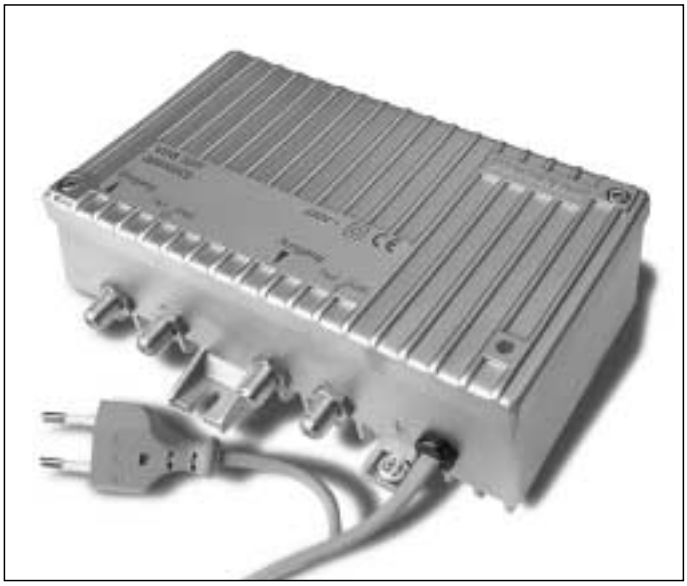
KATHREIN

In-house distribution amplifier VOS 30/F

20910002

- In-house distribution amplifier for modern HFC networks.
- Integrated switched mode power supply unit.
- Basic unit without return path.
- Options:
  The return path is activated by means of pluggable return path modules.
- A new alignment of the forward path is not required after a return path module has been plugged in.
- Integrated variable attenuator and equalizer allow optimum adaption to the local signal levels and cable lengths.
- The gain is adjustable to 24 or 30 dB by means of internal plug-in bridges.
- Test socket with directional coupler (-20 dB) on output.
- Test socket on input -20 dB (becomes operational by means of a plug-in bridge) for alignment of the return path.
- Injection of test signals on the return path is possible.
- The amplifier complies with the requirements of the guidelines 73/23 EC and 89/336 EC.
- Their use as receiving amplifier (in headends) is not permitted.



Technical data
Forward path

Basic version	MHz	47–862
Frequency range with VGR 25/30	MHz	47–862
Frequency range with VGR 25/65	MHz	80–862
Gain	dB	30/24
Variable range of gain	dB	0–20
Variable range of equalization	dB	0–20
Noise figure	dB	6

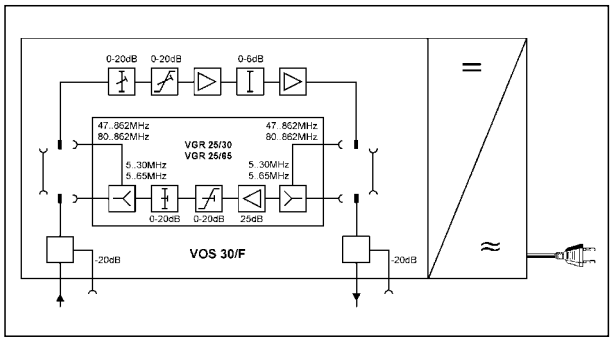
Return path in conjunction with return path module

Frequency range with VGR 25/30	MHz	5–30
Frequency range with VGR 25/65	MHz	5–65
Gain	dB	25
Variable range of gain	dB	0–20
Variable range of equalization	dB	0–20

Forward path

- Basic version with O-bridges (without return path module)
- Electrical data for the forward path are also valid in conjunction with the return path module.

Block diagram



Output level (max.)

		VOS 30/F	VGR 25/30 VGR 25/65	
3rd order 60 dB XM EN 50083-5 up to 862 MHz	dB	113	up to 30 MHz up to 65 MHz	116 (VGR 25/30) 116 (VGR 25/65)
2nd order 60 dB XM EN 50083-3 up to 862 MHz	dB	108	up to 30 MHz up to 65 MHz	116 (VGR 25/30 116 (VGR 25/65)

Operation level (max.)

up to 862 MHz
Measurement acc. to CENELEC (EN 50083-3)

CTB	42 channels (60 dB spacing)	dBµV	98
CSO	42 channels (60 dB spacing)	dBµV	100

Power supply unit

Input voltage	V~		230
Admis. input voltage	V~		198–253
Mains frequency	Hz		47–63
Power draw	W	without/with return path module	

General data

Temperature range	°C		-20 up to +55
Impedance	Ω		75
RF connections		F-Connectors	
Interference radiation	dBpW	5–30 MHz	≤ 27–20*)
	dBpW	30–862 MHz	≤ 20
Protection class		II	
Protection category		IP 50	

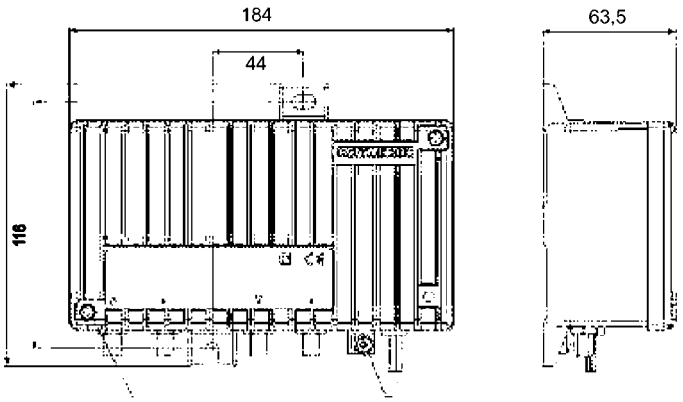
*) linear diminishing with the logarithm of the frequency.

