KATHREIN
Antennen · Electronic

Product Information

Monitorable House Connection Amplifier

• **VOS 930**	**24410017**	**28 dB**	**locally fed**
• **VOS 931**	**24410018**	**28 dB**	**remotely fed**
• **VOS 940**	**24410019**	**38 dB**	**locally fed**
• **VOS 941**	**24410020**	**38 dB**	**remotely fed**

Common features

- Monitorable house connection amplifier for modern inter-active HFC nets
- Latest GaAs technology used
- All tuning elements designed as slide switches
- Insert positions for monitoring transponder (HMS or KOM)
- Return path amplifier on-board (switchable 15/33 dB)
- Delivery status without return path filter (return path amplifier is deactivated)
- Variable frequency ranges with insertable return path filter
- Variable gain with switchable interstage-attenuation (0,-3 dB;-6 dB)
- Integrated de-emphasis equaliser to equalise out any pre-emphasis in BK 862 MHz nets in the C level
- Fixed interstage pre-emphasis (can be switched off for tuning)
- Ingress Control Switch
- High pass in return path for ingress suppression below 15 MHz
- All test sockets designed as directional couplers
- External test sockets on output to tune forward and return paths
- External test socket on return path output for ingress control
- Internal test socket on forward path input to control incoming signal
- Over-voltage protection on in and output
- Screened switched power supply with low power loss
- LED operational control externally viewable
- Cast housing with F connectors
- In-house mounting
- Dimensions (in mm): 225 x 54 x 155
- CE KLASSE A CLASS

Technical data subject to alteration

Technical Specification:

Type	**VOS 930**	**VOS 931**	**VOS 940**	**VOS 941**	
Order no.	24410017	24410018	24410019	24410020	
Forward path:					
Frequency range[1)]	47 – 862 or 80 – 862				MHz
Gain	28		38		dB
Max.operational level ANGA-ZVEI[2)] CTB ≥ 66 dB + CSO ≥ 64 dB	97		108		dBµV
Max.output level CENELEC[3)] CTB ≥ 60 dB CSO ≥ 60dB	98 99		108 109		dBµV
Variable gain range	0-16 in 2 dB steps				dB
Variable equalisation range	0-16 in 2 dB steps				dB
De-emphasis Input (switchable)	0; 3; 6				dB
Interstage attenuation (switchable)	0; 3; 6				dB
Interstage pre-emphasis	0 or 4		0 or 6		dB
Noise figure (0 dB Interstage)	5				dB
Return path:					
Frequency range[1)]	5-30 or 5-65				MHz
Gain (switchable)	33 or 15				dB
Max. output level: 60 dB IMod3 (EN 50083-5) to 65 MHz 60 dB IMod2 (EN 50083-3) to 65 MHz	116 107				dBµV
Input level density (CINR = 50dB)	-10				dBµV/Hz
Dynamic range (CINR ≥ 50 dB, 5-65 MHz)	17 dB				dB
Noise figure	5				dB
Attenuation setting range (output)	0-16 in 2 dB steps				dB
Slope setting range (output)	0; 3; 6				dB
Attenuation setting range (input)	0-16 in 2 dB steps				dB
High pass	15				MHz
Return path switch-off (manual / NMS)	0; -6; <-40				dB
General					
Voltage supply	198-253	38-65	198-253	38-65	VAC
Power draw	9	10,5	10	12,5	W
Max. remote feed current	-	3	-	3	A
RF-connectors	F-sockets				
Test socket Input forward path (intern.)	-20				dB
Test socket Output ret. path (external)	-20				dB
Test socket output (external)	-20				dB
Protection class housing	IP 54				
Ambient temperature range	-20 to +55				°C
Dimensions (WxHxD)	225 x 54 x 155				mm
Network management (optional)					
Monitoring transponder	TVM 801/H (KOM); TVM 840/H (HMS)				
Monitored parameters	Internal tension; current drain; temperature Forward path level; working point of return path filter Ingress Control Switch (ICS)				

