



# ALCAD

- ▶ AMPLIFICADORES MULTIBANDA DE INTERIOR
- ▶ INDOOR MULTIBAND AMPLIFIERS
- ▶ AMPLIFICATEURS MULTIBANDE D'INTERIEUR
- ▶ AMPLIFICADORES MULTIBANDA PARA INTERIOR
- ▶ INNERER MEHRBEREICHsverstärker



<b>CARACTERÍSTICAS PRINCIPALES</b>								
<b>MAIN FEATURES</b>								
<b>PRINCIPALES CARACTERISTIQUES</b>								
<b>CARACTERISTICAS PRINCIPAIS</b>								
<b>WESENTLICHE KENNZEICHEN</b>								
CODIGO-CODE-CODE-CODIGO-CODE		9040053		9040050		9040063		
TIPO-TYPE-TYPE-TIPO-TYP		AI-100		AI-200		AI-400		
SALIDAS OUTPUTS SORTIES SAIDAS AUSGANGE		2				4		
RANGO DE FRECUENCIAS FREQUENCY RANGE GAMME DE FREQUENCE RANGO DE FRECUENCIAS FREQUENZBEREICH		Band	VHF	UHF	VHF	UHF	VHF	UHF
		MHz	40-318	470-862	40-318	470-862	40-318	470-862
GANANCIA GAIN GAIN GANHO VERSTÄRKUNG		dB	14 ±2,0 (OUT 1) 3 ±2,0 (OUT 2)	24 ±2,0 (OUT 1) 13 ±2,0 (OUT 2)	14 ±2,0	24 ±2,0	20 ±1,0	28 ±2,0
MARGEN REGULACION DE GANANCIA ADJUSTABLE GAIN RANGE PLAGE DE REGLAGE DU GAIN MARGEM DE REGULACAO DO GANHO REGELBARER VERSTÄRKUNG		dB	16	12	16	12	16	12
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL		dB $\mu$ V	104/91 DIN 45004B 101/88 (IMD <sub>3</sub> -60 dB) 90/77 (IMD <sub>2</sub> -60 dB)		102 DIN 45004B 99 (IMD <sub>3</sub> -60 dB) 88 (IMD <sub>2</sub> -60 dB)		102 DIN 45004B 99 (IMD <sub>3</sub> -60 dB) 86 (IMD <sub>2</sub> -60 dB)	
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL		dB $\mu$ V	88/75 CTB 90/69 CSO 92/77 XMOD		86 CTB 82 CSO 89 XMOD		86 CTB 81 CSO 82 XMOD	
FIGURA DE RUIDO NOISE FIGURE FACTEUR DE BRUIT FIGURA DE RUIDO RAUSCHMAß		dB	<4,5	<3,5	<4,5	<3,0	4,2 ±0,2	3,3 ±0,3
PÉRDIDAS DE RETORNO RETURN LOSS PERTES DE RETOUR PERDAS DE RETORNO RÜCKFLUßDÄMPFUNG		dB	≥10					
TENSION DE RED MAINS VOLTAGE TENSION DU SECTEUR TENSÃO DE REDE NETZSPANNUNG		V~	230±10% <sup>(1)</sup>					50/60 Hz
		VA	7				6	

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<b>WESENTLICHE KENNZEICHEN</b>					
CODIGO-CODE-CODE-CODIGO-CODE		9040060		9040061	
TIPO-TYPE-TYPE-TIPO-TYP		CA-210		CA-215	
SALIDAS OUTPUTS SORTIES SAIDAS AUSGANGE		2			
RANGO DE FRECUENCIAS FREQUENCY RANGE GAMME DE FREQUENCE RANGO DE FRECUENCIAS FREQUENZBEREICH	Band	VHF	UHF	VHF	UHF
	MHz	40 - 400	470 - 862	40 - 400	470 - 862
GANANCIA GAIN GAIN GANHO VERSTARKUNG	dB	24 ±2,0	25 ±2,0	24 ±2,0	25 ±2,0
MARGEN REGULACION DE GANANCIA ADJUSTABLE GAIN RANGE PLAGE DE REGLAGE DU GAIN MARGEM DE REGULACAO DO GANHO REGELBARER VERSTARKUNG	dB	16	12	16	12
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL	dB $\mu$ V	102 DIN 45004B 99 (IMD <sub>3</sub> -60 dB) 86 (IMD <sub>2</sub> -60 dB)			
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL	dB $\mu$ V	86 CTB 80 CSO 89 XMOD			
FIGURA DE RUIDO NOISE FIGURE FACTEUR DE BRUIT FIGURA DE RUIDO RAUSCHMAß	dB	<4,5	<3,0	<4,5	<3,0
PERDIDAS DE RETORNO RETURN LOSS PERTES DE RETOUR PERDAS DE RETORNO RÜCKFLUßDAMPFUNG	dB	≥10			
TENSION DE SALIDA OUTPUT VOLTAGE TENSION DE SORTIE TENSÃO DE SAIDA AUSGANGSSPANNUNG	V $\cdots$	24		12	
	mA	55		60	
TENSION DE RED MAINS VOLTAGE TENSION DU SECTEUR TENSÃO DE REDE NETZSPANNUNG	V $\sim$	230±10% <sup>(1)</sup> 50/60 Hz			
	VA	7			

