



# CERTIFICATION RECORD

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The company named below has been authorized by CSA International to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

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File No: 053787\_C\_000  
Class No: 1422 01 FUSES Special Type

## SUBMITTOR

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SEE ALSO SATELLITE FACTORY FILES 214615, 226687, 095957\_0\_000

January 18, 2007(Replaces:February 8, 2006)

Fuses listed below comply with the latest requirements of CSA Std. Series C22.2 No. 248.

Note: Prototype verification and testing is conducted at the submittor's facility. The catalogue numbers listed below are products manufactured by the factory.

Cartridge fuses, non-renewable:

- Type BBS, EBS, 5A and less, 600V ac and less, IR600-10kA.
- Type BBS, 6-10A, 250V ac and less, IR250-10kA.

- "Buss" fuses, Type FNA, MID, 10A and less, 125V ac and less, IR125-10kA, and 8/10A and less, 250V ac and less, IR125-10kA, IR250-35A.
- "Buss" fuses, Type FNM, MEN, 15A and less, 125V ac and less, IR125-10kA, and 10A and less, 250V ac and less, IR125-10kA, IR250-35A or 0 - 1A, 100A for 1.1 - 3.5A, and 200A for 3.6 - 10A.
- "Buss" fuses, Type BAF, MOL, 15A and less, 250V ac and less, IR125-10kA, IR250-35A for 0 - 1A, 100A for 1.1 - 3.5A, 200A for 3.6 - 10A, and 750A for 10.1 - 15A.
- "Buss" fuses, Type FNW, MEN, 12A - 30A, 250V ac and less, IR250-10kA.
- "Tron" equipment fuses, Type FNQ, time-delay, 15A and less, 500V ac and less, IR500-10kA.
- Type FNQ, 20 - 30A, 500V ac and less, 13/32 by 1-1/2 in, time-delay, IR500-10kA.
- "Limitron", Type KTK, MCL, 30A and less, 600V ac and less, IR600-100,000A.
- Class CC, Cat No FNQ-R, 0-30A and FNQ-RB, 3-2/10A, 600V, IR600-200kA.
- Type KTK, MCL, 10A and less, 600V ac and less, IR600-100kA max.
- Type MIN, 1-5A, 250V ac and less, 13/32 by 1-1/2 in with blown fuse indicating feature, IR125-10kA, IR250-35A for 0-1A; IR125-10kA, IR250-100A for 1.1-3.5A; IR125-10kA, IR250-200A for 3.6-5A.
- Type KLM, 30A and less, 500V ac/dc, IR500V ac/dc-10kA.

Notes:

1. Fuses with a 250V rating are for supplementary overcurrent protection at 250V.
2. Type SC fuses in the range of 6-60A are designated time delay.

- GMF, GMQ, 300V and less, 6.25A and less, IR300-10kA "Buss", special type glass or ceramic cartridge, non-renewable, for use only with the manufacturer's Type HLQ and HLR fuseholders.
- GLQ, GLR, 300V and less, 10A and less, "Buss", special type glass cartridge, non-renewable, for use only with the manufacturer's Type HLQ and HLR fuseholders.
- GRF, 125V and less, 6.5A-10A, "Buss" special type glass cartridge, non-renewable, for use only with the manufacturer's Type HLR fuseholder.
- GRR, 125V and less, 10.1A-15A, "Buss" special type glass cartridge, non-renewable, for use only with the manufacturer's type HLR fuseholder.
- GJV, 125/250V and less, 10A and less, IR 125-10kA, IR 250-200A, "Buss" special type, glass or ceramic cartridge, non-renewable, pigtail leads.
- ABC, ABC-R or WP-91768L101-L116, ABC-V, ABC-V-R or WP-91768L1-L16 (axial leads) and GLW (pigtail leads), 125/250V and less, 15A and less, "Buss" special type, glass or ceramic cartridge, non-renewable, **IR125-10kA ac/dc, IR250 - See Table A, Std. 248-14.**
- Glass cartridge fuses, 1/4 by 1-1/4 "Buss" non-renewable:
- AGC, AGC-V, 32V and less, 12A-30A.
- AGC-CW, 32V and less, 3.1A-7.5A.
- AGC, AGC-R, AGC-V, AGC-V-R, 250V and less, 10A and less, IR 125-10kA, IR 250-200A.
- AGX, 125/250V and less, 2A and less; 2.1-5A, 125V.
- GLH, 125V and less, 7A-10A.
- MDA, MDA-R, MDA-V, MDA-V-R or MDW, MDW-V (with axial leads), 250V ac, 125V dc, 20A and less, IR125-10kA, IR250-1500A, IR125-10kA dc resistive.
- MDL, MDL-R, MDL-V, MDL-V-R, 250V and less, 8A and less, 250V, IR250- Table A of Std. 248.14.
- MDQ, MDQ-V-B, MDQ-V, 125/250V, 1.25-7A, IR125-10kA, IR250-Table A of Std 248.14.
- MDX, MDX-V, 250V and less, 8A and less.
- MDV (axial position pigtail leads), MDV-RAD (radial position pigtail leads) and MDVXXXXXX (specially formed and cut pigtail leads), 125/250V, 8A and less.
- MTH-CW, 125/250V and less, 8A and less, MTH-V, 4-8A.

- MBK, 125/250V and less, 5A and less.
- MWO, 125V and less, 12A, 15A.
- MSL, MSL-V, 250V and less, 0.100A-8A (0-1A, IR125-10kA, IR250-35A), (1.1-3A, IR125-10kA, IR250-100A), (3.1-8A, IR125-10kA, IR250-200A).
- MSV (axial position pigtail leads), MSV-RAD (radial position pigtail leads), 125/250V, 0.100-8A.
- MTH, 8A (max), 125/250V.