Accessories

Return path module VGR 25/30 BN 20910003
Return path module VGR 25/65 BN 20910004
} fitted with filter for input and output

Installation only by authorized persons

The safety prescriptions according to
EN 50083-1 + A1 and
EN 60065 must be observed!

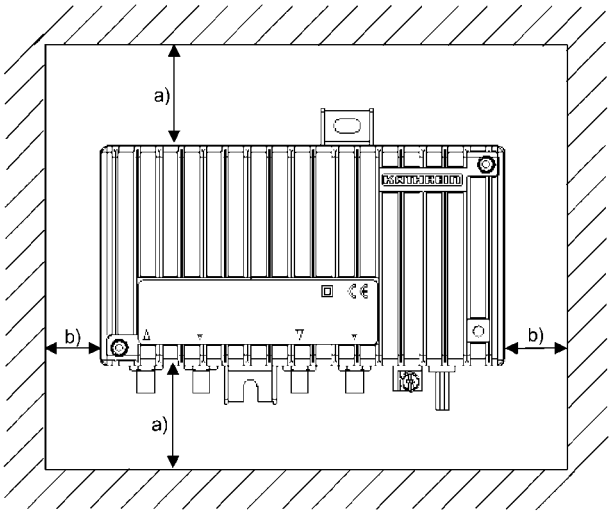


Screw down until stop

Potentiel equalisation:
Clamping range 4–6 mm²

Mounting position

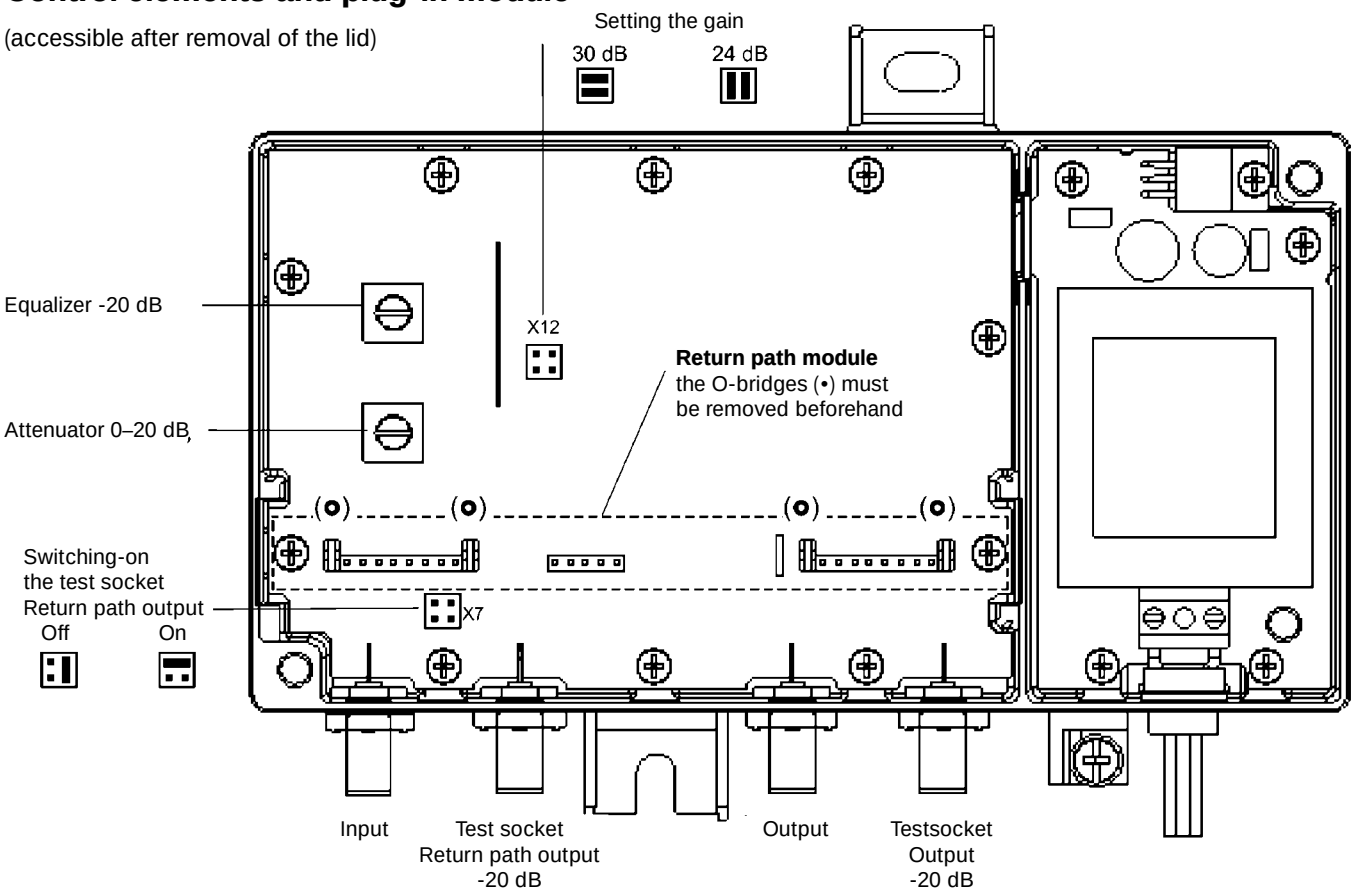
Attention! The unit is current conveying.
Pull the mains cable when installing.
Do not install on easily inflammable material!



a) Distance to adjacent objects ≥ 150 mm
b) Distance to adjacent objects ≥ 50 mm

Control elements and plug-in module

(accessible after removal of the lid)



Switching-on with test socket X7. Align the return path.
After the measurement: Switch-off with test socket X7.

Internet: http/www.kathrein.de

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