



Product Service

# CERTIFICATE

No. Z2 118443 0003 Rev. 07

**Holder of Certificate:** **Jinko Solar Co., Ltd.**  
No.1, Yingbin Road, Economic Development Zone  
334100 Shangrao City, Jiangxi  
PEOPLE'S REPUBLIC OF CHINA

**Certification Mark:**



**Product:** **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**  
**Crystalline Silicon Photovoltaic Module**

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier. All applicable requirements of the testing and certification regulations of TÜV SÜD Group have to be complied. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 704062217001-12

**Valid until:** 2024-03-30

**Date,** 2023-09-28

( Zhulin Zhang )

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## Model(s):

1500VDC system voltage:

JKMxxxM-78H-TV, (xxx=405-455, in steps of 5, 156 cells)  
 JKMxxxM-66H-TV, (xxx=340-385, in steps of 5, 132 cells)  
 JKMxxxM-72-V, JKMxxxM-72B-V, JKMxxxM-72(Plus)-V, JKMxxxM-72L-V,  
 JKMxxxM-72BL-V, JKMSxxxM-72-V, JKMSxxxM-72-V-J, JKMSxxxM-72-V-TI,  
 JKMSxxxM-72L-V-TI, JKMSxxxM-72B-V-TI, JKMSxxxM-72BL-V-TI  
 (xxx=335-410, in steps of 5, 72 cells)  
 JKMxxxM-60-V, JKMxxxM-60B-V, JKMxxxM-60(Plus)-V, JKMxxxM-60L-V,  
 JKMxxxM-60BL-V, JKMSxxxM-60-V, JKMSxxxM-60-V-J, JKMSxxxM-60-V-TI,  
 JKMSxxxM-60L-V-TI, JKMSxxxM-60B-V-TI, JKMSxxxM-60BL-V-TI (xxx=270-  
 340, in steps of 5, 60 cells)  
 JKMxxxM-72H-V, JKMxxxM-72HL-V, JKMxxxM-72HB-V, JKMxxxM-72HBL-V,  
 JKMSxxxM-72H-V-TI, JKMSxxxM-72HL-V-TI, JKMSxxxM-72HB-V-TI,  
 JKMSxxxM-72HBL-V-TI (xxx=335-425, in steps of 5, 144 cells)  
 JKMxxxM-60H-V, JKMxxxM-60HL-V, JKMxxxM-60HB-V, JKMxxxM-60HBL-V,  
 JKMSxxxM-60H-V-TI, JKMSxxxM-60HL-V-TI, JKMSxxxM-60HB-V-TI,  
 JKMSxxxM-60HBL-V-TI (xxx=270-350, in steps of 5, 120 cells)  
 MMxxx-72LA-MBV, MMxxx-72LA-ABV, SMMxxx-72LA-MBV,  
 SMMxxx-72LA-MBV-TI, SMMxxx-72LA-ABV-TI  
 (xxx=335-410, in steps of 5, 72 cells)  
 MMxxx-60LA-MBV, MMxxx-60LA-ABV, SMMxxx-60LA-MBV-TI,  
 SMMxxx-60LA-ABV-TI (xxx=270-340, in steps of 5, 60 cells)  
 JKMxxxM-72HL-V-Q, JKMSxxxM-72HL-V-TI-Q, MMxxx-72HLA-MBV,  
 MMxxx-72HLA-ABV, SMMxxx-72HLA-MBV-TI, SMMxxx-72HLA-ABV-TI  
 (xxx=335-425, in steps of 5, 144 cells)  
 JKMxxxM-60HL-V-Q, JKMSxxxM-60HL-V-TI-Q, MMxxx-60HLA-MBV,  
 MMxxx-60HLA-ABV, SMMxxx-60HLA-MBV-TI, SMMxxx-60HLA-ABV-TI  
 (xxx=270-350, in steps of 5, 120 cells)  
 JKMxxxPP-72-V, JKMxxxPP-72B-V, JKMxxxPP-72(Plus)-V, JKMSxxxPP-72-V,  
 JKMSxxxPP-72-V-J (xxx=320-355, in steps of 5, 72 cells)  
 JKMxxxPP-60-V, JKMxxxPP-60B-V, JKMxxxPP-60(Plus)-V, JKMSxxxPP-60-V,  
 JKMSxxxPP-60-V-J (xxx=260-290, in steps of 5, 60 cells)  
 JKMxxxPP-72H-V, JKMxxxPP-72HB-V (xxx=330-380, in steps of 5, 144 cells)  
 JKMxxxPP-60H-V, JKMxxxPP-60HB-V (xxx=260-315, in steps of 5, 120 cells)  
 JKMxxxM-72H-TV, JKMxxxM-72HL-TV (xxx=375-425, in steps of 5, 144 cells)  
 JKMxxxM-60H-TV, JKMxxxM-60HL-TV (xxx=315-355, in steps of 5, 120 cells)  
 JKMxxxM-72HL-TV-Q, MMxxx-72HLA-BBV  
 (xxx=375-425, in steps of 5, 144 cells)  
 JKMxxxM-60HL-TV-Q, MMxxx-60HLA-BBV  
 (xxx=315-355, in steps of 5, 120 cells)  
 JKMxxxN-72H-TV, JKMxxxN-72HL-TV (xxx=375-425, in steps of 5, 144 cells)  
 JKMxxxN-60H-TV, JKMxxxN-60HL-TV (xxx=315-355, in steps of 5, 120 cells)  
 JKMSxxxM-72-V-MX3, JKMSxxxM-72B-V-MX3, JKMSxxxM-72L-V-MX3,  
 JKMSxxxM-72BL-V-MX3 (xxx=335-395, in steps of 5, 72 cells)  
 JKMSxxxM-60-V-MX3, JKMSxxxM-60B-V-MX3, JKMSxxxM-60L-V-MX3,  
 JKMSxxxM-60BL-V-MX3 (xxx=270-340, in steps of 5, 60 cells)  
 SMMxxx-72LA-MBV-MX3, SMMxxx-72LA-ABV-MX3  
 (xxx=335-395, in steps of 5, 72 cells)  
 SMMxxx-60LA-MBV-MX3, SMMxxx-60LA-ABV-MX3  
 (xxx=270-340, in steps of 5, 60 cells)  
 JKMSxxxM-72H-V-MX3, JKMSxxxM-72HB-V-MX3, JKMSxxxM-72HL-V-MX3,  
 JKMSxxxM-72HBL-V-MX3 (xxx=335-395, in steps of 5, 144cells)  
 JKMSxxxM-60H-V-MX3, JKMSxxxM-60HB-V-MX3, JKMSxxxM-60HL-V-MX3,  
 JKMSxxxM-60HBL-V-MX3 (xxx=270-340, in steps of 5, 120 cells)  
 JKMSxxxM-72HL-V-MX3-Q, SMMxxx-72HLA-MBV-MX3,  
 SMMxxx-72HLA-ABV-MX3 (xxx=335-395, in steps of 5, 144cells)  
 JKMSxxxM-60HL-V-MX3-Q, SMMxxx-60HLA-MBV-MX3,  
 SMMxxx-60HLA-ABV-MX3 (xxx=270-340, in steps of 5, 120 cells)  
 JKMSxxxPP-72-V-MX3, JKMSxxxPP-72B-V-MX3, JKMSxxxPP-72L-V-MX3,  
 JKMSxxxPP-72BL-V-MX3 (xxx=320-355, in steps of 5, 72 cells)  
 JKMSxxxPP-60-V-MX3, JKMSxxxPP-60B-V-MX3, JKMSxxxPP-60L-V-MX3,  
 JKMSxxxPP-60BL-V-MX3 (xxx=260-290, in steps of 5, 60 cells)  
 JKMSxxxPP-72H-V-MX3, JKMSxxxPP-72HB-V-MX3, JKMSxxxPP-72HL-V-MX3,  
 JKMSxxxPP-72HBL-V-MX3 (xxx=330-380, in steps of 5, 144cells)  
 JKMSxxxPP-60H-V-MX3, JKMSxxxPP-60HB-V-MX3, JKMSxxxPP-60HL-V-MX3,  
 JKMSxxxPP-60HBL-V-MX3 (xxx=260-315, in steps of 5, 120 cells)  
 JKMxxxN-72H-MBB-TV (xxx=390-420, in steps of 5, 144 cells)  
 JKMxxxN-60H-MBB-TV (xxx=330-350, in steps of 5, 120 cells)  
 MNxxx-72HLA-BBV-MBB (xxx=390-420, in steps of 5, 144 cells)  
 MNxxx-60HLA-BBV-MBB (xxx=330-350, in steps of 5, 120 cells)