Note: Above fuses with 125/250V rating are for supplemental overcurrent protection at 250V.

- Supplemental fuses examined to CSA Electrical Bulletin No 1419 or 1419A, "Buss" glass cartridge, non-renewable, 5mm by 20mm.
- "Micro" fuses: Types GFA, TR/GFA, glass cartridge, non-renewable, pigtail leads, 5A and less, 125V ac and less, IR125-50A.

Note: Type TR/GFA fuse designation refers to type of packaging of Type GFA fuse.

- "Micro" fuse, 3216FF, 1.1-3A, 32V ac/63V dc and less, IR32-50A ac, IR63-50A dc.
- ECF, 125V ac and less, 11A and less, special type glass cartridge, non-renewable, IR125-10kA.
- "Buss" fuses, Type GLD and GBA, 5A and less, 125V ac and less, IR125-10kA, cartridge fuses, non-renewable.

Note: Supplemental glass or ceramic cartridge fuses, non-renewable, with pigtails, may have the Suffix "-B" indicating sealed construction. Supplemental, non-renewable, microfuses:

- Types PCB and PCC, 250V ac and less, 3A and less, IR125 - 10kA, IR250 - 50A.
- Types PCD, PCE, PCG and PCL, 125V ac and less, 5A and less, IR125 - 10kA.
- Types PCF, PCH and PCK, 250V ac and less, 3A and less, IR125 - 10kA, IR250 - 50A.
- Type PCI, 125V ac and less, 5A and less, IR125 - 10kA.
- Type MCR, 125V ac/dc and less, 5A and less, IR125V ac - 50A, IR125V dc - 300A, 6-10A, 60V ac and less, IR 60V ac-50A, 90V dc and less, IR 90V dc - 300A.
- Type MCR or TRW microfuses, pigtail leads; 1/4 to 3/4A, 125V ac and less, IR125V ac-50A, IR125V dc-300A; 6-10A, 60V ac and less, IR60V ac-50A, IR90V dc-300A.
- Type SFT, 125V ac and less, 1/4-5A, IR125V ac - 50A, IR125V dc - 300A; Type SFT, 5.1 to 10A, 60V ac and less, IR60V ac - 50A, IR90V dc - 300A; Type SFT, 10.1 to 12.5A, 48V ac, IR48-50A unity pF. Supplemental fuses, cartridge type, non-renewable, alarm circuit operation, visual trip indicator:
- Series 70, 125V and less; Type A, 1.33A and less; Type B, 2.0A and less; Type C, 3.0A and less; Type E, 0.18A and less; Type F, 0.25A and less; Type G, 0.5A and less; Type H, 0.75A and less; Type O, 5.0A and less; IR125-10kA.
- Type 74, rated 20A and less, 60V dc and less, IR60-1kA.
- Type No 3216FF, 1.1-3A, 32V ac/63V dc and less, IR 32V - 50A, IR 63V - 50A.
- Supplemental glass cartridge fuse, non-renewable, Type TDC518 or C518, C518-XXX-R (pigtail), Type TDC520 or C520, C520-XXX-R, 0.1- 5A, 250V ac and less, IR125-10kA, IR250-200A.
- Supplemental fuses Type GMA, GMA-XXX-R, GMA-V, GMA-V-XXX-R, 20mm by 5mm, 63mA to 1A, 250V ac, IR125-10kA, IR250-35A, greater than 1A to 3A, 250V ac, IR125-10kA, IR250-100A; 3.1A to 6A, 125V ac, IR125-10kA.
- Supplemental fuses Type GMC, GMC-XXX-R, GMC-V, GMC-V-XXX-R, 5 by 20mm, 0.050-6.3A, 250V ac and less, IR125-10kA; IR250-35A (1A and less); IR250-100A (1.1 to 3.5A); IR250-200A, (3.6- 6.3A); 6.4-10A, 125Vac and less, IR250-200A.

- Supplemental glass cartridge fuse, non-renewable, Type GMB, GMB-XXX-R, 1- 3.15A, 125V ac and less, IR125-10kA.
- Supplemental fuses Type GMD, GMD-XXX-R, GMD-V, GMD-V-XXX-R, 20mm by 5mm, time-delay, rated 0.125A to 4A, 250V ac, IR125-10kA; IR250-35A (1A and less); IR250-100A (1.1-3.5A ); IR250-200A (3.6-4A ).
- Supplemental glass cartridge fuse, non-renewable, Type TDC514 or C514, C514-XXX-R, (pigtail), 3A, 250V ac and less, IR125-10kA, IR250-100A.
- Supplemental glass cartridge fuse, non-renewable, Type TDC515, C515, C515-XXX-R, (pigtail) or M515, 0.125 to 7A, 250V ac and less, IR125-10kA; IR250-35A, (0- 1A), IR250-100A, (1.1- 3.5A), IR250-200A, (3.6- 7A).
- Supplemental glass cartridge fuse, non-renewable, Type TDC517, C517, C517-XXX-R (pigtail) or M517, 3A, 250V ac and less, IR125- 10kA, IR250-100A.
- Supplemental glass cartridge fuse, non-renewable, Type TDC519 or C519, C519-XXX-R (pigtail), 0.125 to 3A, 250V ac and less, IR125-10kA; IR250-35A, (0- 1A), IR250-100A, (1.1- 3.5A), IR250-200A, (3.6- 7A).
- Supplemental glass cartridge fuse, non-renewable, Type MIDGET, Cat No. DCM 0-30A, 600Vac, IR600kA, 600Vdc, IR600-50kA.

Notes:

1. Sold only to manufacturers of certified electrical equipment where the suitability of the combination is determined by CSA International.
2. Types GMA, GMC and GMD may have Suffix "B" denoting alternate scaled construction
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