



PRODUCT FAMILY	DESCRIPTION
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<b>DH AND HOME AMPLIFIERS</b>	<b>DH HOUSE CONNECTION AMPLIFIERS</b>
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	FEATURES
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- >> 1 GHz Bandwidth
- >> NE-4 amplifier
- >> Compact housing
- >> Input and Output test point
- >> Downstream gain 39 dB, upstream gain 29 dB
- >> Variable 0 ... 18dB attenuator for downstream and upstream
- >> Variable 0 ... 18dB input equalizer for downstream

SPECIFICATIONS
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Downstream signal path
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Frequency range	85 ... 1006 MHz
Return loss	18 dB <sup>(1)</sup>
Gain @ 1006 MHz	39 dB ± 1 dB
Input attenuator control range	0 ... 18 dB <sup>(2)</sup>
Input equalizer control range	0 ... 18 dB <sup>(3)</sup>
Interstage slope	0 / 7 dB <sup>(4)</sup> + <sup>(5)</sup>
Flatness	±0.8 dB
Noise Figure	6.0 dB <sup>(6)</sup>
CTB	100 dBμV <sup>(7)</sup>
CSO	100 dBμV <sup>(7)</sup>

Upstream signal path
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Frequency range	5 ... 65 MHz
Return loss	18 dB <sup>(1)</sup> + <sup>(16)</sup>
Gain @ 65 MHz	29 dB ± 1 dB
Input attenuator control range	0 ... 18 dB <sup>(2)</sup>
Output slope	0 / 3 / 6 / 9 dB <sup>(4)</sup> + <sup>(8)</sup>
Flatness	±0.5 dB <sup>(9)</sup>
Noise Figure	6.0 dB <sup>(10)</sup>

Return path load	Mittlere Last 64 QAM
Output level, DIN 45004B	120 dB $\mu$ V <sup>(11)</sup>

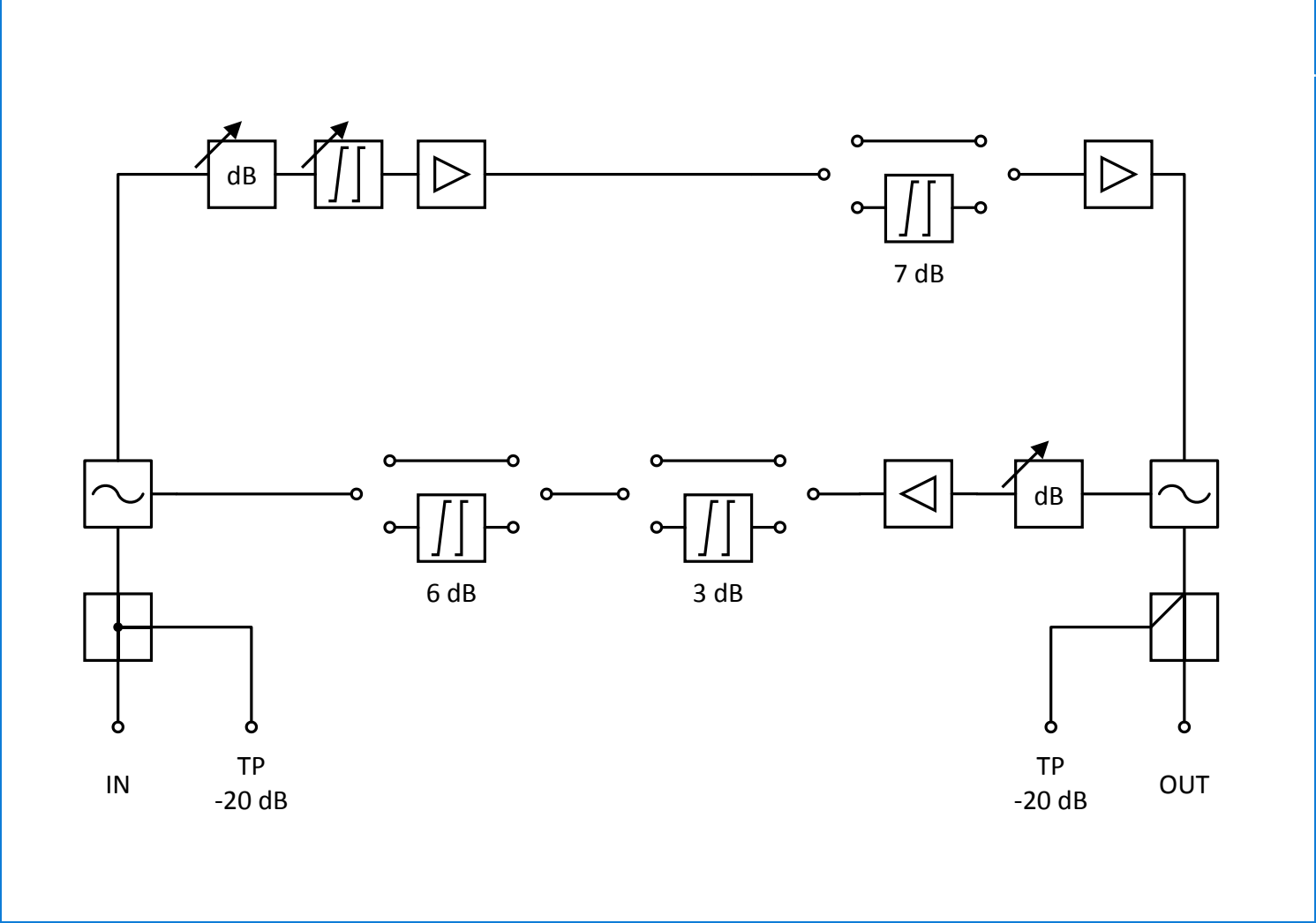
**GENERAL SPECIFICATIONS**

Input Test point (external)	- 20 dB <sup>(12)</sup>
Output Test point (external)	- 20 dB <sup>(13)</sup>
Supply voltage (AC)	207 ... 255 V
Power Consumption	7 W
Input / Output test point connectors	F female
Dimensions (h x w x h)	178 (213) x 100 (110) x 58 mm
Weight	1.3 kg
Operation temperature	-20° ... +55°C
Class of enclosure	IP20
EMC	EN 60728-2
Screening	Class A
Overvoltage protection (surge)	2 kV <sup>(14)</sup>
ESD protection	2 kV <sup>(15)</sup>

**NOTES:**

- (1) The limiting curve is defined at 40 MHz -1.5 dB/octave
- (2) Attenuation is set with a 0 ... 18 dB variable attenuator
- (3) The pivot point is at 1006 MHz. Slope is set with a 0 ... 18 dB variable attenuator
- (4) Switchable by jumper
- (5) Slope is defined between 85 and 1006 MHz, set to 0 or 7 dB
- (6) Typical value. Maximum 7.0 dB
- (7) Output level flat, 41 Ch. CENELEC
- (8) This slope is defined between 5...65 MHz
- (9) Typical value. Maximum  $\pm$  0.8 dB
- (10) Typical value. Maximum 7.0 dB
- (11) Typical value
- (12) Input test point is bidirectional with  $\pm$  2 dB tolerance. It can be used as the output test point for the return signal
- (13) Output test point is a directional coupler with  $\pm$  1.0 dB tolerance. It can be used as an injection point for a return channel test signal
- (14) According to EN 60728-3
- (15) EN 61000-4-2, contact discharge to enclosure and RF ports
- (16) Between 5 and 10 MHz, > 16 dB

BLOCK DIAGRAM



ORDERING INFORMATION

**DH6868VA**      Amplifier