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JKMXxxM-72H-MBB-TV (xxx=385-405, in steps of 5, 144 cells)  
 JKMXxxM-60H-MBB-TV (xxx=320-335, in steps of 5, 120 cells)  
 MM-72HLA-BBV-MBB, MMxx-72HLA-BBV-MBB  
 (xxx=385-405, in steps of 5, 144 cells)  
 MM-60HLA-BBV-MBB, MMxx-60HLA-BBV-MBB  
 (xxx=320-335, in steps of 5, 120 cells)  
 JKMXxxM-72H-MBB-V, JKMSxxM-72H-MBB-V-TI, JKMSxxM-72H-MBB-V-  
 MX3 (xxx=385-425, in steps of 5, 144 cells)  
 JKMXxxM-60H-MBB-V, JKMSxxM-60H-MBB-V-TI, JKMSxxM-60H-MBB-V-  
 MX3 (xxx=320-355, in steps of 5, 120 cells)  
 MM-72HLA-MBV-MBB, SMM-72HLA-MBV-MBB-TI, MMxx-72HLA-MBV-MBB,  
 SMMxx-72HLA-MBV-MBB-TI (xxx=385-425, in steps of 5, 144 cells)  
 MM-60HLA-MBV-MBB, SMM-60HLA-MBV-MBB-TI, MMxx-60HLA-MBV-MBB,  
 SMMxx-60HLA-MBV-MBB-TI (xxx=320-355, in steps of 5, 120 cells)  
 JKSN3-DCCA-xxx (xxx=410-440, in steps of 5, 156 cells)  
 JKSN3-CCCA-xxx (xxx=345-370, in steps of 5, 132 cells)  
 JKSM3-DCCA-xxx (xxx=400-450, in steps of 5, 156 cells)  
 JKSM3-CCCA-xxx (xxx=340-380, in steps of 5, 132 cells)  
 JKSM3-DACA-xxx (xxx=400-440, in steps of 5, 156 cells)  
 JKSM3-CACA-xxx (xxx=335-370, in steps of 5, 132 cells)  
 JKMXxxM-78H-V, JKMSxxM-78H-V-TI (xxx=405-465, in steps of 5, 156 cells)  
 JKMXxxM-66H-V, JKMSxxM-66H-V-TI (xxx=340-390, in steps of 5, 132 cells)  
 JKMXxxM-78H-V-Q, JKMSxxM-78H-V-TI-Q, MMxx-78HLA-MBV,  
 SMMxx-78HLA-MBV-TI (xxx=405-465, in steps of 5, 156 cells)  
 JKMXxxM-66H-V-Q, JKMSxxM-66H-V-TI-Q, MMxx-66HLA-MBV,  
 SMMxx-66HLA-MBV-TI (xxx=340-390, in steps of 5, 132 cells)  
 JKMXxxM-78HB-V, JKMSxxM-78HB-V-TI (xxx=405-435, in steps of 5, 156  
 cells)  
 JKMXxxM-66HB-V, JKMSxxM-66HB-V-TI (xxx=340-365, in steps of 5, 132  
 cells)  
 MMxx-78HLA-ABV, SMMxx-78HLA-ABV-TI  
 (xxx=405-435, in steps of 5, 156 cells)  
 MMxx-66HLA-ABV, SMMxx-66HLA-ABV-TI  
 (xxx=340-365, in steps of 5, 132 cells)  
 JKMXxxM-78H-TV-Q, MMxx-78HLA-BBV (xxx=405-455, in steps of 5, 156  
 cells)  
 JKMXxxM-66H-TV-Q, MMxx-66HLA-BBV (xxx=340-385, in steps of 5, 132  
 cells)  
 JKMXxxN-78H-TV (xxx=410-460, in steps of 5, 156 cells)  
 JKMXxxN-66H-TV (xxx=345-385, in steps of 5, 132 cells)  
 JKMXxxM-7RL3-V, JKMXxxM-7RL3-V-J, JKMSxxM-7RL3-V-TI,  
 JKMXxxM-7RL3-S-V, JKMXxxM-7RL3-S-V-J  
 (xxx=430-495, in steps of 5, 156 cells)  
 JKMXxxM-6RL3-V, JKMXxxM-6RL3-V-J, JKMSxxM-6RL3-V-TI,  
 JKMXxxM-6RL3-S-V, JKMXxxM-6RL3-S-V-J, JKMSxxM-6RL3-V-MX3  
 (xxx=360-415, in steps of 5, 132 cells)  
 JKMXxxM-6TL3-V, JKMSxxM-6TL3-V-TI, JKMXxxM-6TL3-S-V,  
 JKMSxxM-6TL3-V-MX3 (xxx=335-380, in steps of 5, 120 cells)  
 MMxx-7RLC-MBV, SMMxx-7RLC-MBV-TI  
 (xxx=430-475, in steps of 5, 156 cells)  
 MMxx-6RLC-MBV, SMMxx-6RLC-MBV-TI  
 (xxx=360-400, in steps of 5, 132 cells)  
 MMxx-6TLC-MBV, SMMxx-6TLC-MBV-TI  
 (xxx=335-365, in steps of 5, 120 cells)  
 JKMXxxN-7RL3-V, JKMXxxN-7RL3-V-J, JKMSxxN-7RL3-V-TI  
 (xxx=430-500, in steps of 5, 156 cells)  
 JKMXxxN-6RL3-V, JKMXxxN-6RL3-V-J, JKMSxxN-6RL3-V-TI,  
 JKMSxxN-6RL3-V-MX3 (xxx=360-420, in steps of 5, 132 cells)  
 JKMXxxN-6TL3-V, JKMSxxN-6TL3-V-TI, JKMSxxN-6TL3-V-MX3  
 (xxx=335-390, in steps of 5, 120 cells)  
 MNxx-7RLC-MBV, SMNxx-7RLC-MBV-TI  
 (xxx=430-475, in steps of 5, 156 cells)  
 MNxx-6RLC-MBV, SMNxx-6RLC-MBV-TI  
 (xxx=360-400, in steps of 5, 132 cells)  
 MNxx-6TLC-MBV, SMNxx-6TLC-MBV-TI  
 (xxx=335-365, in steps of 5, 120 cells)  
 JKMXxxM-7RL3-TV, JKMXxxM-7RL3-TV-J, JKMXxxM-7RL3-S-TV,  
 JKMXxxM-7RL3-S-TV-J (xxx=420-475, in steps of 5, 156 cells)  
 JKMXxxM-6RL3-TV, JKMXxxM-6RL3-TV-J, JKMXxxM-6RL3-S-TV,  
 JKMXxxM-6RL3-S-TV-J (xxx=355-400, in steps of 5, 132 cells)

