

# Dual-Band Combiner

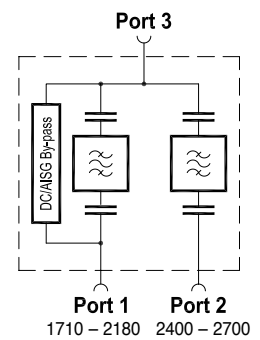
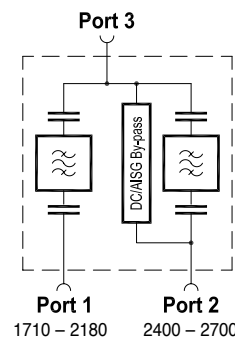
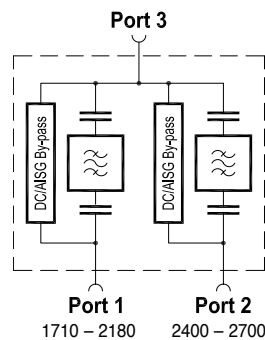
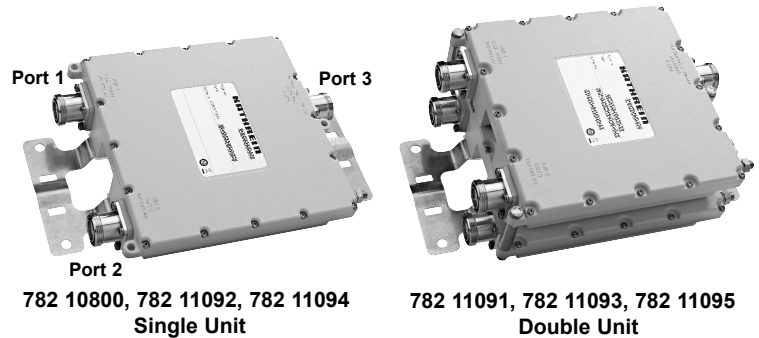
**KATHREIN**

Antennen · Electronic

**1710 – 2180 MHz**  
GSM1800 / PCS1900 / AWS / UMTS2100

**2400 – 2700 MHz**  
WLAN / WiMAX / BRS/ LTE2600

- Designed for co-siting purposes
- Enables feeder sharing
- Can be used as a combiner near the BTS or in a reciprocal function near the antenna
- Suitable for indoor or outdoor applications
- Wall or mast mounting
- Available as a single unit, or for XPol antennas as a double unit
- Built-in lightning protection
- External DC stop available as an accessory
- **Very low insertion loss**



## Technical Data

Type No.	782 10800 Single Unit	782 11092 Single Unit	782 11094 Single Unit
	782 11091 Double Unit	782 11093 Double Unit	782 11095 Double Unit
Pass band Band 1 Band 2	1710 – 2180 MHz 2400 – 2700 MHz		
Insertion loss Port 1 ↔ Port 3 Port 2 ↔ Port 3	< 0.15 dB < 0.15 dB		
Isolation Port 1 ↔ Port 2	> 60 dB		
VSWR	< 1.25 (1710 – 2180 / 2400 – 2700 MHz)		
Impedance	50 Ω		
Input power Band 1 / Band 2	< 300 W / < 300 W		
Intermodulation products	< -160 dBc (3 <sup>rd</sup> order with 2 x 20 W)		
Temperature range	-40 ... +60 °C		
Connectors	7-16 female (long neck)		
Application	Indoor or outdoor (IP 66)		
DC/AISG transparency Port 1 ↔ Port 3 Port 2 ↔ Port 3	<b>By-pass</b> (max. 2500 mA) <b>By-pass</b> (max. 2500 mA)	<b>Stop</b> <b>By-pass</b> (max. 2500 mA)	<b>By-pass</b> (max. 2500 mA) <b>Stop</b>
Lightning protection	3 kA, 10/350 μs pulse		
Mounting	Wall mounting: With 4 screws (max. 8 mm diameter) / Mast mounting: With additional clamp set		
Weight	Single Unit: 2.9 kg / Double Unit: 5.7 kg		
Packing size	Single Unit: 392 x 272 x 139 mm / Double Unit: 392 x 272 x 189 mm		
Dimensions (w x h x d)	Single Unit: 199 x 199 x 44 mm / Double Unit: 199 x 199 x 95 mm (without connectors, without mounting brackets)		

936.3367/b Subject to alteration.

