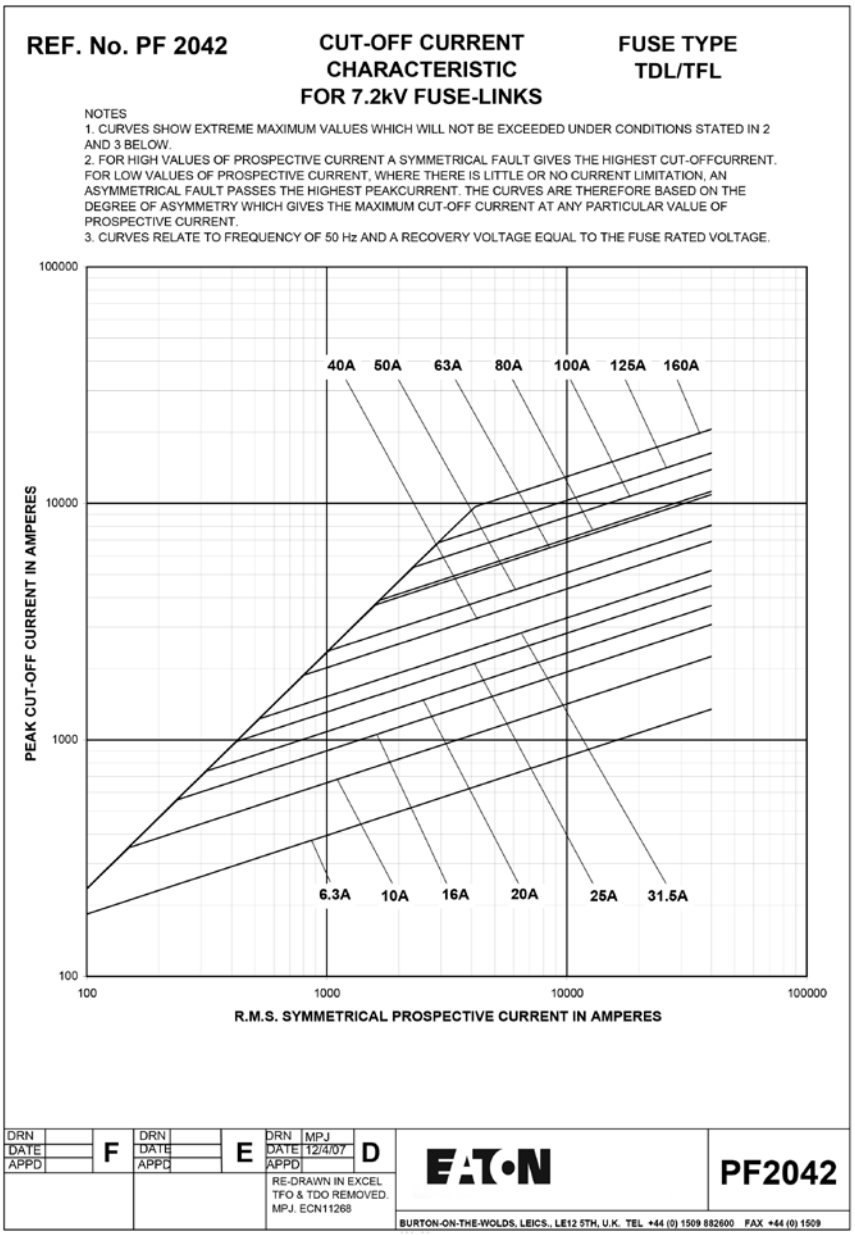
Table 3. Watts loss

Eaton's Bussmann series	Eaton's Bussmann series	SIBA	MESA	Merlin Gerin	ABB
7.2TDLSJ6.3	11	8			26
7.2TDLSJ10	19	13			16
7.2TDLSJ16	23	11			26
7.2TDLSJ20	27	13			
7.2TDLSJ25	28	16			24
7.2TDLSJ31.5	36	21			
7.2TDLSJ40	36	27			30
7.2TDLSJ50	46	30			35
7.2TDLSJ63	45	34			40
7.2TFLSJ80	54	47			52
7.2TFLSJ100	64	64			57
7.2TFLSJ125	79	98	88	88	76
7.2TFLSJ160	97	103	87	87	101

