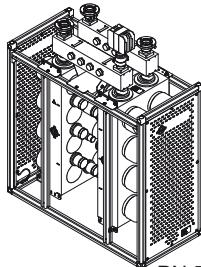
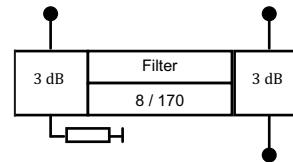
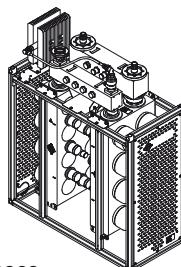


CCS UHF CIB COMBINERS

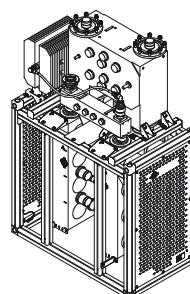
- **CCS** compact design
- integrated mask filters for DTV
- adjacent channel operation
- for 6, 7 and 8 MHz channel bandwidth
- temperature compensated
- tuneable within the whole UHF range



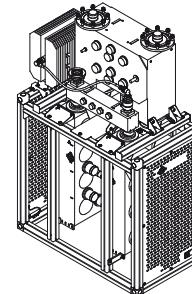
BN 57 55 25 A0060



BN 57 55 26 A0060



BN 57 55 27 A0060



BN 57 55 28 A0020

Part number / Width	BN 57 55 25 A0010 BN 57 55 25 A0060	480 415	BN 57 55 26 A0010 BN 57 55 26 A0060	480 415	BN 57 55 27 A0010 BN 57 55 27 A0060	480 415	BN 57 55 28 A0020	520																																							
Frequency range					470 - 860 MHz																																										
Channel spacing					≥ 0																																										
Narrow band input					1 5/8" EIA																																										
Filter type integrated cavities/size					8/170 ≡ BN 616666																																										
Temperature stability					$\leq 2 \text{ kHz} / \text{K}$																																										
Harmonics attenuation					$\geq 50 \text{ dB}$ for $f \leq 1000 \text{ MHz}$																																										
DTV Mask filtering	DVB-T @ 8 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)		ISDB-T @ 6 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)		ATSC @ 6 MHz ($\hat{U}/U_{\text{rms}}=11 \text{ dB}$)																																										
Average input power	$\leq 7 \text{ kW}$		$\leq 6 \text{ kW}$		$\leq 6 \text{ kW}$																																										
Tuning instruction	AS8100		AS8104		AS8103																																										
Insertion loss & Mask filtering (alternative tuning on request)	<table border="0"> <tr> <td>470 MHz</td> <td>860 MHz</td> <td>470 MHz</td> <td>803 MHz</td> <td>470 MHz</td> <td>803 MHz</td> </tr> <tr> <td>f_0</td> <td>$\leq 0.45 \text{ dB}$</td> <td>$\leq 0.55 \text{ dB}$</td> <td>$\leq 0.50 \text{ dB}$</td> <td>$\leq 0.6 \text{ dB}$</td> <td>$\leq 0.55 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 3.805$</td> <td>$\leq 1.20 \text{ dB}$</td> <td>$\leq 1.9 \text{ dB}$</td> <td>$f_0 \pm 2.79$</td> <td>$\leq 1.40 \text{ dB}$</td> <td>$\leq 1.15 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 3.885$</td> <td>$\leq 1.50 \text{ dB}$</td> <td>$\leq 2.1 \text{ dB}$</td> <td>$f_0 \pm 3.15$</td> <td>$\geq 12 \text{ dB}$</td> <td>$\leq 1.50 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 4.2$</td> <td>$\geq 15 \text{ dB}$</td> <td></td> <td>$f_0 \pm 4.5$</td> <td>$\geq 28 \text{ dB}$</td> <td>≥ 3.25</td> </tr> <tr> <td>$f_0 \pm 6$</td> <td>$\geq 40 \text{ dB}$</td> <td></td> <td>$f_0 \pm 9$</td> <td>$\geq 54 \text{ dB}$</td> <td>≥ 9</td> </tr> <tr> <td>$f_0 \pm 12$</td> <td>$\geq 55 \text{ dB}$</td> <td></td> <td></td> <td></td> <td>$\geq 64 \text{ dB}$</td> </tr> </table>	470 MHz	860 MHz	470 MHz	803 MHz	470 MHz	803 MHz	f_0	$\leq 0.45 \text{ dB}$	$\leq 0.55 \text{ dB}$	$\leq 0.50 \text{ dB}$	$\leq 0.6 \text{ dB}$	$\leq 0.55 \text{ dB}$	$f_0 \pm 3.805$	$\leq 1.20 \text{ dB}$	$\leq 1.9 \text{ dB}$	$f_0 \pm 2.79$	$\leq 1.40 \text{ dB}$	$\leq 1.15 \text{ dB}$	$f_0 \pm 3.885$	$\leq 1.50 \text{ dB}$	$\leq 2.1 \text{ dB}$	$f_0 \pm 3.15$	$\geq 12 \text{ dB}$	$\leq 1.50 \text{ dB}$	$f_0 \pm 4.2$	$\geq 15 \text{ dB}$		$f_0 \pm 4.5$	$\geq 28 \text{ dB}$	≥ 3.25	$f_0 \pm 6$	$\geq 40 \text{ dB}$		$f_0 \pm 9$	$\geq 54 \text{ dB}$	≥ 9	$f_0 \pm 12$	$\geq 55 \text{ dB}$				$\geq 64 \text{ dB}$				
470 MHz	860 MHz	470 MHz	803 MHz	470 MHz	803 MHz																																										
f_0	$\leq 0.45 \text{ dB}$	$\leq 0.55 \text{ dB}$	$\leq 0.50 \text{ dB}$	$\leq 0.6 \text{ dB}$	$\leq 0.55 \text{ dB}$																																										
$f_0 \pm 3.805$	$\leq 1.20 \text{ dB}$	$\leq 1.9 \text{ dB}$	$f_0 \pm 2.79$	$\leq 1.40 \text{ dB}$	$\leq 1.15 \text{ dB}$																																										
$f_0 \pm 3.885$	$\leq 1.50 \text{ dB}$	$\leq 2.1 \text{ dB}$	$f_0 \pm 3.15$	$\geq 12 \text{ dB}$	$\leq 1.50 \text{ dB}$																																										
$f_0 \pm 4.2$	$\geq 15 \text{ dB}$		$f_0 \pm 4.5$	$\geq 28 \text{ dB}$	≥ 3.25																																										
$f_0 \pm 6$	$\geq 40 \text{ dB}$		$f_0 \pm 9$	$\geq 54 \text{ dB}$	≥ 9																																										
$f_0 \pm 12$	$\geq 55 \text{ dB}$				$\geq 64 \text{ dB}$																																										
Group delay variation		$\Delta\tau \leq 700 \text{ ns}$			$\Delta\tau \leq 650 \text{ ns}$			$\Delta\tau \leq 500 \text{ ns}$																																							
Wide band input	1 5/8" EIA		3 1/8" EIA male		4 1/2" EIA male		52-120 BT male																																								
Average input power	$\leq 7 \text{ kW}$		$\leq 17.5 \text{ kW}$		$\leq 33 \text{ kW}$		$\leq 60 \text{ kW}$																																								
DTV Mask filtering					Attention: The power at the wide band input must be reduced by 50 % of the power fed into the narrow band input																																										
Insertion loss					no																																										
Output					$\leq 0.1 \text{ dB}$ (non adjacent)																																										
Peak output voltage	1 5/8" EIA $\leq 8.5 \text{ kV}$		3 1/8" EIA male $\leq 12.5 \text{ kV}$		4 1/2" EIA male $\leq 15.5 \text{ kV}$		52-120 BT male $\leq 19.5 \text{ kV}$																																								
Isolation between inputs					$\geq 35 \text{ dB}$																																										
VSWR (one WB channel)					≤ 1.06																																										
Dimensions (L x W x H) mm	900 x 480 x 1200 900 x 415 x 1200		BN 57 55 25 A0010, BN 57 55 26 A0010, BN 57 55 27 A0010 BN 57 55 25 A0060, BN 57 55 26 A0060, BN 57 55 27 A0060				900 x 520 x 1400																																								
Weight	$\approx 125 \text{ kg}$		$\approx 135 \text{ kg}$		$\approx 150 \text{ kg}$		$\approx 195 \text{ kg}$																																								
Environmental conditions	for limitations see „Environmental Conditions for Broadcast Products“																																														