**CARACTERÍSTICAS PRINCIPALES****MAIN FEATURES****PRINCIPALES CARACTERISTIQUES****CARACTERISTICAS PRINCIPAIS****WESENTLICHE KENNZEICHEN**

CODIGO-CODE-CODE-CODIGO-CODE		9040051		9040052		
TIPO-TYPE-TYPE-TIPO-TYP		AI-221		AI-223		
SALIDAS OUTPUTS SORTIES SAIDAS AUSGANGE		2				
RANGO DE FRECUENCIAS FREQUENCY RANGE GAMME DE FREQUENCE RANGO DE FRECUENCIAS FREQUENZBEREICH	Band	RETURN	VHF/UHF	RETURN	VHF/UHF	
	MHz	0 - 30	47 - 862	0 - 65	86 - 862	
GANANCIA GAIN GAIN GANHO VERSTÄRKUNG	dB	-5,5 ±1,0	25 ±2,0	-4,5 ±1,0	25 ±2,0	
MARGEN REGULACIÓN DE GANANCIA ADJUSTABLE GAIN RANGE PLAGE DE REGLAGE DU GAIN MARGEM DE REGULACAO DO GANHO REGLBARER VERSTÄRKUNG	MHz	-	47	862	-	86 862
	dB	-	20	10	-	15 10
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL	dB $\mu$ V	105 DIN 45004B 102 (IMD <sub>3</sub> -60 dB) 90 (IMD <sub>2</sub> -60 dB)				
NIVEL DE SALIDA OUTPUT LEVEL NIVEAU DE SORTIE NIVEL DE SAIDA AUSGANGSPEGEL	dB $\mu$ V	89 CTB 84 CSO 90 XMOD				
FIGURA DE RUIDO NOISE FIGURE FACTEUR DE BRUIT FIGURA DE RUIDO RAUSCHMAß	dB	≤6				
PERDIDAS DE RETORNO RETURN LOSS PERTES DE RETOUR PERDAS DE RETORNO RÜCKFLUßDÄMPFUNG	dB	≥10				
TENSION DE RED MAINS VOLTAGE TENSION DU SECTEUR TENSÃO DE REDE NETZSPANNUNG	V~	230±10% <sup>(1)</sup>		50/60 Hz		
	VA	5,5				

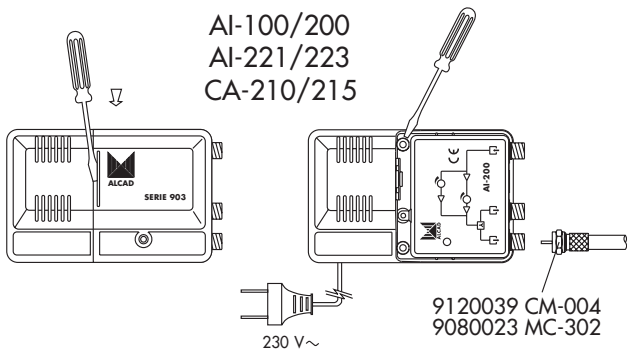
<b>CARACTERÍSTICAS PRINCIPALES</b>								
<b>MAIN FEATURES</b>								
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<b>CARACTERÍSTICAS PRINCIPAIS</b>								
<b>WESENTLICHE KENNZEICHEN</b>								
CODIGO-CODE-CODE-CODIGO-CODE		9040053	9040050	9040063	9040060	9040061	9040051	9040052
TIPO-TYPE-TYPE-TIPO-TYP		AI-100	AI-200	AI-400	CA-210	CA-215	AI-221	AI-223
TEMPERATURA DE FUNCIONAMIENTO OPERATING TEMPERATURE TEMPERATURE DE FONCTIONNEMENT TEMPERATURA DE FUNCIONAMENTO BETRIEBSTEMPERATUR		°C	-5..+60	-10..+65				-5..+60
ÍNDICE DE PROTECCIÓN PROTECTION INDEX INDICE DE PROTECTION INDICE DE PROTECÇÃO SCHÜTZKLASSE		IP 20						

- ▶ Se deben cargar las salidas no utilizadas con cargas RS-275 (COD. 9120011).
- ▶ The unused outputs should be loaded with an RS-275 (COD. 9120011) load.
- ▶ Les sorties non utilisées doit être chargées avec des charges RS-275 (COD. 9120011).
- ▶ Deve-se carregar as saídas não utilizadas com cargas RS-275 (COD. 9120011).
- ▶ Man soll den nicht genützten Ausgänge mit ciner Last RS-275 schützen (COD. 9120011).

