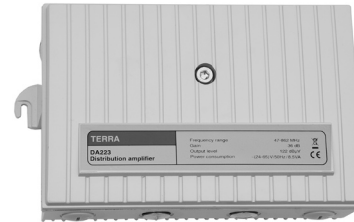




# Distribution amplifiers

## 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

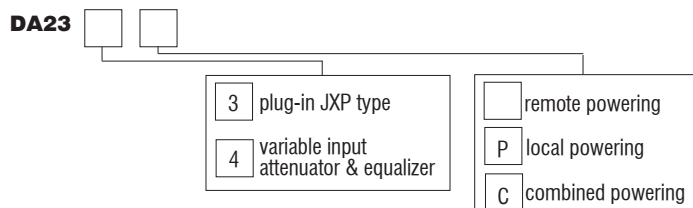


| Technical specifications                           |  | TYPE                       |                     |          |
|--|--|----------------------------|---------------------|----------|
|  | DA23X  | DA23XP                     | DA23XC              |          |
| Frequency range*                                   |  | 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

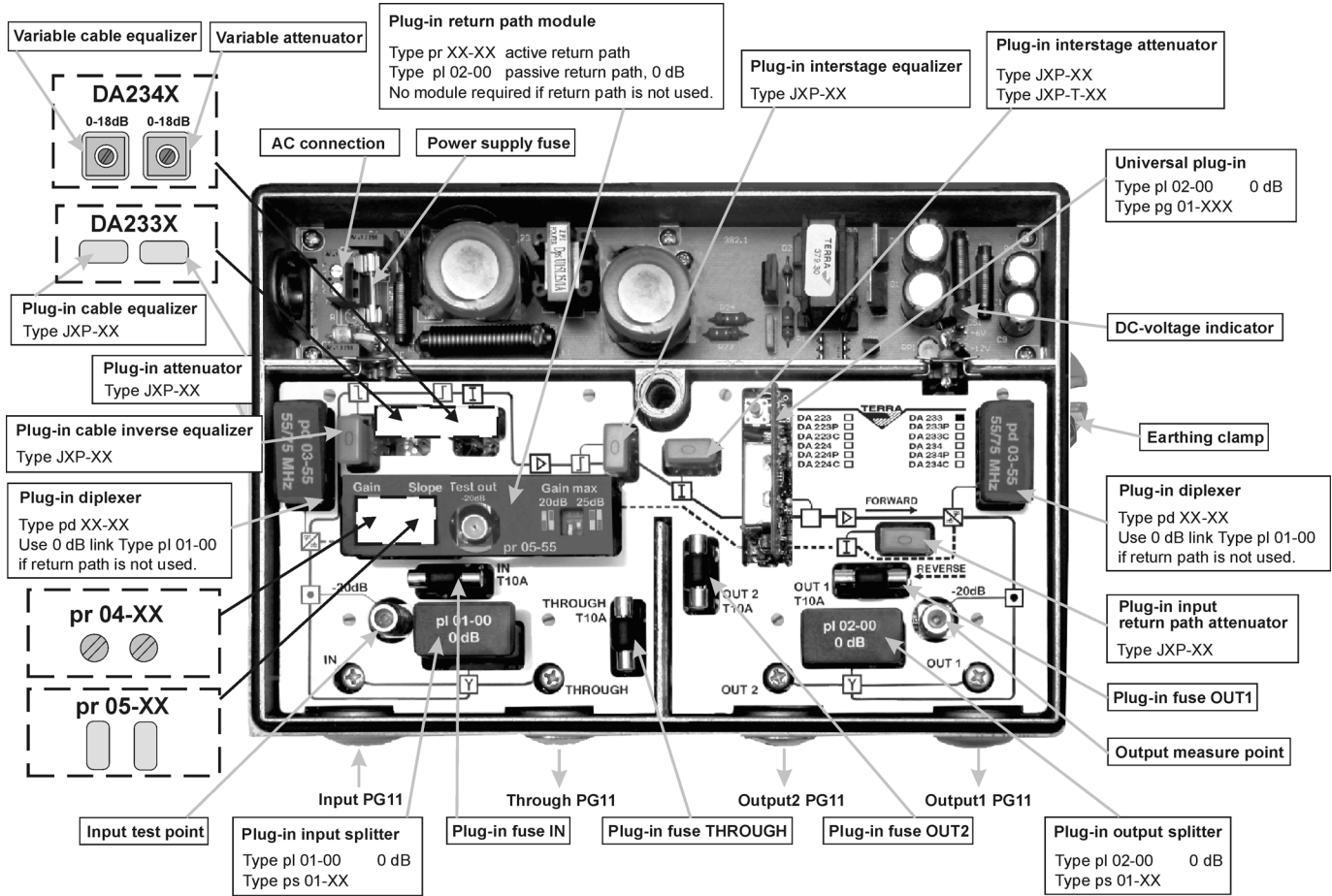
All parameters are measured with links pl 01-00 instead of return path diplexers, plug-in input splitter; pl 02-00 instead of plug-in output splitter and in universal slot; JXP-0 instead of input attenuator, cable equalizer, cable inverse equalizer; interstage attenuator and cable equalizer.