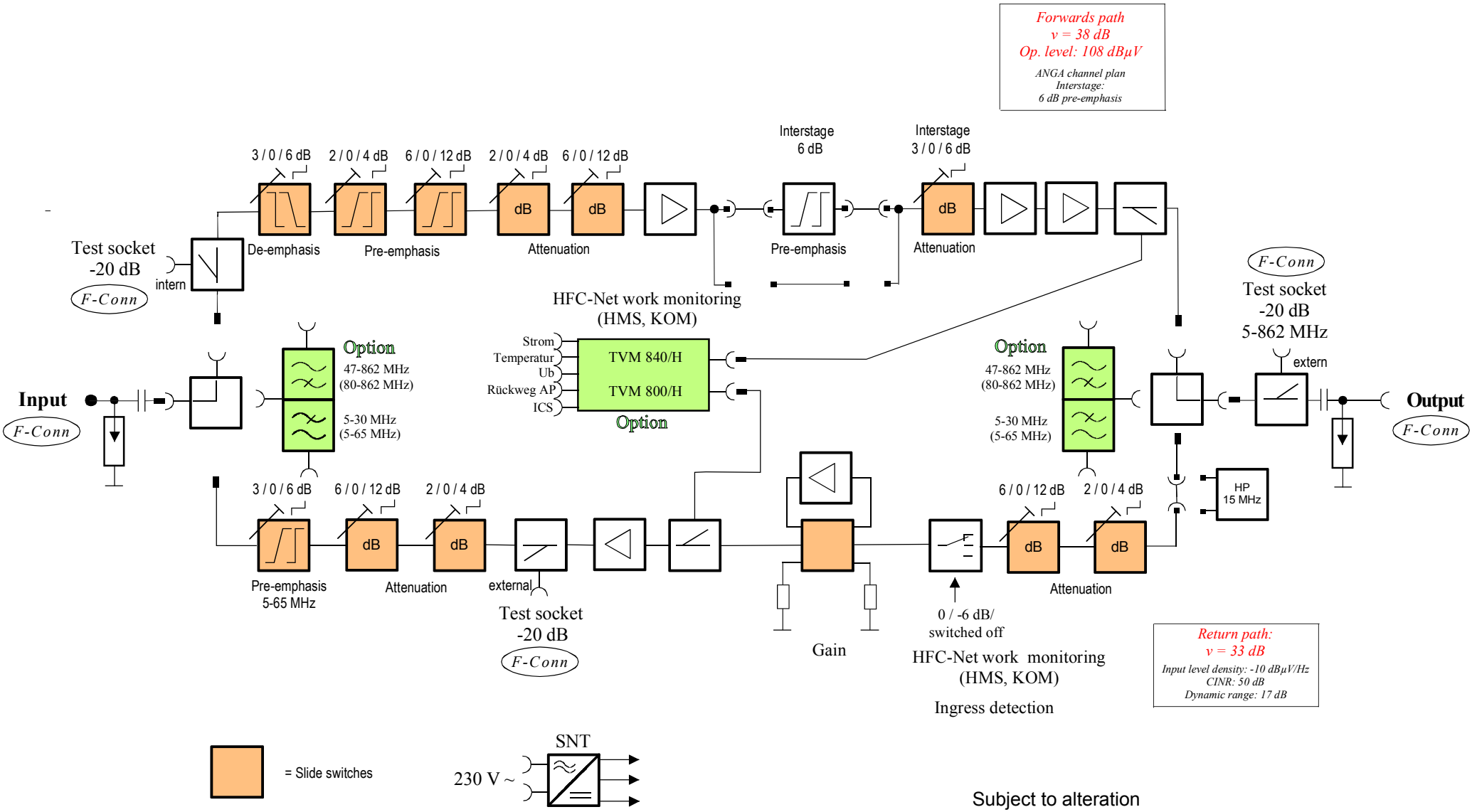
Subject to alteration

[1)] with WFS 903 or WFS 906
[2)] Full band op. 860 MHz per ANGA-ZVEI with + w/o Band I; Interstage-pre-emphasis (-4 dB with VOS 93x; -6 dB with VOS 94x)
[3)] per EN 50083-3 and Interstage-pre-emphasis (-4 dB with VOS 93x; -6 dB with VOS 94x)

Accessories :

- Return path filter 30/ 47 MHz: WFS 903 (BN: 24510047)
- Return path filter 65/ 80 MHz: WFS 906 (BN: 24510048)
- Monitoring transponder KOM: TVM 801/H (BN: 26210014)
- Monitoring transponder HMS: TVM 840/H (BN: 26210016)

Block diagramme VOS 940



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