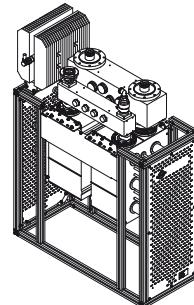
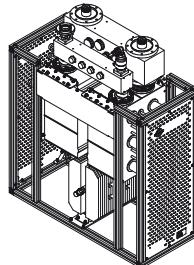
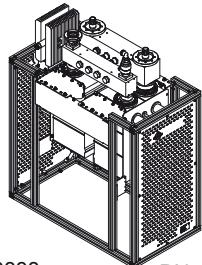
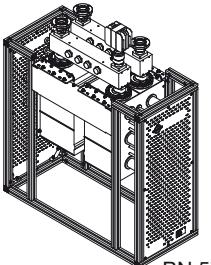
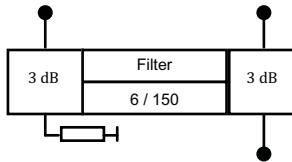


CCS UHF CIB COMBINERS

- **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 49 47 A0000

BN 57 49 34 A0000

BN 57 49 35 A0000

BN 57 49 35 A0010

Part number / Width	BN 57 49 47 A0000 390	BN 57 49 34 A0000 390	BN 57 49 35 A0000 390																																																						
Frequency range	470 - 860 MHz																																																								
Channel spacing	≥ 0																																																								
Narrow band input	1 5/8" EIA																																																								
Filter type integrated cavities/size	6/150 ≡ BN 616518																																																								
Temperature stability	$\leq 2 \text{ kHz} / \text{K}$																																																								
Harmonics attenuation	$\geq 50 \text{ dB for } f \leq 860 \text{ MHz}$																																																								
DTV Mask filtering	DVB-T @ 8 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)	ISDB-T @ 6 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)	DVB-T @ 7 MHz ($\hat{U}/U_{\text{rms}}=13 \text{ dB}$)																																																						
Average input power	$\leq 5 \text{ kW}$	$\leq 4 \text{ kW}$	$\leq 4.5 \text{ kW}$																																																						
Tuning instruction	AS6193	AS6184	AS6289																																																						
Insertion loss & Mask filtering (alternative tuning on request)	<table> <tr> <td>f_0</td> <td>470 MHz</td> <td>860 MHz</td> <td>470 MHz</td> <td>803 MHz</td> <td>470 MHz</td> <td>820 MHz</td> </tr> <tr> <td>$f_0 \pm 3.805$</td> <td>$\leq 0.40 \text{ dB}$</td> <td>$\leq 0.55 \text{ dB}$</td> <td>f_0</td> <td>$\leq 0.5 \text{ dB}$</td> <td>$\leq 0.7 \text{ dB}$</td> <td>f_0</td> <td>$\leq 0.45 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 3.885$</td> <td>$\leq 0.85 \text{ dB}$</td> <td>$\leq 1.3 \text{ dB}$</td> <td>$f_0 \pm 2.79$</td> <td>$\leq 1.2 \text{ dB}$</td> <td>$\leq 1.6 \text{ dB}$</td> <td>$f_0 \pm 3.2$</td> <td>$\leq 0.65 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 4.2$</td> <td>$\leq 1.05 \text{ dB}$</td> <td>$\leq 1.5 \text{ dB}$</td> <td>$f_0 \pm 3.0$</td> <td>$\geq 3.5 \text{ dB}$</td> <td>$f_0 \pm 4.2$</td> <td>$\geq 13 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 6$</td> <td>$\geq 4 \text{ dB}$</td> <td>$f_0 \pm 3.15$</td> <td>$\geq 8 \text{ dB}$</td> <td>$f_0 \pm 10.5$</td> <td>$\geq 38 \text{ dB}$</td> </tr> <tr> <td>$f_0 \pm 12$</td> <td>$\geq 20 \text{ dB}$</td> <td>$f_0 \pm 4.5$</td> <td>$\geq 23 \text{ dB}$</td> <td></td> <td></td> </tr> <tr> <td></td> <td>$\geq 40 \text{ dB}$</td> <td>$f_0 \pm 9$</td> <td>$\geq 48 \text{ dB}$</td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td>$f_0 \pm 15$</td> <td>$\geq 50 \text{ dB}$</td> <td></td> <td></td> </tr> </table>	f_0	470 MHz	860 MHz	470 MHz	803 MHz	470 MHz	820 MHz	$f_0 \pm 3.805$	$\leq 0.40 \text{ dB}$	$\leq 0.55 \text{ dB}$	f_0	$\leq 0.5 \text{ dB}$	$\leq 0.7 \text{ dB}$	f_0	$\leq 0.45 \text{ dB}$	$f_0 \pm 3.885$	$\leq 0.85 \text{ dB}$	$\leq 1.3 \text{ dB}$	$f_0 \pm 2.79$	$\leq 1.2 \text{ dB}$	$\leq 1.6 \text{ dB}$	$f_0 \pm 3.2$	$\leq 0.65 \text{ dB}$	$f_0 \pm 4.2$	$\leq 1.05 \text{ dB}$	$\leq 1.5 \text{ dB}$	$f_0 \pm 3.0$	$\geq 3.5 \text{ dB}$	$f_0 \pm 4.2$	$\geq 13 \text{ dB}$	$f_0 \pm 6$	$\geq 4 \text{ dB}$	$f_0 \pm 3.15$	$\geq 8 \text{ dB}$	$f_0 \pm 10.5$	$\geq 38 \text{ dB}$	$f_0 \pm 12$	$\geq 20 \text{ dB}$	$f_0 \pm 4.5$	$\geq 23 \text{ dB}$				$\geq 40 \text{ dB}$	$f_0 \pm 9$	$\geq 48 \text{ dB}$					$f_0 \pm 15$	$\geq 50 \text{ dB}$				
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Group delay variation	$\Delta\tau \leq 350 \text{ ns}$	$\Delta\tau \leq 500 \text{ ns}$	$\Delta\tau \leq 150 \text{ ns}$																																																						
Wide band input	1 5/8" EIA	3 1/8" EIA male	4 1/2" EIA male																																																						
Average input power	$\leq 7 \text{ kW}$	$\leq 17.5 \text{ kW}$	$\leq 33 \text{ kW}$																																																						
Attention:	The power at the wide band input must be reduced by 50 % of the power fed into the narrow band input																																																								
DTV Mask filtering	no																																																								
Insertion loss	$\leq 0.1 \text{ dB (non adjacent)}$																																																								
Output	1 5/8" EIA	3 1/8" EIA male	4 1/2" EIA male																																																						
Peak output voltage	$\leq 8.5 \text{ kV}$	$\leq 12.5 \text{ kV}$	$\leq 15.5 \text{ kV}$																																																						
Isolation between inputs	$\geq 35 \text{ dB}$																																																								
VSWR (one WB channel)	≤ 1.06																																																								
Dimensions (L x W x H) mm	900 x 390 x 1200 BN 57 49 47 A0000 900 x 480 x 1200 BN 57 49 47 A0010	900 x 390 x 1200 BN 57 49 34 A0000 900 x 480 x 1200 BN 57 49 34 A0010	900 x 390 x 1200 BN 57 49 35 A0000 900 x 480 x 1200 BN 57 49 35 A0010																																																						
Weight	$\approx 90 \text{ kg}$	$\approx 100 \text{ kg}$	$\approx 115 \text{ kg}$																																																						
Environmental conditions	for limitations see „Environmental Conditions for Broadcast Products“																																																								