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JKMSxxxM-6TL3-TV, JKMSxxxM-6TL3-S-TV (xxx=325-365, in steps of 5, 120 cells)  
 MMxxx-7RLC-BBV (xxx=420-475, in steps of 5, 156 cells)  
 MMxxx-6RLC-BBV (xxx=355-400, in steps of 5, 132 cells)  
 MMxxx-6TLC-BBV (xxx=325-365, in steps of 5, 120 cells)  
 JKMSxxxN-7RL3-TV, JKMSxxxN-7RL3-TV-J, JKMSxxxN-7RL3-S-TV, JKMSxxxN-7RL3-S-TV-J (xxx=425-500, in steps of 5, 156 cells)  
 JKMSxxxN-6RL3-TV, JKMSxxxN-6RL3-TV-J, JKMSxxxN-6RL3-S-TV, JKMSxxxN-6RL3-S-TV-J (xxx=355-420, in steps of 5, 132 cells)  
 JKMSxxxN-6TL3-TV, JKMSxxxN-6TL3-S-TV (xxx=325-380, in steps of 5, 120 cells)  
 MNxxx-7RLC-BBV (xxx=425-475, in steps of 5, 156 cells)  
 MNxxx-6RLC-BBV (xxx=355-400, in steps of 5, 132 cells)  
 MNxxx-6TLC-BBV (xxx=325-365, in steps of 5, 120 cells)  
 JKMSxxxN-72H-MBB-V, JKMSxxxN-72H-MBB-V-TI (xxx=385-425, in steps of 5, 144 cells)  
 JKMSxxxN-60H-MBB-V, JKMSxxxN-60H-MBB-V-TI (xxx=320-350, in steps of 5, 120 cells)  
 MNxxx-72HLA-MBV-MBB, SMNxxx-72HLA-MBV-MBB-TI (xxx=385-425, in steps of 5, 144 cells)  
 MNxxx-60HLA-MBV-MBB, SMNxxx-60HLA-MBV-MBB-TI (xxx=320-350, in steps of 5, 120 cells)  
 JKMSxxxM-7RL3-B-V, JKMSxxxM-7RL3-S-B-V, JKMSxxxM-7RL3-B-V-TI (xxx=425-480, in steps of 5, 156 cells)  
 JKMSxxxM-6RL3-B-V, JKMSxxxM-6RL3-S-B-V, JKMSxxxM-6RL3-B-V-TI (xxx=360-405, in steps of 5, 132 cells)  
 JKMSxxxM-6TL3-B-V, JKMSxxxM-6TL3-S-B-V, JKMSxxxM-6TL3-B-V-TI (xxx=320-365, in steps of 5, 120 cells)  
 MMxxx-7RLC-ABV, SMMxxx-7RLC-ABV-TI (xxx=425-480, in steps of 5, 156 cells)  
 MMxxx-6RLC-ABV, SMMxxx-6RLC-ABV-TI (xxx=360-405, in steps of 5, 132 cells)  
 MMxxx-6TLC-ABV, SMMxxx-6TLC-ABV-TI (xxx=320-365, in steps of 5, 120 cells)  
 JKMSxxxN-7RL3-B-V, JKMSxxxN-7RL3-B-V-TI, JKMSxxxN-7RL3-S-B-V, JKMSxxxN-6RL3-B-V, JKMSxxxN-6RL3-B-V-TI, JKMSxxxN-6RL3-S-B-V, JKMSxxxN-6TL3-B-V, JKMSxxxN-6TL3-B-V-TI, JKMSxxxN-6TL3-S-B-V, MNxxx-7RLC-ABV, SMNxxx-7RLC-ABV-TI (xxx=425-480, in steps of 5, 156 cells)  
 MNxxx-6RLC-ABV, SMNxxx-6RLC-ABV-TI (xxx=360-405, in steps of 5, 132 cells)  
 MNxxx-6TLC-ABV, SMNxxx-6TLC-ABV-TI (xxx=320-365, in steps of 5, 120 cells)  
 JKMSxxxN-72H-MBB-B-V, JKMSxxxN-72H-MBB-B-V-TI (xxx=380-400, in steps of 5, 144 cells)  
 JKMSxxxN-60H-MBB-B-V, JKMSxxxN-60H-MBB-B-V-TI (xxx=315-330, in steps of 5, 120 cells)  
 MNxxx-72HLA-ABV-MBB, SMNxxx-72HLA-ABV-MBB-TI (xxx=380-400, in steps of 5, 144 cells)  
 MNxxx-60HLA-ABV-MBB, SMNxxx-60HLA-ABV-MBB-TI (xxx=315-330, in steps of 5, 120 cells)  
 JKMSxxxM-72HLM-V, JKMSxxxM-72HLM-V-MX3 (xxx=420-465, in steps of 5, 144 cells)  
 JKMSxxxM-60HLM-V, JKMSxxxM-60HLM-V-MX3 (xxx=350-385, in steps of 5, 120 cells)  
 MMxxx-72HLM-MBV (xxx=420-465, in steps of 5, 144 cells)  
 MMxxx-60HLM-MBV (xxx=350-385, in steps of 5, 120 cells)  
 JKMSxxxM-78H-MBB-V, JKMSxxxM-78H-MBB-V-MX3 (xxx=440-465, in steps of 5, 156 cells)  
 JKMSxxxM-66H-MBB-V, JKMSxxxM-66H-MBB-V-MX3 (xxx=370-390, in steps of 5, 132 cells)  
 MM-78HLA-MBV-MBB, MMxxx-78HLA-MBV-MBB (xxx=440-465, in steps of 5, 156 cells)  
 MM-66HLA-MBV-MBB, MMxxx-66HLA-MBV-MBB (xxx=370-390, in steps of 5, 132 cells)  
 JKMSxxxM-78HL4-V, JKMSxxxM-78HL4-S-V (xxx=565-605, in steps of 5, 156 cells)