Time current curve - Fuse types TDL/TFL



Cut-off characteristics - Fuse types TDL/TFL



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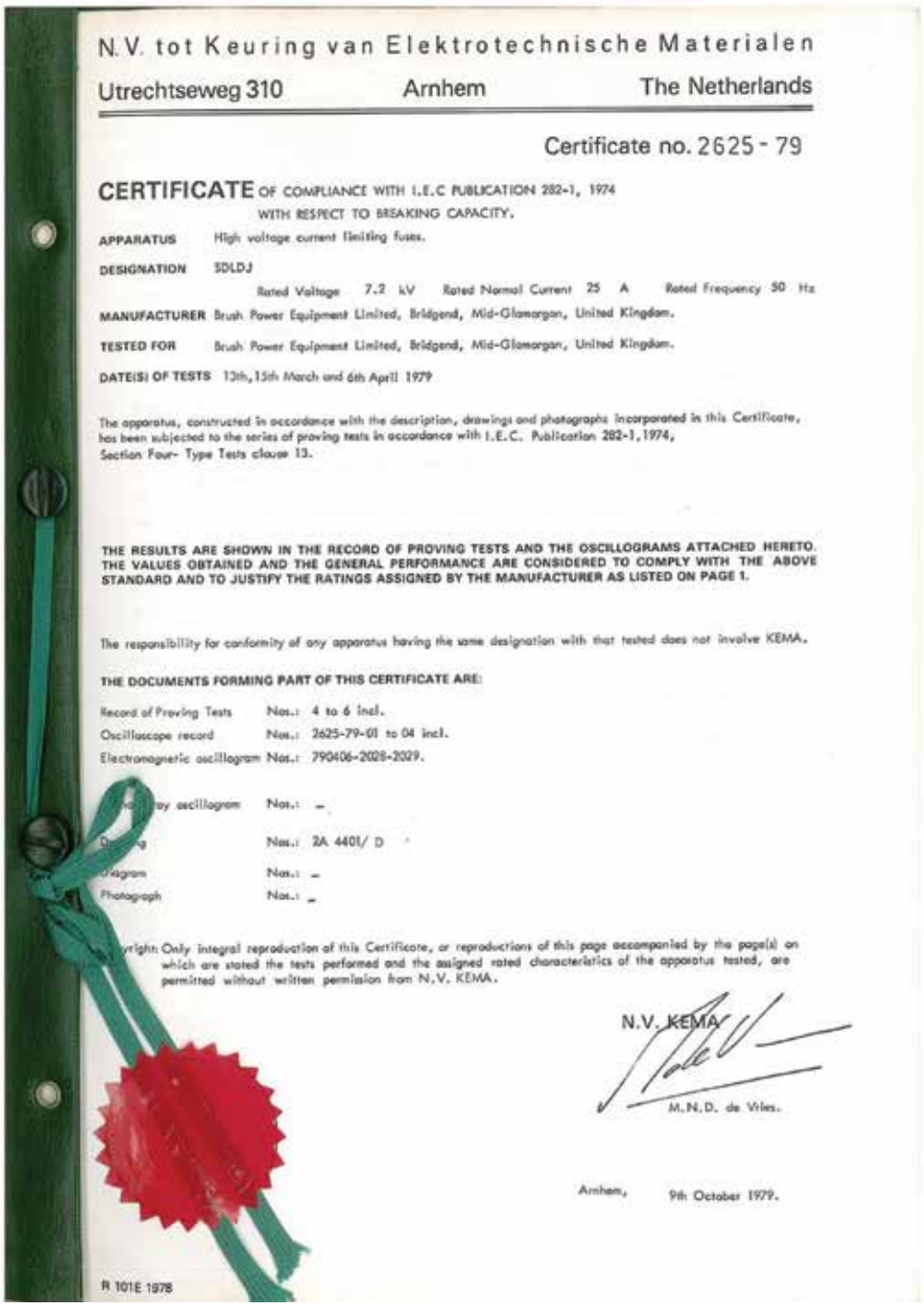

N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no. 2625 - 79

CERTIFICATE OF COMPLIANCE WITH I.E.C PUBLICATION 282-1, 1974
WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High voltage current limiting fuses.

DESIGNATION SDLDJ
Rated Voltage 7.2 kV Rated Normal Current 25 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

DATE(S) OF TESTS 13th, 15th March and 6th April 1979

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 I.E.C. Publication 282-1, 1974, Section Four- Type Tests clause 13.