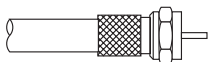
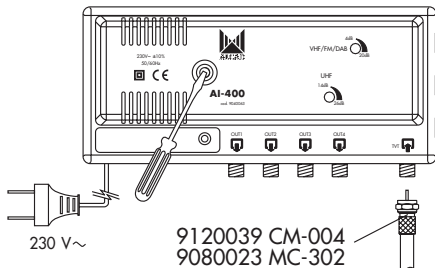
- (1) Bajo pedido 125 o 240 V~
- (1) Upon request 125 or 240 V~
- (1) Sur demande 125 ou 240 V~
- (1) Sob pedido 125 ou 240 V~
- (1) Nach Anfrage Auswahl zwischen 125 order 240 Wechselspannung möglich

- ▶ COMO FIJAR EL AMPLIFICADOR
- ▶ HOW TO FIX THE AMPLIFIER
- ▶ COMMENT FIXER L'AMPLIFICATEUR
- ▶ COMO FIXAR O AMPLIFICADOR
- ▶ WIE WIRD DER VERSTÄKER BEFESTIGT

AI-100/200  
AI-221/223  
CA-210/215

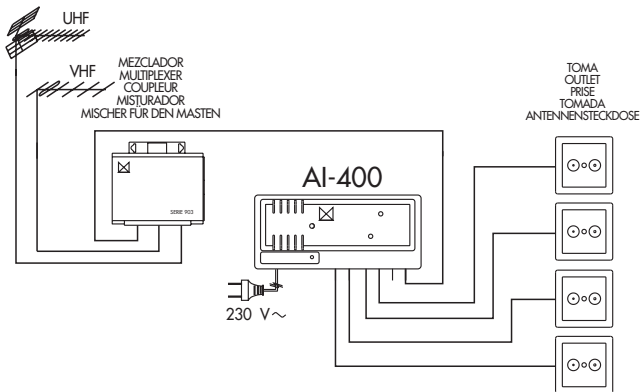
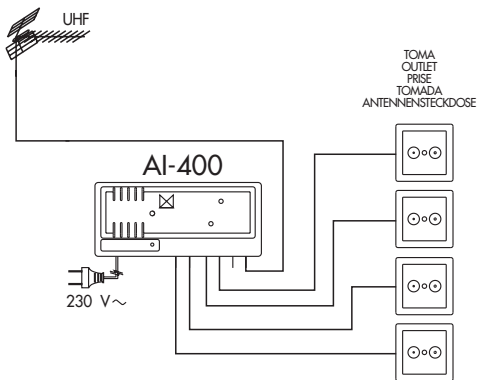


AI-400

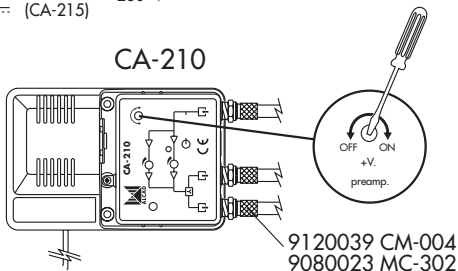
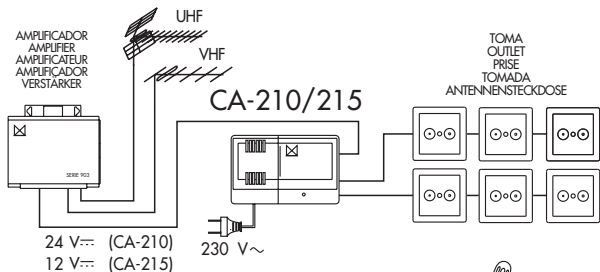
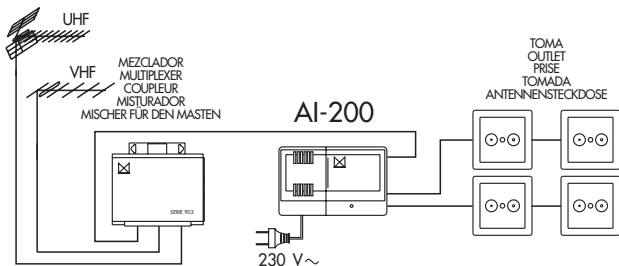


