KATHREIN VGP 9033

COMPACT AMPLIFIER

- Modern, monitorable compact amplifiers for interactive
- HFC networks
- Innovative operational concept: using electronic tuning elements, set using HTE 10 hand-held unit (fewer plug-in cards and attenuation pads required, repeatable device settings)
- Integrated frequency-agile 2-Pilot control enables quick commissioning:
  - Automatic levelling in the forward path, thus no need for time-consuming manual levelling
  - Automatic presetting of the return path is possible
- Remote configuration of all setting parameters via monitoring system (can be activated/deactivated)
- High gain (up to 40 dB), variable settable in interstage-position
- Latest GaAs-MMIC technology
- Very high output levels at lowest intermodulation products, even for interstage operation
- Loop-through input and output splitter can be configured
- De-emphasis (inverse-equalisation) insert position
- Remote feeding: 7 A per input/output, local feeding: 10 A
- Insert position for monitoring transponder (HMS)
- Highly efficient switch-mode power supply
- Test socket on input/output and at return path amplifier
- Integrated return path amplifier, variable gain
- Ingress Control Switch
- Aluminium die-cast housing with PG 11 connections

SPECIFICATIONS

VGP 9033		
Order no.		24410053
FORWARD PATH		
Frequency range	MHz	85-862
Gain	dB	33
Return loss	dB	19 -1.5 dB/oct.
Frequency response (85-862 MHz at 25 °C)	dB	± 0.5
Max. output level CENELEC [1]) - CTB > 60 dB	dBµV	114
Max. output level CENELEC [1]) - CSO > 60 dB	dBµV	116
Attenuation range, electronically settable in 0.5 dB steps	dB	0-16
Slope range, electronically settable in 0.5 dB steps	dB	0-20
Pre-emphasis, electronically settable in 1 dB steps	dB	2-9
Noise figure at minimum pre-emphasis	dB	6
Adjustment range, sloped 85-862 MHz	dB	± 2
Adjustment range, parallel	dB	± 3
Frequency range lower pilot Pu [2])	MHz	82.5-230
Frequency range upper pilot Po [2])	MHz	420-630
Pilot level (PAL/CW/QAM) 606 MHz	dBµV	83-112
Hum modulation ratio at 7 A	dB	70

RETURN PATH		
Frequency range	MHz	5-65
Gain	dB	30
Frequency response at 25 °C	dB	± 0.5
Input level density (CINR = 50 dB) at 30 dB gain	dBµV/Hz	-9
Dynamic range: CINR > 50 dB, 5-65 MHz at 30 dB gain	dB	21
Dynamic range: CINR > 50 dB, 5-65 MHz at 20 dB gain	dB	26
Noise figure	dB	6
Attenuation, switchable in 1 dB steps	dB	0-30
Slope, switchable in 7 steps	dB	1-8
ICS switch (attenuation switchable over EMS or HTE 10 hand-held unit)	dB	0/6/> 45
Hum modulation ratio at 7 A/> 15 MHz	dB	60
GENERAL		
Voltage supply	V AC	30-72
Power consumption	W	23
Max. remote feed current per connection	A	7
Max. remote feed current in local feeding (power passing)	A	10
RF connections		PG 11
Housing protection category		IP 67
Ambient temperature range	°C	-20 to +55
Screening factor		Conforms to CENELEC EN 50083-2
Overvoltage protection acc. to IEC 60-2		2 kV (1.2/50 µs)
Dimensions (W x H x D)	mm	240 × 95 × 240 [3])
NETWORK MANAGEMENT (OPTIONAL)		
Monitorable/settable parameters	Operational voltage; current; temperature; electronic tuning elements; pilot setting and alarm; automatic levelling of forward path; automatic presetting of return path; return path gain; ICS switch; remote inventory data	

[1]) 9 dB slope
[2]) Set using HTE 10 hand-held unit
[3]) Width incl. hinges: 267 mm