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 1.

The responsibility for conformity of any apparatus having the same designation with that tested does not involve KEMA.

THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests Nos.: 4 to 6 incl.
Oscilloscope record Nos.: 2625-79-01 to 04 incl.
Electromagnetic oscillogram Nos.: 790406-2028-2029.
[illegible] oscillogram Nos.: –
[illegible] Nos.: 2A 4401/ D
[illegible]gram Nos.: –
Photograph Nos.: –

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N.V. KEMA

M.N.D. de Vries.

Arnhem, 9th October 1979.

R 101E 1978

This certificate refers to **S**DLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

KEMA certificate



N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no.10739-78

CERTIFICATE OF COMPLIANCE WITH I.E.C. PUBLICATION 282-1, 1974 WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High-voltage current limiting fuses.

DESIGNATION SDLDJ.

Rated Voltage 7.2 kV Rated Normal Current 63 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

DATE(S) OF TESTS 12th and 13th December 1978.

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 I.E.C. Publication 282-1, 1974 Section Four - Type Tests, clause 13.

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 1.

The responsibility for conformity of any apparatus having the same designation with that tested does not involve KEMA.

THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests Nos.: 4 to 6 incl.

Oscillascope record Nos.: 10739-78-01 to 10739-78-04 incl.

Electromagnetic oscillogram Nos.: 781212-2022.
781213-2059-2060.

Cathode-ray oscillogram Nos.: -

Nos.: 2A 4387/B.

Nos.: -

Photograph Nos.: -

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N.V. KEMA

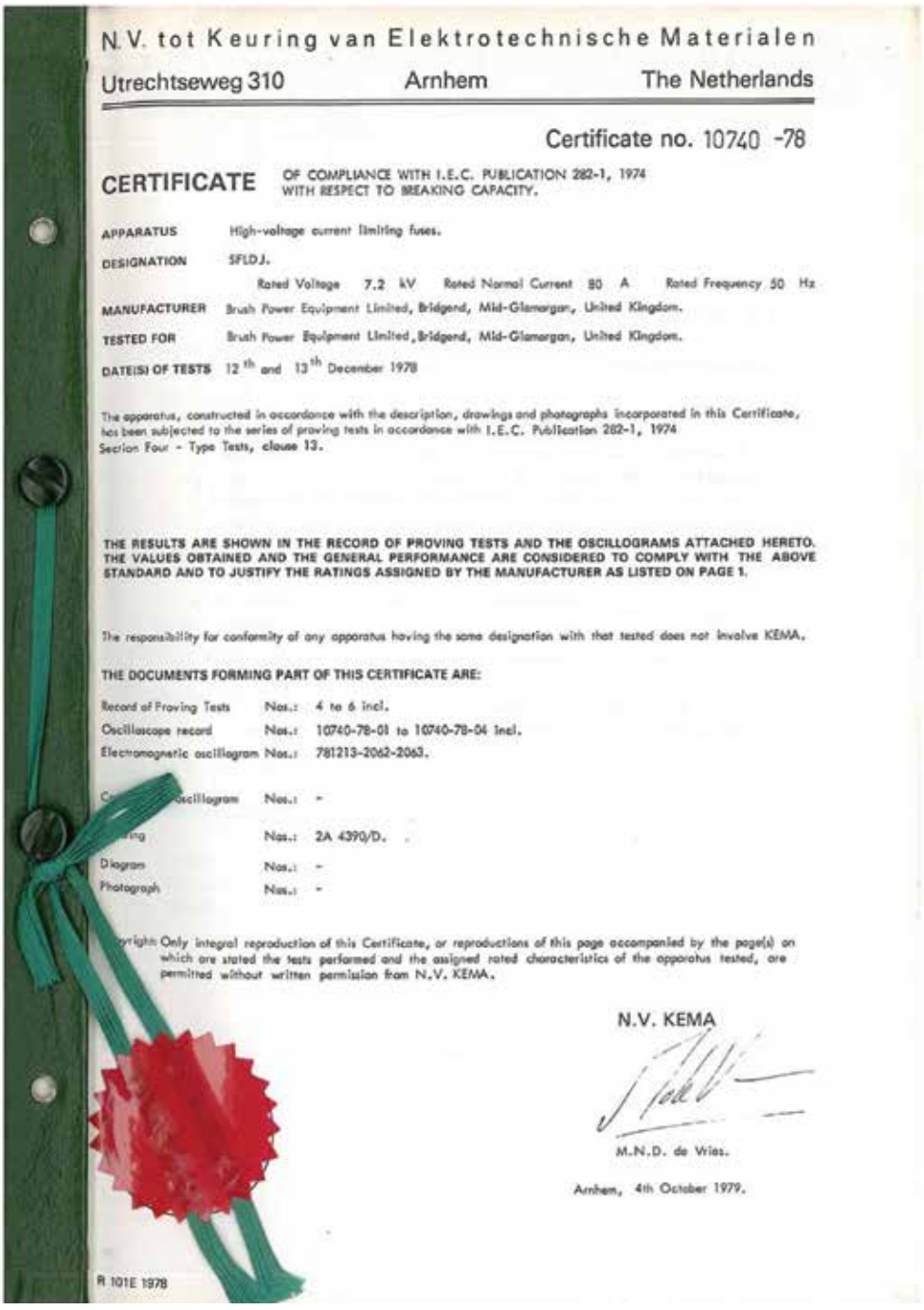
M.N.D. de Vries.

