Distribution amplifiers
Universal distribution amplifiers

- GaAs push-pull technology
- flexibility provided by plug-in return path diplexers
- plug-in interstage attenuator and equalizer for improving amplifier performance
- plug-in inverse equalizer
- weatherproof and RF-screened die-cast housing
- switch-mode power supply unit
- possibility to inject supply voltage for remote powering (DA2XX)
- transient protection at all inputs and outputs

Technical specifications

T Y P E		DA23X	DA23XP	DA23XC
Frequency range*		47/75/87-862 MHz		
Return path*		5-30/55/65 MHz		
Input and output impedance		75 Ω		
Gain, 20°C		36 dB		
Flatness		± 0.75 dB		
Input and output return loss		18 dB/40 MHz-1.5 dB/octave		
Input attenuator		0-18 dB		
Input cable equalizer		0-18 dB		
Inverse cable equalizer		0-9 dB in 1 dB step		
Noise figure		max. 6 dB		
Output level CTB (EN50083-3)**		112 dBμV (42 ch.)		
Output level CSO (EN50083-3)**		113 dBμV (42 ch.)		
Mains voltage, 50 Hz		24÷65 V~	187-250 V~	24÷65 V~/187-250 V~
Power consumption, max.		17 W	14.5 W	17/14.5 W
Current consumption	24 V AC	1 A	-	1 A/-
	42 V AC	0.67 A	-	0.67 A/-
	65 V AC	0.5 A	-	0.5 A/-
Maximal AC pass current		7 A		
Loss in internal input test point (bi-directional)		-20 ± 2.0 dB		
Loss in internal output test point (directional)		-20 ± 0.5 dB		
Input and outputs connectors		PG11		
Test point connectors		F		
Hum modulation distance (7 A)		min. 65 dB		
Enclosure category		IP 64		
Operating temperature range		-20° ÷ + 50° C		
Dimensions/Weight (packed)		229x159x87 mm (main body); 261x159x87 mm (with fixing ears)/2.5 kg		

* frequency range depends on inserted plug-in diplexer

** output level (CTB, CSO) is measured with 6 dB interstage equalizer

All parameters are measured with links pl 01-00 instead of return path diplexers, plug-in input splitter; pl 02-00 instead of plug-in output splitter and in universal slot; JXP-0 instead of input attenuator, cable equalizer, cable inverse equalizer; interstage attenuator and cable equalizer.