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JKxxxxM-72HL4-V, JKxxxxM-72HL4-V-J, JKxxxxM-72HL4-S-V, JKxxxxM-72HL4-S-V-J (xxx=475-585, in steps of 5, 144 cells)  
 JKxxxxM-66HL4-V, JKxxxxM-66HL4-S-V (xxx=440-505, in steps of 5, 132 cells)  
 JKxxxxM-60HL4-V, JKxxxxM-60HL4-S-V (xxx=400-485, in steps of 5, 120 cells)  
 JKxxxxM-54HL4-V, JKxxxxM-54HL4-S-V (xxx=360-430, in steps of 5, 108 cells)  
 MMxxx-78HLD-MBV (xxx=565-605, in steps of 5, 156 cells)  
 MMxxx-72HLD-MBV (xxx=475-570, in steps of 5, 144 cells)  
 MMxxx-66HLD-MBV (xxx=440-505, in steps of 5, 132 cells)  
 MMxxx-60HLD-MBV (xxx=400-470, in steps of 5, 120 cells)  
 MMxxx-54HLD-MBV (xxx=360-420, in steps of 5, 108 cells)  
 JKxxxxM-78HL4-TV, JKxxxxM-78HL4-S-TV (xxx=555-595, in steps of 5, 156 cells)  
 JKxxxxM-72HL4-TV, JKxxxxM-72HL4-TV-J, JKxxxxM-72HL4-S-TV, JKxxxxM-72HL4-S-TV-J (xxx=475-580, in steps of 5, 144 cells)  
 JKxxxxM-66HL4-TV, JKxxxxM-66HL4-S-TV (xxx=440-500, in steps of 5, 132 cells)  
 JKxxxxM-60HL4-TV, JKxxxxM-60HL4-S-TV (xxx=400-455, in steps of 5, 120 cells)  
 JKxxxxM-54HL4-TV, JKxxxxM-54HL4-S-TV (xxx=360-410, in steps of 5, 108 cells)  
 JKxxxxM-7RL4-V, JKxxxxM-7RL4-V-J (xxx=535-590, in steps of 5, 156 cells)  
 JKxxxxM-7TL4-V, JKxxxxM-7TL4-V-J (xxx=495-570, in steps of 5, 144 cells)  
 JKxxxxM-6RL4-V (xxx=455-495, in steps of 5, 132 cells)  
 JKxxxxM-6TL4-V (xxx=415-450, in steps of 5, 120 cells)  
 JKxxxxM-5RL4-V (xxx=375-435, in steps of 5, 108 cells)  
 MMxxx-7RLD-MBV (xxx=535-590, in steps of 5, 156 cells)  
 MMxxx-7TLD-MBV (xxx=495-540, in steps of 5, 144 cells)  
 MMxxx-6RLD-MBV (xxx=455-495, in steps of 5, 132 cells)  
 MMxxx-6TLD-MBV (xxx=415-450, in steps of 5, 120 cells)  
 MMxxx-5RLD-MBV (xxx=375-405, in steps of 5, 108 cells)  
 JKxxxxM-7RL4-TV, JKxxxxM-7RL4-TV-J (xxx=525-590, in steps of 5, 156 cells)  
 JKxxxxM-7TL4-TV, JKxxxxM-7TL4-TV-J (xxx=485-570, in steps of 5, 144 cells)  
 JKxxxxM-6RL4-TV (xxx=445-495, in steps of 5, 132 cells)  
 JKxxxxM-6TL4-TV (xxx=405-450, in steps of 5, 120 cells)  
 JKxxxxM-5RL4-TV (xxx=365-405, in steps of 5, 108 cells)  
 JKxxxxN-78HL4-V, JKxxxxN-78HL4R-V (xxx=570-650, in steps of 5, 156 cells)  
 JKxxxxN-72HL4-V (xxx=485-615, in steps of 5, 144 cells)  
 JKxxxxN-72HL4R-V (xxx=485-615, in steps of 5, 144 cells)  
 JKxxxxN-66HL4-V (xxx=445-525, in steps of 5, 132 cells)  
 JKxxxxN-60HL4-V (xxx=405-510, in steps of 5, 120 cells)  
 JKxxxxN-60HL4-V-J (xxx=405-510, in steps of 5, 120 cells)  
 JKxxxxN-60HL4R-V (xxx=405-510, in steps of 5, 120 cells)  
 JKxxxxN-54HL4-V, JKxxxxN-54HL4R-V (xxx=365-455, in steps of 5, 108 cells)  
 MNxxx-72HLD-MBV (xxx=485-555, in steps of 5, 144 cells)  
 MNxxx-66HLD-MBV (xxx=445-505, in steps of 5, 132 cells)  
 MNxxx-60HLD-MBV (xxx=405-460, in steps of 5, 120 cells)  
 MNxxx-54HLD-MBV (xxx=365-415, in steps of 5, 108 cells)  
 JKxxxxN-78HL4-TV, JKxxxxN-78HL4R-TV (xxx=570-645, in steps of 5, 156 cells)  
 JKxxxxN-72HL4-TV (xxx=480-605, in steps of 5, 144 cells)  
 JKxxxxN-72HL4R-TV (xxx=480-605, in steps of 5, 144 cells)  
 JKxxxxN-66HL4-TV (xxx=440-525, in steps of 5, 132 cells)  
 JKxxxxN-60HL4-TV (xxx=400-480, in steps of 5, 120 cells)  
 JKxxxxN-54HL4-TV, (xxx=360-430, in steps of 5, 108 cells)  
 MNxxx72HLD-BBV (xxx=480-545, in steps of 5, 144 cells)  
 MNxxx66HLD-BBV (xxx=440-495, in steps of 5, 132 cells)  
 MNxxx60HLD-BBV (xxx=400-450, in steps of 5, 120 cells)  
 MNxxx54HLD-BBV (xxx=360-405, in steps of 5, 108 cells)  
 JKxxxxN-7RL4-V (xxx=535-590, in steps of 5, 156 cells)  
 JKxxxxN-7TL4-V (xxx=495-600, in steps of 5, 144 cells)  
 JKxxxxN-7TL4R-V (xxx=495-600, in steps of 5, 144 cells)  
 JKxxxxN-6RL4-V (xxx=455-495, in steps of 5, 132 cells)  
 JKxxxxN-6TL4-V (xxx=415-450, in steps of 5, 120 cells)

