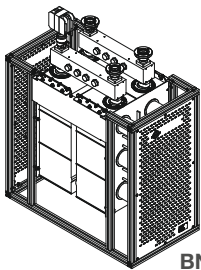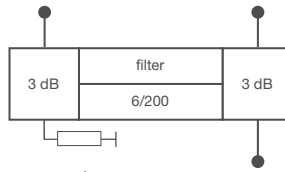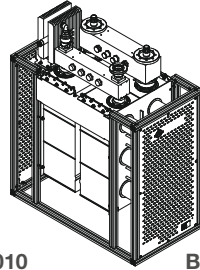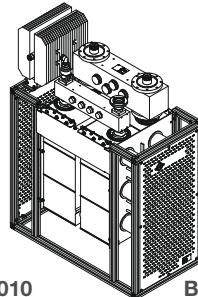# CCS UHF CIB Combiners

- **CCS** compact design
- Integrated mask filters for DTV
- Adjacent channel operation
- For 6, 7 and 8 MHz channel bandwidth
- Temperature compensated
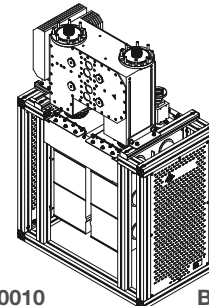- Tuneable within the whole UHF range

BN 576050A0010	BN 576051A0010	BN 576052A0010	BN 576053A0020

Part Number	BN 576050A0010	BN 576051A0010	BN 576052A0010	BN 576053A0020
Frequency range	470 - 800 MHz			
Channel spacing	≥ 0			
Narrowband input	1 5/8" EIA			
Filter type integrated cavities/size	**6/200 ≡ BN 616540**			
Temperature stability	≤ 2 kHz / K			
Harmonics attenuation	≥ 50 dB for $f \leq 860$ MHz			
DTV mask filtering	DVB-T @ 8 MHz ($\hat{U}/U_{rms}$=13 dB)		ISDB-T @ 6 MHz ($\hat{U}/U_{rms}$=13 dB)	DVB-T @ 7 MHz ($\hat{U}/U_{rms}$=13 dB)
Average input power	≤ 7 kW			
Tuning instruction	AS6194		AS6185	AS6290
Insertion loss & mask filtering (alternative tuning on request)	f_0 470 MHz ≤ 0.30 dB, 860 MHz ≤ 0.45 dB; $f_0 \pm 3.805$ ≤ 0.70 dB / ≤ 1.00 dB; $f_0 \pm 3.885$ ≤ 0.85 dB / ≤ 1.15 dB; $f_0 \pm 4.2$ ≥ 4 dB; $f_0 \pm 6$ ≥ 20 dB; $f_0 \pm 12$ ≥ 40 dB		f_0 470 MHz ≤ 0.4 dB, 803 MHz ≤ 0.55 dB; $f_0 \pm 2.79$ ≤ 1.0 dB / ≤ 1.40 dB; $f_0 \pm 3.0$ ≥ 4 dB; $f_0 \pm 3.15$ ≥ 8 dB; $f_0 \pm 4.5$ ≥ 23 dB; $f_0 \pm 9$ ≥ 48 dB; $f_0 \pm 15$ ≥ 50 dB	f_0 470 MHz ≤ 0.30 dB, 820 MHz ≤ 0.40 dB; $f_0 \pm 3.2$ ≤ 0.45 dB / ≤ 0.55 dB; $f_0 \pm 4.2$ ≥ 13 dB; $f_0 \pm 10.5$ ≥ 38 dB
Group delay variation	$\Delta\tau \leq 350$ ns		$\Delta\tau \leq 500$ ns	$\Delta\tau \leq 150$ ns
Wideband input	1 5/8" EIA	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male
Average input power	**≤ 7 kW**	**≤ 17.5 kW**	**≤ 33 kW**	**≤ 60 kW**
	Attention: The power at the wideband input must be reduced by 50 % of the power fed into the narrowband input.			
DTV mask filtering	No			
Insertion loss	≤ 0.1 dB (non adjacent)			
Output	1 5/8" EIA	3 1/8" EIA male	4 1/2" EIA male	52-120 BT male
Peak output voltage	≤ 8.5 kV	≤ 12.5 kV	≤ 15.5 kV	≤ 19.5 kV
Average output power	-	–	–	≤ 60 kW
Isolation between inputs	≥ 35 dB			
VSWR (one WB channel)	≤ 1.06			
Dimensions (L x W x H) mm	900 x 480 x 1200			900 x 520 x 1400
Weight	≈ 130 kg	≈ 140 kg	≈ 155 kg	≈ 200 kg
Environmental conditions	For limitations see „Environmental Conditions for Broadcast Products".			