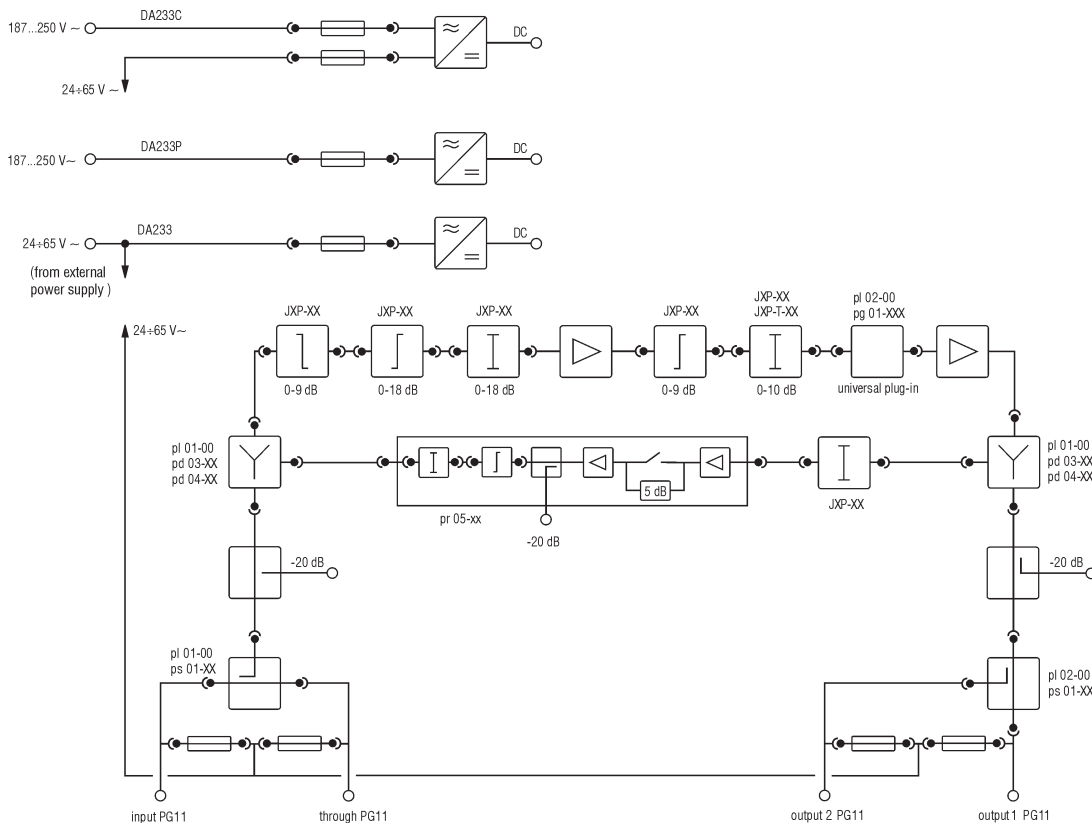


# Distribution amplifiers

## Universal distribution amplifiers



### Structure diagram of DA233X

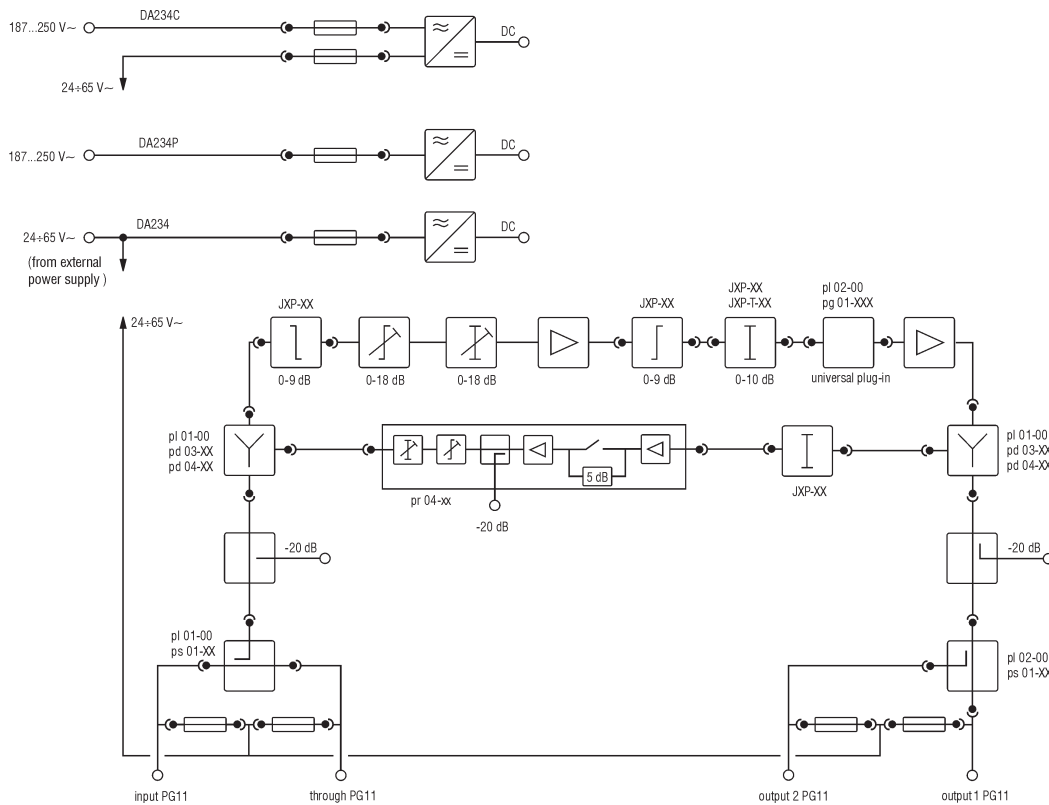




# Distribution amplifiers

## Universal distribution amplifiers

### Structure diagram of DA234X



### Ordering notes

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

### Ordering number

|               |       |
|---------------|-------|
| <b>DA233</b>  | 11862 |
| <b>DA233P</b> | 11864 |
| <b>DA233C</b> | 11866 |
| <b>DA234</b>  | 11863 |
| <b>DA234P</b> | 11865 |
| <b>DA234C</b> | 11867 |