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JKxxxxN-5RL4-V (xxx=375-460, in steps of 5, 108 cells)  
 MNxxx7RLD-MBV (xxx=535-590, in steps of 5, 156 cells)  
 MNxxx7TLD-MBV (xxx=495-540, in steps of 5, 144 cells)  
 MNxxx6RLD-MBV (xxx=455-495, in steps of 5, 132 cells)  
 MNxxx6TLD-MBV (xxx=415-450, in steps of 5, 120 cells)  
 MNxxx5RLD-MBV (xxx=375-405, in steps of 5, 108 cells)  
 JKxxxxN-7RL4-TV (xxx=520-585, in steps of 5, 156 cells)  
 JKxxxxN-7TL4-TV (xxx=480-590, in steps of 5, 144 cells)  
 JKxxxxN-7TL4R-TV (xxx=480-590, in steps of 5, 144 cells)  
 JKxxxxN-6RL4-TV (xxx=440-495, in steps of 5, 132 cells)  
 JKxxxxN-6TL4-TV (xxx=400-450, in steps of 5, 120 cells)  
 JKxxxxN-5RL4-TV (xxx=365-405, in steps of 5, 108 cells)  
 MNxxx7RLD-BBV (xxx=520-585, in steps of 5, 156 cells)  
 MNxxx7TLD-BBV (xxx=480-540, in steps of 5, 144 cells)  
 MNxxx6RLD-BBV (xxx=440-495, in steps of 5, 132 cells)  
 MNxxx6TLD-BBV (xxx=400-450, in steps of 5, 120 cells)  
 MNxxx5RLD-BBV (xxx=365-405, in steps of 5, 108 cells)  
 JKxxxxM-72HL4-B-V, JKxxxxM-72HL4-S-B-V  
 (xxx=510-535, in steps of 5, 144 cells)  
 JKxxxxM-66HL4-B-V, JKxxxxM-66HL4-S-B-V  
 (xxx=465-490, in steps of 5, 132 cells)  
 JKxxxxM-60HL4-B-V, JKxxxxM-60HL4-S-B-V  
 (xxx=425-445, in steps of 5, 120 cells)  
 JKxxxxM-54HL4-B-V, JKxxxxM-54HL4-S-B-V  
 (xxx=380-400, in steps of 5, 108 cells)  
 JKxxxxN-72HL4-B-V (xxx=510-535, in steps of 5, 144 cells)  
 JKxxxxN-66HL4-B-V (xxx=465-490, in steps of 5, 132 cells)  
 JKxxxxN-60HL4-B-V (xxx=425-445, in steps of 5, 120 cells)  
 JKxxxxN-54HL4-B-V (xxx=380-400, in steps of 5, 108 cells)  
 JKxxxxM-7RL4-B-V (xxx=540-575, in steps of 5, 156 cells)  
 JKxxxxM-7TL4-B-V (xxx=495-530, in steps of 5, 144 cells)  
 JKxxxxM-6RL4-B-V (xxx=455-485, in steps of 5, 132 cells)  
 JKxxxxM-6TL4-B-V (xxx=415-440, in steps of 5, 120 cells)  
 JKxxxxN-5RL4-B-V (xxx=375-395, in steps of 5, 108 cells)  
 JKxxxxN-7RL4-B-V (xxx=540-575, in steps of 5, 156 cells)  
 JKxxxxN-7TL4-B-V (xxx=495-530, in steps of 5, 144 cells)  
 JKxxxxN-6RL4-B-V (xxx=455-485, in steps of 5, 132 cells)  
 JKxxxxN-6TL4-B-V (xxx=415-440, in steps of 5, 120 cells)  
 JKxxxxN-5RL4-B-V (xxx=375-395, in steps of 5, 108 cells)  
 JKxxxxM-72HLM-TV (xxx=425-460, in steps of 5, 144 cells)  
 JKxxxxM-60HLM-TV (xxx=355-380, in steps of 5, 120 cells)  
 JKxxxxM-72HLM-B-V, JKMSxxxM-72HLM-B-V-MX3  
 (xxx=415-445, in steps of 5, 144 cells)  
 JKxxxxM-60HLM-B-V, JKMSxxxM-60HLM-B-V-MX3  
 (xxx=350-370, in steps of 5, 120 cells)  
 JKxxxM-66R5-MWV (xxx=630-665, in steps of 5, 132 cells)  
 JKxxxM-66R5-BTV (xxx=630-660, in steps of 5, 132 cells)  
 JKxxxM-66H5-MWV (xxx=635-670, in steps of 5, 132 cells)  
 JKxxxM-66H5-BTV (xxx=630-665, in steps of 5, 132 cells)  
 JKxxxN-66H5-BTV (xxx=625-700, in steps of 5, 132 cells)  
 JKxxxN-66H5-MWV (xxx=630-695, in steps of 5, 132 cells)

1000VDC system voltage:  
 JKxxxxM-72, JKxxxxM-72(Plus), JKxxxxM-72L, JKxxxxM-72B,  
 JKxxxxM-72BL, JKMSxxxM-72, JKMSxxxM-72-J, JKMSxxxM-72-TI,  
 JKMSxxxM-72L-TI, JKMSxxxM-72B-TI, JKMSxxxM-72BL-TI  
 (xxx=335-410, in steps of 5, 72 cells)  
 JKxxxxM-60, JKxxxxM-60(Plus), JKxxxxM-60L, JKxxxxM-60B,  
 JKxxxxM-60BL, JKMSxxxM-60, JKMSxxxM-60-J, JKMSxxxM-60-TI,  
 JKMSxxxM-60L-TI, JKMSxxxM-60B-TI, JKMSxxxM-60BL-TI  
 (xxx=270-340, in steps of 5, 60 cells)  
 MMxxx-72LA-MB, MMxxx-72LA-AB, SMMxxx-72LA-MB, SMMxxx-72LA-MB-TI,  
 SMMxxx-72LA-AB-TI (xxx=335-410, in steps of 5, 72 cells)  
 MMxxx-60LA-MB, MMxxx-60LA-AB, SMMxxx-60LA-MB-TI, SMMxxx-60LA-AB-  
 TI (xxx=270-340, in steps of 5, 60 cells)  
 JKxxxxM-72H, JKxxxxM-72HL, JKxxxxM-72HB, JKxxxxM-72HBL,  
 JKMSxxxM-72H-TI, JKMSxxxM-72HL-TI, JKMSxxxM-72HB-TI,  
 JKMSxxxM-72HBL-TI (xxx=335-425, in steps of 5, 144 cells)  
 JKxxxxM-60H, JKxxxxM-60HL, JKxxxxM-60HB, JKxxxxM-60HBL,