Arnhem, 4th October 1979.

R 101E 1978

This certificate refers to **S**DLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

KEMA certificate



N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no. 10740 -78

CERTIFICATE OF COMPLIANCE WITH I.E.C. PUBLICATION 282-1, 1974 WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High-voltage current limiting fuses.

DESIGNATION SFLDJ.
Rated Voltage 7.2 kV Rated Normal Current 80 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom.

DATE(S) OF TESTS 12th and 13th December 1978

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 I.E.C. Publication 282-1, 1974 Section Four - Type Tests, clause 13.

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 1.

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THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests	Nos.:	4 to 6 incl.
Oscillascope record	Nos.:	10740-78-01 to 10740-78-04 incl.
Electromagnetic oscillogram	Nos.:	781213-2062-2063.
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Diagram	Nos.:	-
Photograph	Nos.:	-

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N.V. KEMA

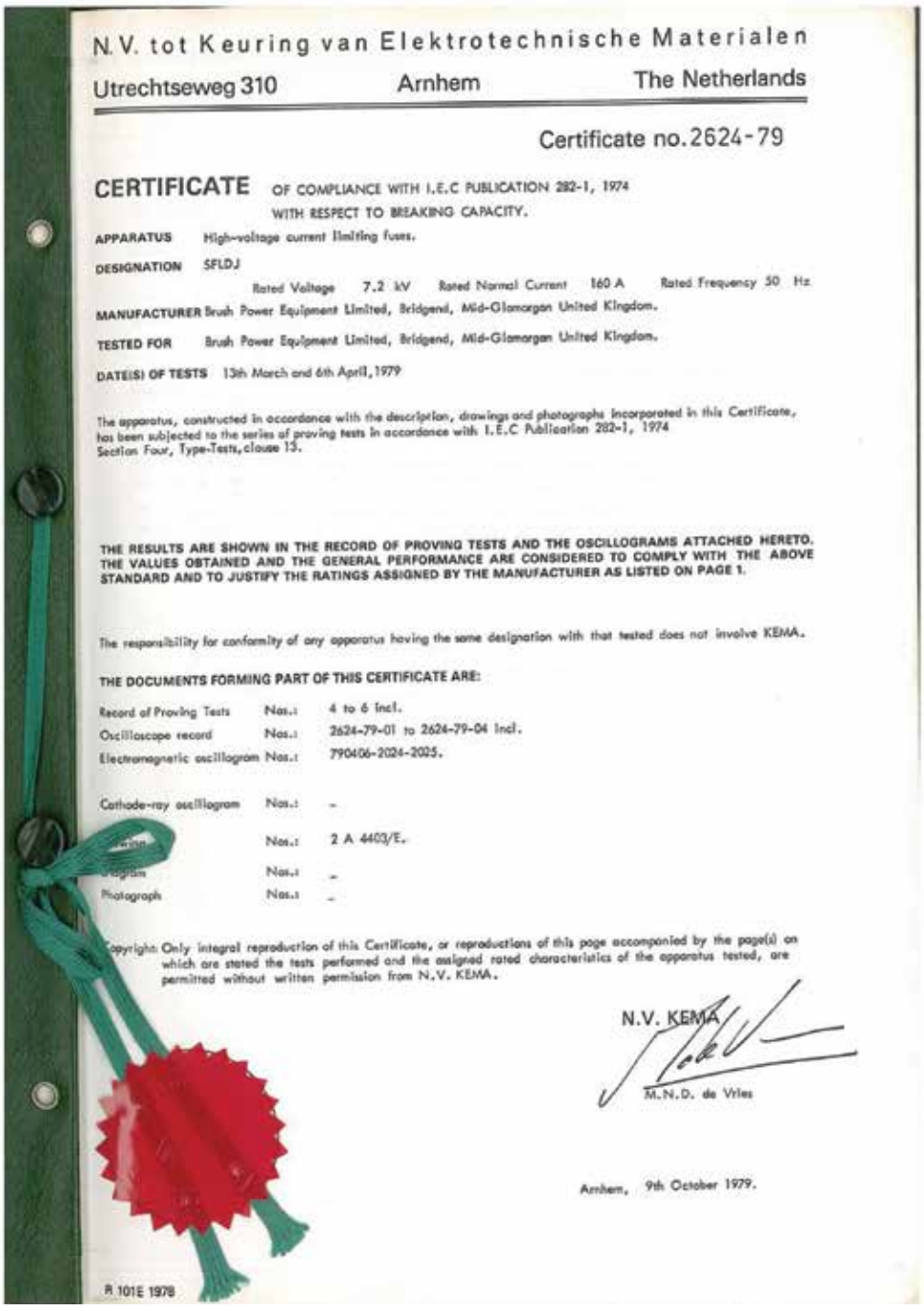
M.N.D. de Vries.