DA23 ☐ ☐

- ☐ 3 plug-in JXP type
- ☐ 4 variable input attenuator & equalizer

- ☐ remote powering
- ☐ P local powering
- ☐ C combined powering

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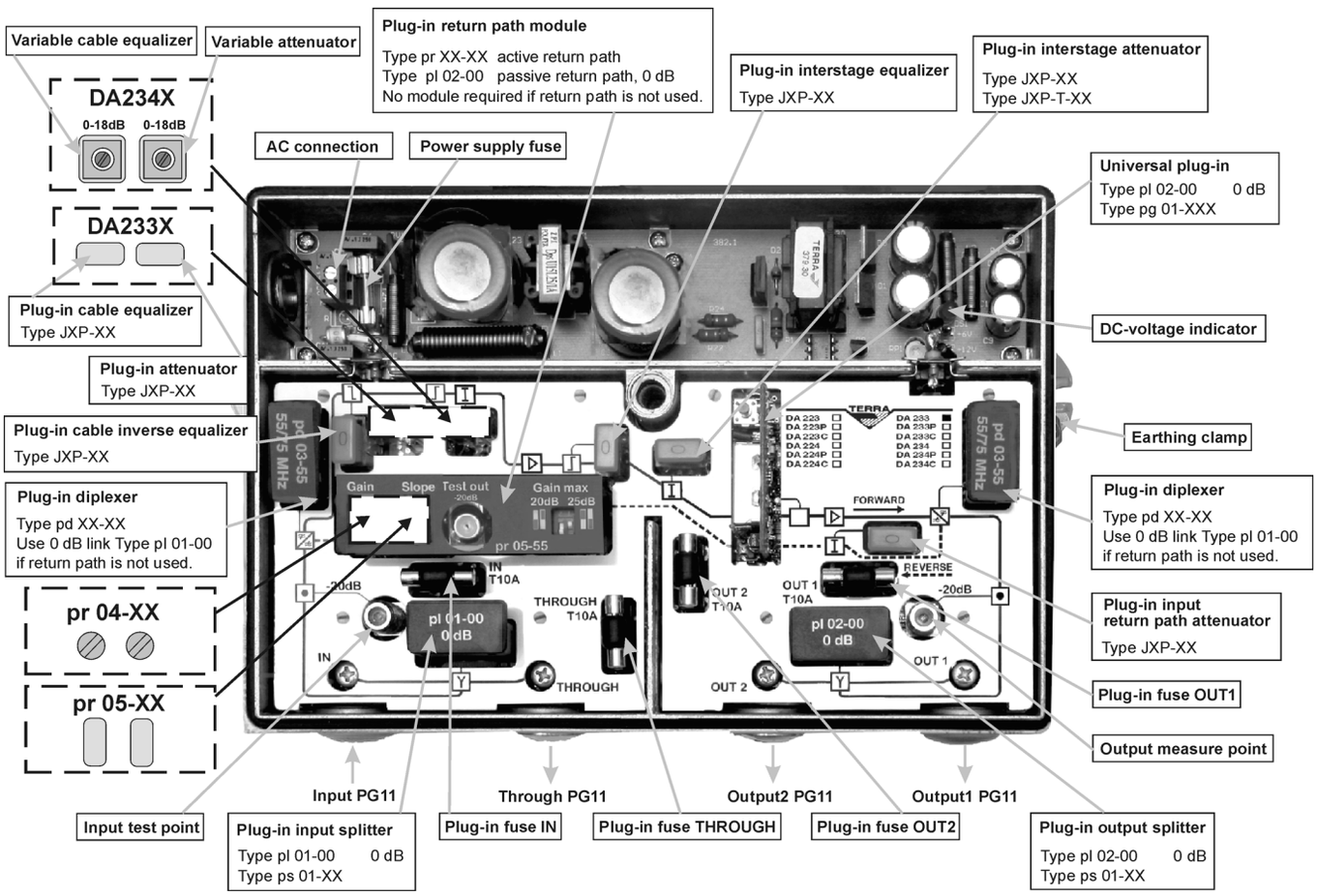
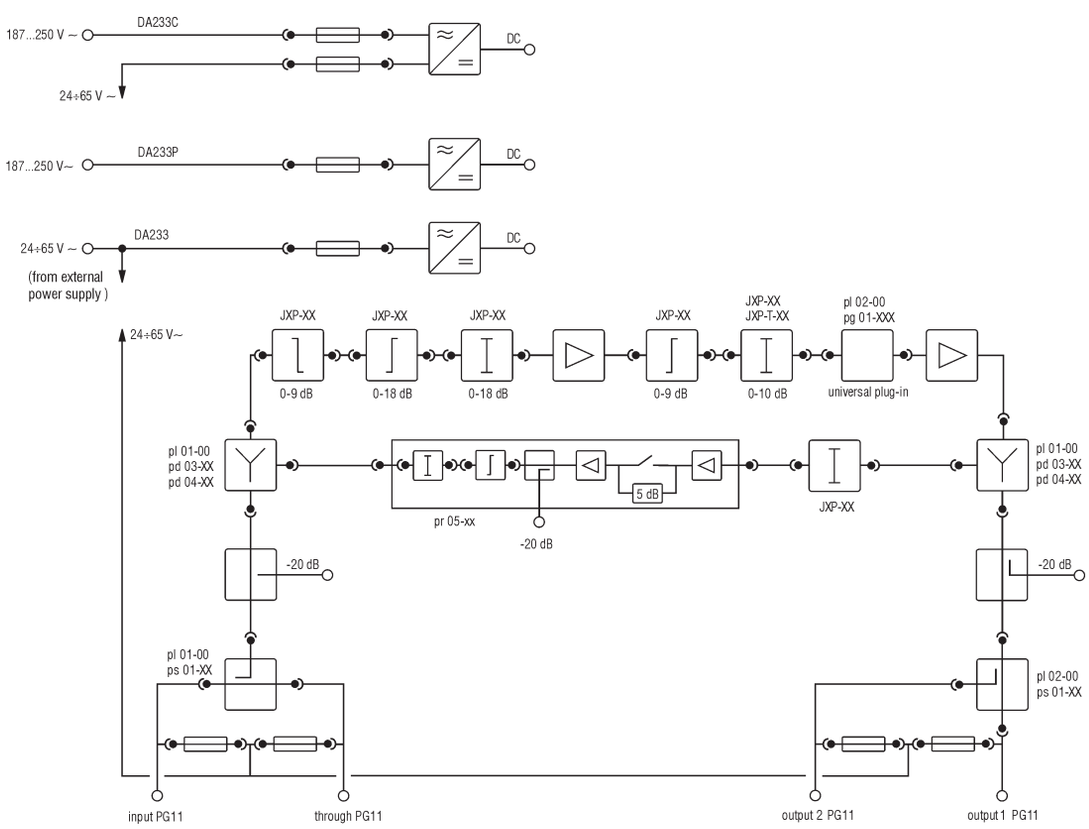