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JKMSxxxM-60H-TI, JKMSxxxM-60HL-TI, JKMSxxxM-60HB-TI,  
 JKMSxxxM-60HBL-TI (xxx=270-350, in steps of 5, 120 cells)  
 MMxxx-72HLA-MB, MMxxx-72HLA-AB, SMMxxx-72HLA-MB-TI,  
 SMMxxx-72HLA-AB-TI (xxx=335-425, in steps of 5, 144 cells)  
 MMxxx-60HLA-MB, MMxxx-60HLA-AB, SMMxxx-60HLA-MB-TI,  
 SMMxxx-60HLA-AB-TI (xxx=270-350, in steps of 5, 120 cells)  
 JKMSxxxM-72HL-Q, JKMSxxxM-72HBL-Q, JKMSxxxM-72HL-TI-Q,  
 JKMSxxxM-72HBL-TI-Q (xxx=335-425, in steps of 5, 144 cells)  
 JKMSxxxM-60HL-Q, JKMSxxxM-60HBL-Q, JKMSxxxM-60HL-TI-Q,  
 JKMSxxxM-60HBL-TI-Q (xxx=270-350, in steps of 5, 120 cells)  
 JKMSxxxPP-72, JKMSxxxPP-72(Plus), JKMSxxxPP-72B, JKMSxxxPP-72,  
 JKMSxxxPP-72-J (xxx=320-355, in steps of 5, 72 cells)  
 JKMSxxxPP-60, JKMSxxxPP-60(Plus), JKMSxxxPP-60B, JKMSxxxPP-60,  
 JKMSxxxPP-60-J (xxx=260-290, in steps of 5, 60 cells)  
 JKMSxxxPP-72H, JKMSxxxPP-72HB (xxx=330-380, in steps of 5, 144 cells)  
 JKMSxxxPP-60H, JKMSxxxPP-60HB (xxx=260-315, in steps of 5, 120 cells)  
 JKMSxxxM-72H-T, JKMSxxxM-72HL-T (xxx=375-425, in steps of 5, 144 cells)  
 JKMSxxxM-60H-T, JKMSxxxM-60HL-T (xxx=315-355, in steps of 5, 120 cells)  
 JKMSxxxM-72HL-T-Q, MMxxx-72HLA-BB (xxx=375-425, in steps of 5, 144 cells)  
 JKMSxxxM-60HL-T-Q, MMxxx-60HLA-BB (xxx=315-355, in steps of 5, 120 cells)  
 JKMSxxxN-72H-T, JKMSxxxN-72HL-T (xxx=375-425, in steps of 5, 144 cells)  
 JKMSxxxN-60H-T, JKMSxxxN-60HL-T (xxx=315-355 in steps of 5, 120 cells)  
 JKMSxxxM-72-MX3, JKMSxxxM-72B-MX3, JKMSxxxM-72L-MX3,  
 JKMSxxxM-72BL-MX3 (xxx=335-395, in steps of 5, 72 cells)  
 JKMSxxxM-60-MX3, JKMSxxxM-60B-MX3, JKMSxxxM-60L-MX3,  
 JKMSxxxM-60BL-MX3 (xxx=270-340, in steps of 5, 60 cells)  
 SMMxxx-72LA-MB-MX3, SMMxxx-72LA-AB-MX3  
 (xxx=335-395, in steps of 5, 72 cells)  
 SMMxxx-60LA-MB-MX3, SMMxxx-60LA-AB-MX3  
 (xxx=270-340, in steps of 5, 60 cells)  
 JKMSxxxM-72H-MX3, JKMSxxxM-72HB-MX3, JKMSxxxM-72HL-MX3,  
 JKMSxxxM-72HBL-MX3 (xxx=335-395, in steps of 5, 144 cells)  
 JKMSxxxM-60H-MX3, JKMSxxxM-60HB-MX3, JKMSxxxM-60HL-MX3,  
 JKMSxxxM-60HBL-MX3 (xxx=270-340, in steps of 5, 120 cells)  
 JKMSxxxM-72HL-MX3-Q, JKMSxxxM-72HBL-MX3-Q, SMMxxx-72HLA-MB-MX3,  
 SMMxxx-72HLA-AB-MX3, (xxx=335-395, in steps of 5, 144 cells)  
 JKMSxxxM-60HL-MX3-Q, JKMSxxxM-60HBL-MX3-Q, SMMxxx-60HLA-MB-MX3,  
 SMMxxx-60HLA-AB-MX3 (xxx=270-340, in steps of 5, 120 cells)  
 JKMSxxxPP-72-MX3, JKMSxxxPP-72B-MX3, JKMSxxxPP-72L-MX3,  
 JKMSxxxPP-72BL-MX3 (xxx=320-355, in steps of 5, 72 cells)  
 JKMSxxxPP-60-MX3, JKMSxxxPP-60B-MX3, JKMSxxxPP-60L-MX3,  
 JKMSxxxPP-60BL-MX3 (xxx=260-290, in steps of 5, 60 cells)  
 JKMSxxxPP-72H-MX3, JKMSxxxPP-72HB-MX3, JKMSxxxPP-72HL-MX3,  
 JKMSxxxPP-72HBL-MX3 (xxx=330-380, in steps of 5, 144cells)  
 JKMSxxxPP-60H-MX3, JKMSxxxPP-60HB-MX3, JKMSxxxPP-60HL-MX3,  
 JKMSxxxPP-60HBL-MX3 (xxx=260-315, in steps of 5, 120 cells)  
 JKMSxxxM-72H-MBB, JKMSxxxM-72H-MBB-TI, JKMSxxxM-72H-MBB-MX3  
 (xxx=385-425, in steps of 5, 144 cells)  
 JKMSxxxM-60H-MBB, JKMSxxxM-60H-MBB-TI, JKMSxxxM-60H-MBB-MX3  
 (xxx=320-355, in steps of 5, 120 cells)  
 MMxxx-72HLA-MB-MBB, SMMxxx-72HLA-MB-MBB-TI  
 (xxx=385-425, in steps of 5, 144 cells)  
 MMxxx-60HLA-MB-MBB, SMMxxx-60HLA-MB-MBB-TI  
 (xxx=320-355, in steps of 5, 120 cells)  
 JKMSxxxM-72H-MBB-T (xxx=385-405, in steps of 5, 144 cells)  
 JKMSxxxM-60H-MBB-T (xxx=320-335, in steps of 5, 120 cells)  
 JKMSxxxN-72H-MBB-T (xxx=390-420, in steps of 5, 144 cells)  
 JKMSxxxN-60H-MBB-T (xxx=330-350, in steps of 5, 120 cells)  
 JKSM3-DFCA-xxx (xxx=400-440, in steps of 5, 156 cells)  
 JKSM3-CFCA-xxx (xxx=335-370, in steps of 5, 132 cells)  
 JKSM3-DHCA-xxx (xxx=400-450, in steps of 5, 156 cells)  
 JKSN3-CHCA-xxx (xxx=340-380, in steps of 5, 132 cells)  
 JKSN3-DHCA-xxx (xxx=410-440, in steps of 5, 156 cells)  
 JKSN3-CHCA-xxx (xxx=345-370, in steps of 5, 132 cells)  
 JKMSxxxM-78H, JKMSxxxM-78H-TI (xxx=405-465, in steps of 5, 156 cells)  
 JKMSxxxM-66H, JKMSxxxM-66H-TI (xxx=340-390, in steps of 5, 132 cells)  
 MMxxx-78HLA-MB, SMMxxx-78HLA-MB-TI  
 (xxx=405-465, in steps of 5, 156 cells)  
 MMxxx-66HLA-MB, SMMxxx-66HLA-MB-TI  
 (xxx=340-390, in steps of 5, 132 cells)