Arnhem, 4th October 1979.

R 101E 1978

This certificate refers to **S**FLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

KEMA certificate



N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no. 2624-79

CERTIFICATE OF COMPLIANCE WITH I.E.C PUBLICATION 282-1, 1974
WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High-voltage current limiting fuses.

DESIGNATION SFLDJ
Rated Voltage 7.2 kV Rated Normal Current 160 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid-Glamorgan United Kingdom.

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid-Glamorgan United Kingdom.

DATE(S) OF TESTS 13th March and 6th April, 1979

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 I.E.C Publication 282-1, 1974 Section Four, Type-Tests, clause 13.

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 1.

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THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests	Nos.:	4 to 6 Incl.
Oscilloscope record	Nos.:	2624-79-01 to 2624-79-04 Incl.
Electromagnetic oscillogram	Nos.:	790406-2024-2025.
Cathode-ray oscillogram	Nos.:	-
[illegible]	Nos.:	2 A 4403/E.
[illegible]gram	Nos.:	-
Photograph	Nos.:	-

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N.V. KEMA

M.N.D. de Vries

Arnhem, 9th October 1979.

R 101E 1978

This certificate refers to **S**FLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

KEMA certificate



N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no. 2347-79

CERTIFICATE OF COMPLIANCE WITH BS 2692: PART 1: 1975 WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High-voltage fuses

DESIGNATION SDLDJ

Rated Voltage 7.2 kV Rated Normal Current 20 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid-Glamorgan, United Kingdom

DATE(S) OF TESTS 15th May 1979

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 2692: Part 1: 1975 Section Four-Type Tests, clause 13.

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 1.

The responsibility for conformity of any apparatus having the same designation with that tested does not involve KEMA.

THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests Nos.: 4 to 6 incl.
Oscilloscope record Nos.: 2347-79-01 to 05 incl.
Electromagnetic oscillogram Nos.: 790515-2048-2049

Cathode-ray oscillogram Nos.: -
Drawing Nos.: 2A 4415/8
Diagram Nos.: -
Photograph Nos.: -