Structure diagram of DA233X



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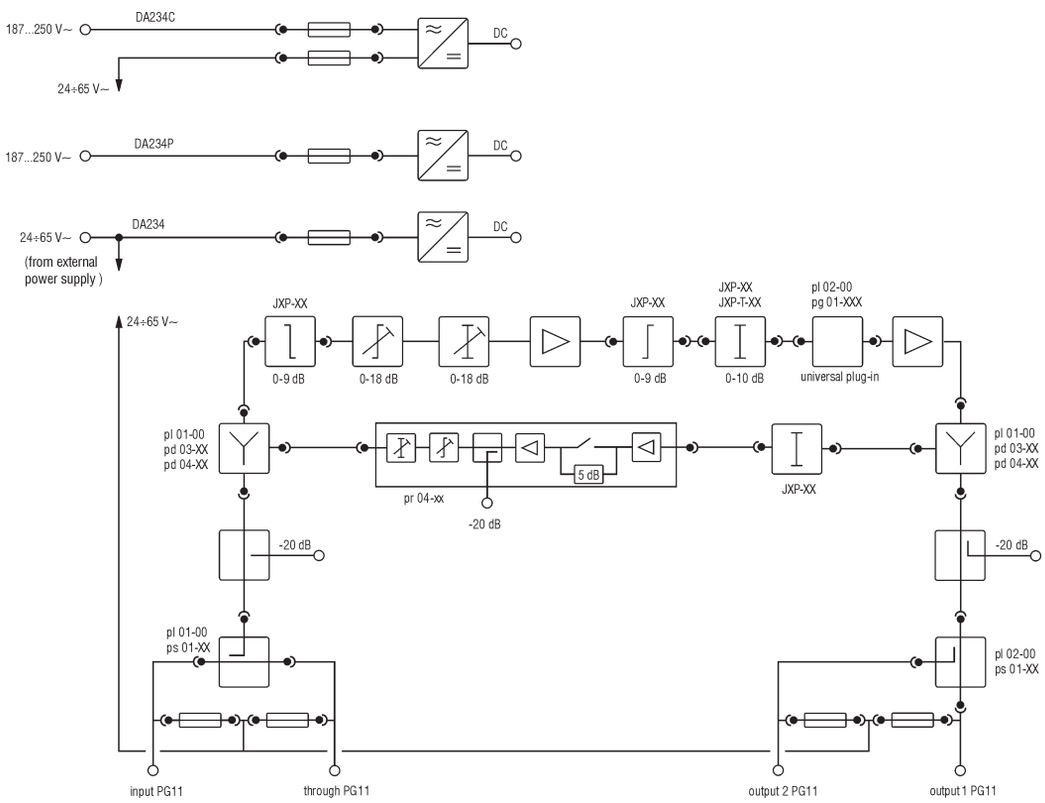
Structure diagram of DA234X



Ordering notes

Band	no return path	2 x pl 01-00
	30/47 MHz	2 x pd 03-30 (pd 04-30)
	55/75 MHz	2 x pd 03-55 (pd 04-55)
	65/87 MHz	2 x pd 03-65 (pd 04-65)
Input	0 dB input, no through	pl 01-00
	3.5 dB through/3.5 dB input	ps 01-03
	2.0 dB through/6.0 dB input	ps 01-06
	1.5 dB through/10 dB input	ps 01-10
	1.0 dB through/14 dB input	ps 01-14
	0.5 dB through/18 dB input	ps 01-18
Output	0 dB output1/no output 2	pl 02-00
	3.5 dB output1/3.5 dB output 2	ps 01-03
	2.0 dB output1/6.0 dB output 2	ps 01-06
	1.5 dB output1/10 dB output 2	ps 01-10
	1.0 dB output1/14 dB output 2	ps 01-14
	0.5 dB output1/18 dB output 2	ps 01-18
Return path	0 dB passive	pl 02-00+JXP-0
	0÷20 dB by 1 dB step, passive	pl 02-00+JXP-XX
	20/25 dB gain 30 MHz, variable adjustments	pr 04-30+JXP-XX
	20/25 dB gain 55 MHz, variable adjustments	pr 04-55+JXP-XX
	20/25 dB gain 65 MHz, variable adjustments	pr 04-65+JXP-XX
	20/25 dB gain 30 MHz, plug-in adjustments	pr 05-30+3 x JXP-XX
	20/25 dB gain 55 MHz, plug-in adjustments	pr 05-55+3 x JXP-XX
	20/25 dB gain 65 MHz, plug-in adjustments	pr 05-65+3 x JXP-XX
Input adjusments	cable simulator 0÷9 dB by 1 dB step	JXP-XX
	attenuator 0÷20 dB by 1 dB step (for DA2X3X only)	JXP-XX
	equalizer 0÷20 dB by 1 dB step (for DA2X3X only)	JXP-XX
Interstage	attenuator 0÷10 dB by 1 dB step	JXP-XX
	equalizer 0÷9 dB by 1 dB step	JXP-XX
	thermal attenuator 1÷4 dB	JXP-T-XX
Universal slot	0 dB passive	pl 02-00
	automatic gain control module	pg 01-XXX

Ordering number	
DA233	11862
DA233P	11864
DA233C	11866
DA234	11863
DA234P	11865
DA234C	11867