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JKMxxxM-78HB, JKMSxxxM-78HB-TI (xxx=405-435, in steps of 5, 156 cells)  
 JKMSxxxM-66HB, JKMSxxxM-66HB-TI (xxx=340-365, in steps of 5, 132 cells)  
 MMxxx-78HLA-AB, SMMxxx-78HLA-AB-TI (xxx=405-435, in steps of 5, 156 cells)  
 MMxxx-66HLA-AB, SMMxxx-66HLA-AB-TI (xxx=340-365, in steps of 5, 132 cells)  
 JKMxxxM-78H-T (xxx=405-455, in steps of 5, 156 cells)  
 JKMxxxM-66H-T (xxx=340-385, in steps of 5, 132 cells)  
 JKMxxxN-78H-T (xxx=410-460, in steps of 5, 156 cells)  
 JKMxxxN-66H-T (xxx=345-385, in steps of 5, 132 cells)  
 JKMxxxM-7RL3, JKMxxxM-7RL3-J, JKMSxxxM-7RL3-TI (xxx=430-495, in steps of 5, 156 cells)  
 JKMxxxM-6RL3, JKMxxxM-6RL3-J, JKMSxxxM-6RL3-TI, JKMSxxxM-6RL3-MX3 (xxx=360-415, in steps of 5, 132 cells)  
 JKMxxxM-6TL3, JKMSxxxM-6TL3-TI, JKMSxxxM-6TL3-MX3 (xxx=335-380, in steps of 5, 120 cells)  
 MMxxx-7RLC-MB, SMMxxx-7RLC-MB-TI (xxx=430-475, in steps of 5, 156 cells)  
 MMxxx-6RLC-MB, SMMxxx-6RLC-MB-TI (xxx=360-400, in steps of 5, 132 cells)  
 MMxxx-6TLC-MB, SMMxxx-6TLC-MB-TI (xxx=335-365, in steps of 5, 120 cells)  
 JKMxxxN-7RL3, JKMxxxN-7RL3-J, JKMSxxxN-7RL3-TI (xxx=430-500, in steps of 5, 156 cells)  
 JKMxxxN-6RL3, JKMxxxN-6RL3-J, JKMSxxxN-6RL3-TI, JKMSxxxN-6RL3-MX3 (xxx=360-420, in steps of 5, 132 cells)  
 JKMxxxN-6TL3, JKMSxxxN-6TL3-TI, JKMSxxxN-6TL3-MX3 (xxx=335-390, in steps of 5, 120 cells)  
 MNxxx-7RLC-MB, SMNxxx-7RLC-MB-TI (xxx=430-490, in steps of 5, 156 cells)  
 MNxxx-6RLC-MB, SMNxxx-6RLC-MB-TI (xxx=360-410, in steps of 5, 132 cells)  
 MNxxx-6TLC-MB, SMNxxx-6TLC-MB-TI (xxx=335-375, in steps of 5, 120 cells)  
 JKMxxxM-7RL3-T, JKMxxxM-7RL3-T-J (xxx=420-475, in steps of 5, 156 cells)  
 JKMxxxM-6RL3-T, JKMxxxM-6RL3-T-J (xxx=355-400, in steps of 5, 132 cells)  
 JKMxxxM-6TL3-T (xxx=325-365, in steps of 5, 120 cells)  
 JKMxxxN-7RL3-T, JKMxxxN-7RL3-T-J (xxx=425-475, in steps of 5, 156 cells)  
 JKMxxxN-6RL3-T, JKMxxxN-6RL3-T-J (xxx=355-400, in steps of 5, 132 cells)  
 JKMxxxN-6TL3-T (xxx=325-365, in steps of 5, 120 cells)  
 JKMxxxN-72H-MBB, JKMSxxxN-72H-MBB-TI (xxx=385-425, in steps of 5, 144 cells)  
 JKMxxxN-60H-MBB, JKMSxxxN-60H-MBB-TI (xxx=320-350, in steps of 5, 120 cells)  
 MNxxx-72HLA-MB-MBB, SMNxxx-72HLA-MB-MBB-TI (xxx=385-425, in steps of 5, 144 cells)  
 MNxxx-60HLA-MB-MBB, SMNxxx-60HLA-MB-MBB-TI (xxx=320-350, in steps of 5, 120 cells)  
 JKMxxxM-7RL3-B, JKMSxxxM-7RL3-B-TI (xxx=425-480, in steps of 5, 156 cells)  
 JKMxxxM-6RL3-B, JKMSxxxM-6RL3-B-TI, JKMSxxxM-6RL3-B-MX3 (xxx=360-405, in steps of 5, 132 cells)  
 JKMxxxM-6TL3-B, JKMSxxxM-6TL3-B-TI, JKMSxxxM-6TL3-B-MX3 (xxx=320-365, in steps of 5, 120 cells)  
 MMxxx-7RLC-AB, SMMxxx-7RLC-AB-TI (xxx=425-480, in steps of 5, 156 cells)  
 MMxxx-6RLC-AB, SMMxxx-6RLC-AB-TI (xxx=360-405, in steps of 5, 132 cells)  
 MMxxx-6TLC-AB, SMMxxx-6TLC-AB-TI (xxx=320-365, in steps of 5, 120 cells)  
 JKMxxxN-7RL3-B, JKMSxxxN-7RL3-B-TI (xxx=425-480, in steps of 5, 156 cells)  
 JKMxxxN-6RL3-B, JKMSxxxN-6RL3-B-TI, JKMSxxxN-6RL3-B-MX3 (xxx=360-425, in steps of 5, 132 cells)  
 JKMxxxN-6TL3-B, JKMSxxxN-6TL3-B-TI, JKMSxxxN-6TL3-B-MX3 (xxx=320-385, in steps of 5, 120 cells)  
 MNxxx-7RLC-AB, SMNxxx-7RLC-AB-TI (xxx=425-480, in steps of 5, 156 cells)  
 MNxxx-6RLC-AB, SMNxxx-6RLC-AB-TI (xxx=360-405, in steps of 5, 132 cells)  
 MNxxx-6TLC-AB, SMNxxx-6TLC-AB-TI (xxx=320-365, in steps of 5, 120 cells)  
 JKMxxxN-72H-MBB-B, JKMSxxxN-72H-MBB-B-TI (xxx=380-400, in steps of 5, 144 cells)  
 JKMxxxN-60H-MBB-B, JKMSxxxN-60H-MBB-B-TI (xxx=315-330, in steps of 5, 120 cells)  
 JKMxxxN-48H-MBB-B (xxx=255-265, in steps of 5, 96 cells)