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N.V. KEMA

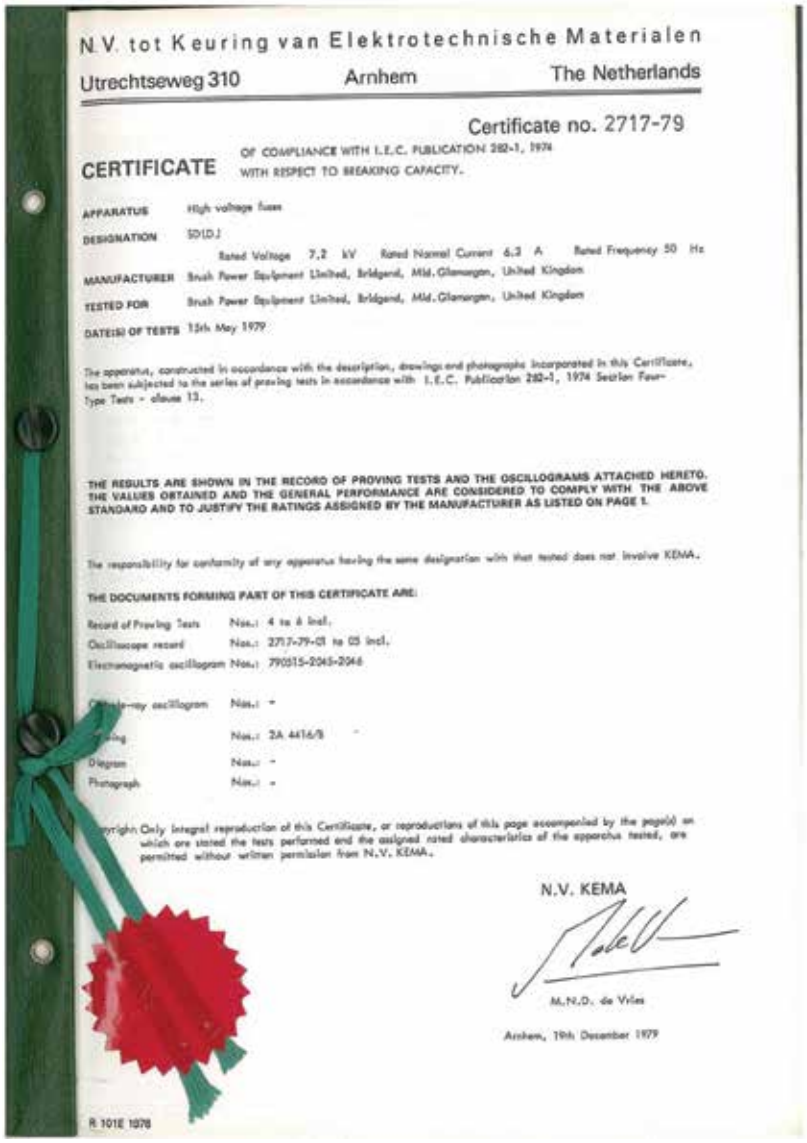
M.N.D. de Vries

Arnhem, 13th December 1979

R 101E 1978

This certificate refers to **S**DLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

KEMA certificate



N.V. tot Keuring van Elektrotechnische Materialen

Utrechtseweg 310 Arnhem The Netherlands

Certificate no. 2717-79

CERTIFICATE OF COMPLIANCE WITH I.E.C. PUBLICATION 282-1, 1974 WITH RESPECT TO BREAKING CAPACITY.

APPARATUS High voltage fuses

DESIGNATION SDLDJ

Rated Voltage 7,2 kV Rated Normal Current 6,3 A Rated Frequency 50 Hz

MANUFACTURER Brush Power Equipment Limited, Bridgend, Mid. Glamorgan, United Kingdom

TESTED FOR Brush Power Equipment Limited, Bridgend, Mid. Glamorgan, United Kingdom

DATE(S) OF TESTS 15th May 1979

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 I.E.C. Publication 282-1, 1974 Section Four- Type Tests - clause 13.

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 1.

The responsibility for conformity of any apparatus having the same designation with that tested does not involve KEMA.

THE DOCUMENTS FORMING PART OF THIS CERTIFICATE ARE:

Record of Proving Tests Nos.: 4 to 6 incl.
Oscilloscope record Nos.: 2717-79-01 to 05 incl.
Electromagnetic oscillogram Nos.: 790515-2045-2046
X-ray oscillogram Nos.: -
Drawing Nos.: 2A 4416/8
Diagram Nos.: -
Photograph Nos.: -

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N.V. KEMA

M.N.D. de Vries

Arnhem, 19th December 1979

R 101E 1078

This certificate refers to **S**DLDJ 7.2 kV fuse links, which are electrically identical to the new T range, other than the fuses are sealed for outdoor use, have a brown ceramic body and use a 50N striker.

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