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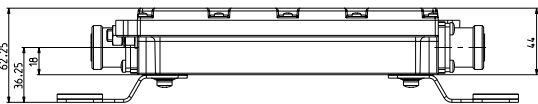
**2400 – 2700 MHz**  
WLAN / WiMAX / BRS/ LTE2600

## Accessories (order separately)

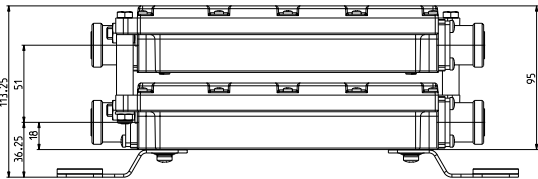
Type No.	Clamp set suitable for mast diameter of
734 360	34 – 60 mm
734 361	60 – 80 mm
734 362	80 – 100 mm
734 363	100 – 120 mm
734 364	120 – 140 mm
734 365	45 – 125 mm
<b>*131 1847</b>	45 – 125 mm

\*U.S. Customers order 131 1847

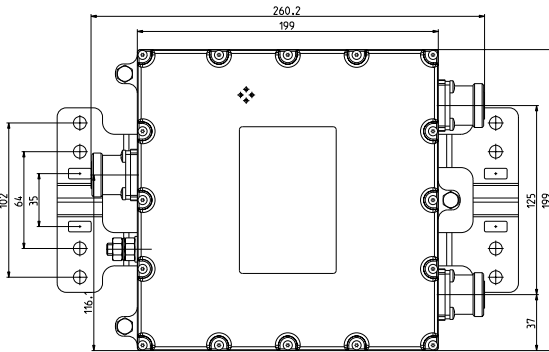
Type No.	Description
<b>782 10850</b>	<b>DC stop</b>
<b>784 10367</b>	<b>50-Ohm load</b>



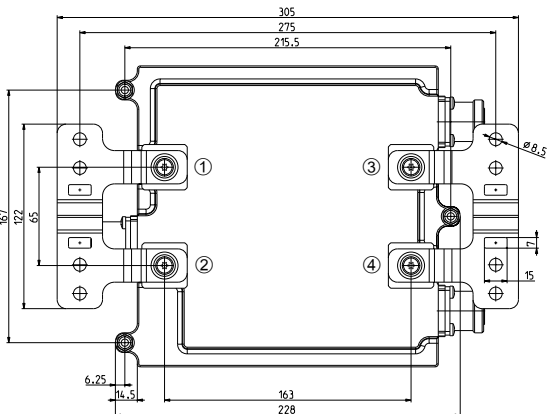
Single Unit Side view



Double Unit Side view

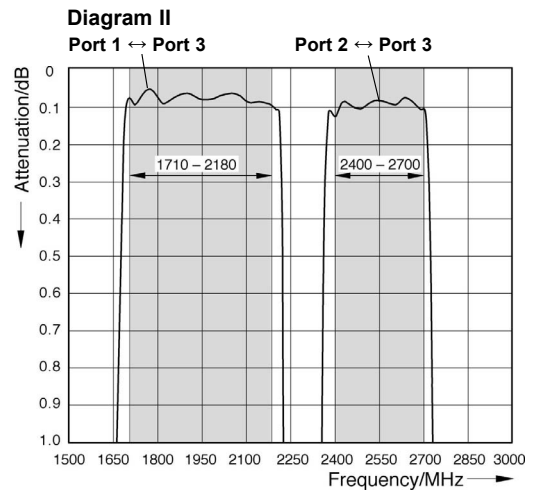
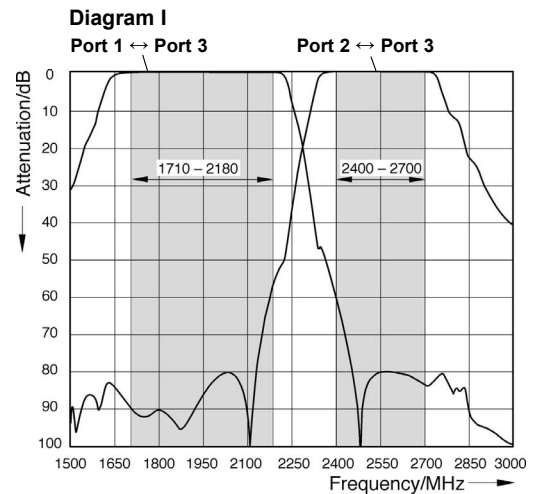


Top view Single Unit Double Unit



Bottom view Single Unit Double Unit

## Typical Attenuation Curves



### Please note:

The mounting plates can be removed by loosening the screws ① to ④ (M5 x 12) and replaced with other means of mounting, always provided that the max. drilled depth of 7.5 mm is respected with the choice of replacement screws.

**As a result of more stringent legal regulations and judgements regarding product liability, we are obliged to point out certain risks that may arise when products are used under extraordinary operating conditions.**

Extraordinary operating conditions, such as heavy icing or exceptional dynamic stress (e.g. strain caused by oscillating support structures), may result in the breakage of a mast mounted device or even cause it to fall to the ground.

These facts must be considered during the site planning process.

The Dual-band Combiners are designed to operate under the environmental conditions as described in ETS 300 019-1-4 class 4.1 E and have passed environmental tests as recommended in ETS 300 019-2-4.

**The installation team must be properly qualified and also be familiar with the relevant national safety regulations.**

**The details given in our data sheets have to be followed carefully when installing the antennas, filters, combiners, amplifiers and accessories.**

**The limits for the coupling torque of RF connectors, recommended by the connector manufacturers must be obeyed.**

Terminate unused inputs with a suitable 50-Ω load, e.g. 784 10367.

Any previous datasheet issues have now become invalid.



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