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JKMxxxN-32H-MBB-B (xxx=170-175, in steps of 5, 64 cells)  
 MNxxx-72HLA-AB-MBB, SMNxxx-72HLA-AB-MBB-TI  
 (xxx=380-400, in steps of 5, 144 cells)  
 MNxxx-60HLA-AB-MBB, SMNxxx-60HLA-AB-MBB-TI  
 (xxx=315-330, in steps of 5, 120 cells)  
 JKMxxxM-72HLM, JKMSxxxM-72HLM-MX3 (xxx=420-465, in steps of 5, 144 cells)  
 JKMxxxM-60HLM, JKMSxxxM-60HLM-MX3 (xxx=350-385, in steps of 5, 120 cells)  
 MMxxx-72HLM-MB (xxx=420-465, in steps of 5, 144 cells)  
 MMxxx-60HLM-MB (xxx=350-385, in steps of 5, 120 cells)  
 JKMxxxM-72HL4, JKMxxxM-72HL4-J (xxx=475-585, in steps of 5, 144 cells)  
 JKMxxxM-66HL4 (xxx=440-505, in steps of 5, 132 cells)  
 JKMxxxM-60HL4 (xxx=400-485, in steps of 5, 120 cells)  
 JKMxxxM-54HL4 (xxx=360-430, in steps of 5, 108 cells)  
 MMxxx-72HLD-MB (xxx=475-570, in steps of 5, 144 cells)  
 MMxxx-66HLD-MB (xxx=440-505, in steps of 5, 132 cells)  
 MMxxx-60HLD-MB (xxx=400-470, in steps of 5, 120 cells)  
 MMxxx-54HLD-MB (xxx=360-420, in steps of 5, 108 cells)  
 JKMxxxM-7RL4, JKMxxxM-7RL4-J (xxx=535-590, in steps of 5, 156 cells)  
 JKMxxxM-7TL4, JKMxxxM-7TL4-J (xxx=495-570, in steps of 5, 144 cells)  
 JKMxxxM-6RL4 (xxx=455-495, in steps of 5, 132 cells)  
 JKMxxxM-6TL4 (xxx=415-450, in steps of 5, 120 cells)  
 JKMxxxM-5RL4 (xxx=375-435, in steps of 5, 108 cells)  
 MMxxx-7RLD-MB (xxx=535-590, in steps of 5, 156 cells)  
 MMxxx-7TLD-MB (xxx=495-540, in steps of 5, 144 cells)  
 MMxxx-6RLD-MB (xxx=455-495, in steps of 5, 132 cells)  
 MMxxx-6TLD-MB (xxx=415-450, in steps of 5, 120 cells)  
 MMxxx-5RLD-MB (xxx=375-405, in steps of 5, 108 cells)  
 JKMxxxM-78H-MBB, JKMSxxxM-78H-MBB-MX3  
 (xxx=440-465, in steps of 5, 156 cells)  
 JKMxxxM-66H-MBB, JKMSxxxM-66H-MBB-MX3  
 (xxx=370-390, in steps of 5, 132 cells)  
 MMxxx-78HLA-MB-MBB (xxx=440-465, in steps of 5, 156 cells)  
 MMxxx-66HLA-MB-MBB (xxx=370-390, in steps of 5, 132 cells)  
 JKMxxxN-78HL4, JKMxxxN-78HL4R (xxx=570-650, in steps of 5, 156 cells)  
 JKMxxxN-72HL4 (xxx=485-615, in steps of 5, 144 cells)  
 JKMxxxN-72HL4R (xxx=485-615, in steps of 5, 144 cells)  
 JKMxxxN-66HL4 (xxx=445-525, in steps of 5, 132 cells)  
 JKMxxxN-60HL4 (xxx=405-510, in steps of 5, 120 cells)  
 JKMxxxN-60HL4-J (xxx=405-510, in steps of 5, 120 cells)  
 JKMxxxN-60HL4R (xxx=405-510, in steps of 5, 120 cells)  
 JKMxxxN-54HL4, JKMxxxN-54HL4R (xxx=365-455, in steps of 5, 108 cells)  
 MNxxx-72HLD-MB (xxx=485-555, in steps of 5, 144 cells)  
 MNxxx-66HLD-MB (xxx=445-505, in steps of 5, 132 cells)  
 MNxxx-60HLD-MB (xxx=405-460, in steps of 5, 120 cells)  
 MNxxx-54HLD-MB (xxx=365-415, in steps of 5, 108 cells)  
 JKMxxxN-7RL4 (xxx=535-590, in steps of 5, 156 cells)  
 JKMxxxN-7TL4 (xxx=495-600, in steps of 5, 144 cells)  
 JKMxxxN-7TL4R (xxx=495-600, in steps of 5, 144 cells)  
 JKMxxxN-6RL4 (xxx=455-495, in steps of 5, 132 cells)  
 JKMxxxN-6TL4 (xxx=415-450, in steps of 5, 120 cells)  
 JKMxxxN-5RL4 (xxx=375-460, in steps of 5, 108 cells)  
 MNxxx-7RLD-MB (xxx=535-590, in steps of 5, 156 cells)  
 MNxxx-7TLD-MB (xxx=495-540, in steps of 5, 144 cells)  
 MNxxx-6RLD-MB (xxx=455-495, in steps of 5, 132 cells)  
 MNxxx-6TLD-MB (xxx=415-450, in steps of 5, 120 cells)  
 MNxxx-5RLD-MB (xxx=375-405, in steps of 5, 108 cells)  
 JKMxxxM-72HL4-B (xxx=510-535, in steps of 5, 144 cells)  
 JKMxxxM-66HL4-B (xxx=465-490, in steps of 5, 132 cells)  
 JKMxxxM-60HL4-B (xxx=425-445, in steps of 5, 120 cells)  
 JKMxxxM-54HL4-B (xxx=380-425, in steps of 5, 108 cells)  
 JKMxxxN-72HL4-B (xxx=510-535, in steps of 5, 144 cells)  
 JKMxxxN-66HL4-B (xxx=465-490, in steps of 5, 132 cells)  
 JKMxxxN-60HL4-B (xxx=425-470, in steps of 5, 120 cells)  
 JKMxxxN-54HL4-B, JKMxxxN-54HL4R-B  
 (xxx=380-450, in steps of 5, 108 cells)  
 JKMxxxM-7RL4-B (xxx=540-575, in steps of 5, 156 cells)  
 JKMxxxM-7TL4-B (xxx=495-530, in steps of 5, 144 cells)

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JKMxxxM-6RL4-B (xxx=455-485, in steps of 5, 132 cells)  
 JKMxxxM-6TL4-B (xxx=415-440, in steps of 5, 120 cells)  
 JKMxxxM-5RL4-B (xxx=375-430, in steps of 5, 108 cells)  
 JKMxxxN-7RL4-B (xxx=540-575, in steps of 5, 156 cells)  
 JKMxxxN-7TL4-B (xxx=495-530, in steps of 5, 144 cells)  
 JKMxxxN-6RL4-B (xxx=455-485, in steps of 5, 132 cells)  
 JKMxxxN-6TL4-B (xxx=415-440, in steps of 5, 120 cells)  
 JKMxxxN-5RL4-B (xxx=375-455, in steps of 5, 108 cells)  
 JKMxxxN-72HL3-MBB-B (xxx=400-445, in steps of 5, 144 cells)  
 JKMxxxN-60HL3-MBB-B (xxx=330-370, in steps of 5, 120 cells)  
 JKMxxxN-48HL3-MBB-B (xxx=270-295, in steps of 5, 96 cells)  
 JKMxxxN-32HL3-MBB-B (xxx=180-195, in steps of 5, 64 cells)  
 JKMxxxM-72HLM-B, JKMSxxxM-72HLM-B-MX3  
 (xxx=415-445, in steps of 5, 144 cells)  
 JKMxxxM-60HLM-B, JKMSxxxM-60HLM-B-MX3  
 (xxx=350-370, in steps of 5, 120 cells)  
 JKxxxM-66R5-MW (xxx=630-665, in steps of 5, 132 cells)  
 JKxxxM-66H5-MW (xxx=635-670, in steps of 5, 132 cells)  
 JKMxxxM-36H (xxx=195-205, in steps of 5, 72 cells)  
 xxx is standing for rated output power at STC

## Parameters:

Fire Safety Class: Class C according to UL790.  
 Safety Class: Class II  
 Max. System Voltage: 1500V DC or 1000V DC  
 Construction: Framed, with Junction box, cable and connector.

## Production

### Facility(ies):

074043, 105416, 115863, 115864, 115883, 115858,  
 115861, 115876, 116025, 118612, 121280, 119488,  
 115860, 115862, 004170, 075612, 119487, 115859,  
 122742

## Tested according to:

IEC 61215-1:2016  
 IEC 61215-1-1:2016  
 IEC 61215-2:2016  
 IEC 61730-1:2016  
 IEC 61730-2:2016  
 EN 61215-1:2016  
 EN 61215-1-1:2016  
 EN 61215-2:2017  
 EN IEC 61730-1:2018  
 EN IEC 61730-1:2018/AC:2018-06  
 EN IEC 61730-2:2018  
 EN IEC 61730-2:2018/AC:2018-06