SMT SWISS MAINS – GIS MONITORING PRODUCTS

Application Manual

GMS-IV-xx dB-MF, LPB 83 MHz, PSG-xCH-xF-xx

INTRODUCTION

Product description & scope of application for GMS-IV-xx dB-MF

GMS-IV is a low-noise measuring preamplifier for monitoring gas insulated switchgear (GIS). This amplifier technology allows to detect the broadband transmissions small defects or impurities in the GIS. Thus, vulnerabilities can be detected early and damage can be avoided. The amplifiers are powered via the coaxial cable at the output. A protective circuit at the input prevents the destruction by excessive input power.

GMS-IV-50 dB-MF Best.-Nr.: SMT-55-0018	GMS-IV-45 dB-MF Best.-Nr.: SMT-55-0019	GMS-IV-40 dB-MF Best.-Nr.: SMT-55-0020
GMS-IV-35 dB-MF Best.-Nr.: SMT-55-0021	GMS-IV-30 dB-MF Best.-Nr.: SMT-55-0022	GMS-IV-50 dB-MFP Best.-Nr.: SMT-55-0023
GMS-IV-30 dB-MFP Best.-Nr.: SMT-55-0027	GMS-IV-50 dB-FMP Best.-Nr.: SMT-55-0048	GMS-IV-30 dB-MF12P-IP65 Best.-Nr.: SMT-55-0057

Product description & scope of application for LPB 83 MHz

This amplifier technology allows to detect the broadband transmissions of small defects or impurities in the GIS. Thus, vulnerabilities can be detected early and damage can be avoided. The LPB is connected to the GIS system between the sensor and the LAG and prevents the destruction of the GMS-IV amplifier by excessive input power.

LPB 83 MHz Best.-Nr.: SMT-55-0032

Product description & scope of application for PSG-xCH-xF-xx

The PSG series has 1-3 integrated bias tees power supplies and can be used in combination with our GMS-IV amplifiers or for general applications. The PSG has on the reverse RF inputs, which are powered with 15VDC. On the front you have the appropriate RF outputs. Each input has its own bias tee power supply, which is protected with a fuse.

PSG-1CH-EF-ET Best.-Nr.: SMT-55-0076	PSG-1CH-EF Best.-Nr.: SMT-55-0077	PSG-1CH-MF-ET Best.-Nr.: SMT-55-0055
PSG-1CH-MF Best.-Nr.: SMT-55-0056	PSG-2CH-EF-ET Best.-Nr.: SMT-55-0039	PSG-2CH-EF Best.-Nr.: SMT-55-0043
PSG-2CH-MF-ET Best.-Nr.: SMT-55-0044	PSG-2CH-MF Best.-Nr.: SMT-55-0045	PSG-3CH-MF-ET Best.-Nr.: SMT-55-0046
PSG-3CH-MF Best.-Nr.: SMT-55-0047		

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IMPORTANT INFORMATION

1. Always connect the grounding before plugging in the mains connector

2. Never disconnect the grounding while the PSG-3CH-MF-ET is still on!

3. Always connect the LPB 83 MHz and the GMS-IV-50 dB before connecting it with the PSG-3CH-MF-ET!

4. Never disconnect the LPB 83 MHz from the GMS-IV-50 dB before it has been disconnected from the PSG-3CH-MF-ET!

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INSTALLATION

1. Connect Grounding before plugging in the mains connector.

2. Connect LPB 83 MHz to GIS (GIS → RF IN, LPB 83 MHz)
3. Connect GMS-IV-50 dB to LPB 83 MHz (RF OUT, LPB 83 MHz → RF IN, GMS-IV-50 dB)
4. Connect GMS-IV-50 dB to coaxial cable (RF OUT, GMS-IV-50 dB → coaxial cable)

5. Connect coaxial cable to PSG-3CH-MF-ET (RF OUT, GMS-IV-50 dB → RF IN / DC OUT, PSG-3CH-MF-ET)

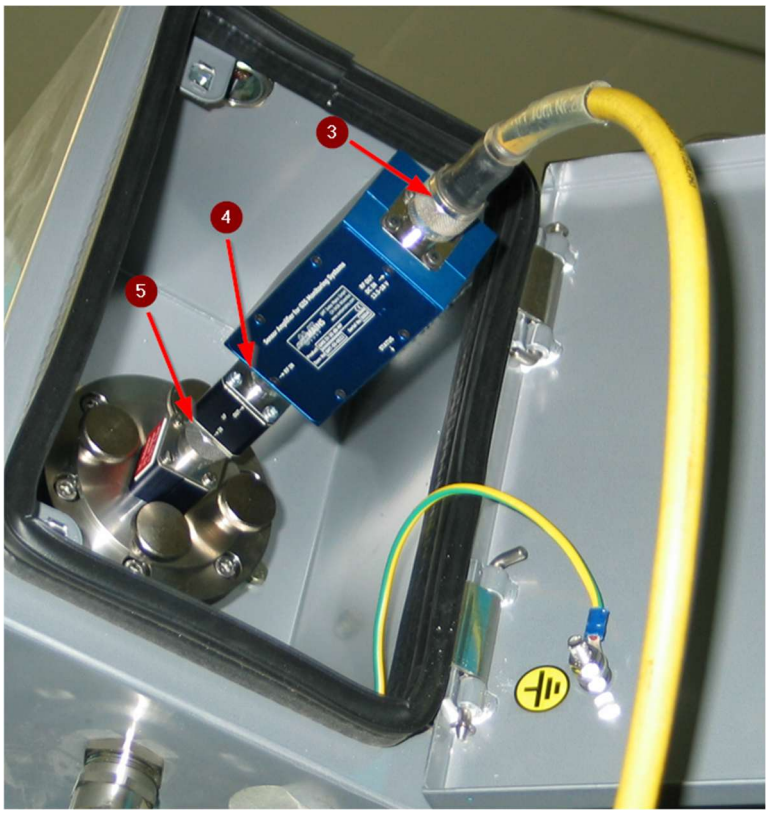
6. Switch on PSG-3CH-MF-ET

UNINSTALLATION

1. Switch off PSG-3CH-MF-ET

2. Disconnect coaxial cable from PSG-3CH-MF-ET

3. Disconnect coaxial cable from GMS-IV-50 dB
4. Separate GMS-IV-50 dB from LPB 83 MHz
5. Disconnect LPB 83 MHz from GIS



6. Unplug the mains connector
7. Remove grounding from PSG-3CH-MF-ET

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CHANNEL CHANGE

1. Disconnect cable from PSG-3CH-MF-ET
2. Connect coaxial cable to another channel

There is no need to switch off the PSG for channel change.

Contact & Support

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