9120039 CM-004 (coax  $\varnothing$  6,5 - 6,8 mm)  
9080023 MC-302 (coax  $\varnothing$  6,8 - 7,2 mm)

- ▶ INSTALACIÓN INDIVIDUAL
- ▶ INDIVIDUAL INSTALLATION
- ▶ INSTALLATION INDIVIDUELLE
- ▶ INSTALAÇÃO INDIVIDUAL
- ▶ EINZEL ANLAGEN



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- ▶ INDIVIDUAL INSTALLATION
- ▶ INSTALLATION INDIVIDUELLE
- ▶ INSTALAÇÃO INDIVIDUAL
- ▶ EINZEL ANLAGEN

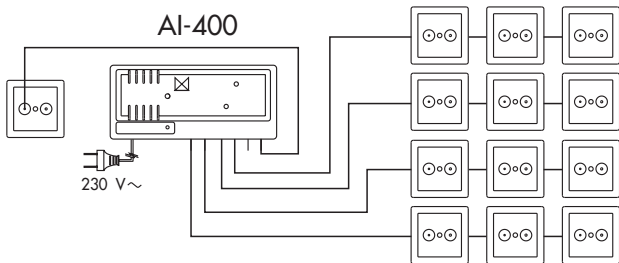




- ▶ INSTALACIÓN EN APARTAMENTO
- ▶ INSTALLATION INSIDE THE APARTMENT
- ▶ INSTALLATION DANS L'APPARTEMENT
- ▶ INSTALAÇÃO EM APARTAMENTO
- ▶ MEHRTEIL NEHMER ANLAGEN

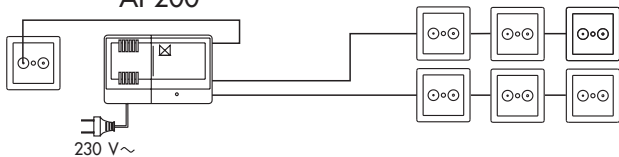
TOMA  
OUTLET  
PRISE  
TOMADA  
ANTENNENSTECKDOSE

AI-400



AI-200

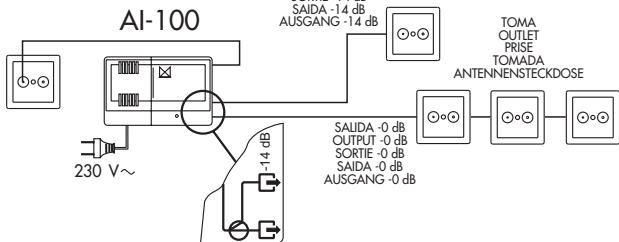
TOMA  
OUTLET  
PRISE  
TOMADA  
ANTENNENSTECKDOSE



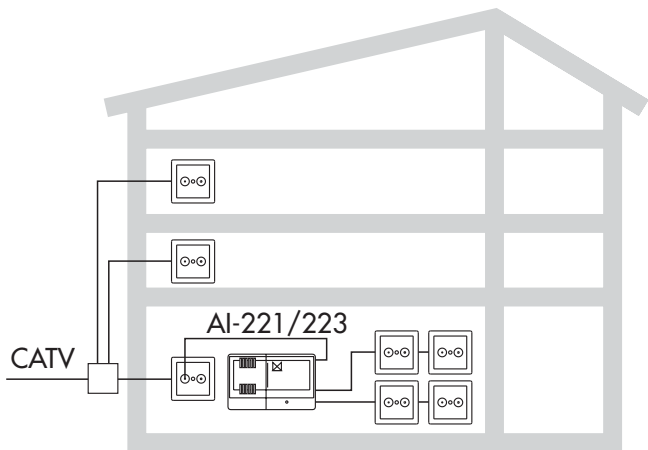
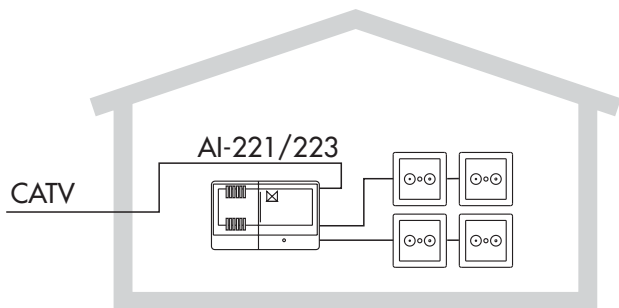
AI-100

SAIDA -14 dB  
OUTPUT -14 dB  
SORTIE -14 dB  
SAIDA -14 dB  
AUSGANG -14 dB

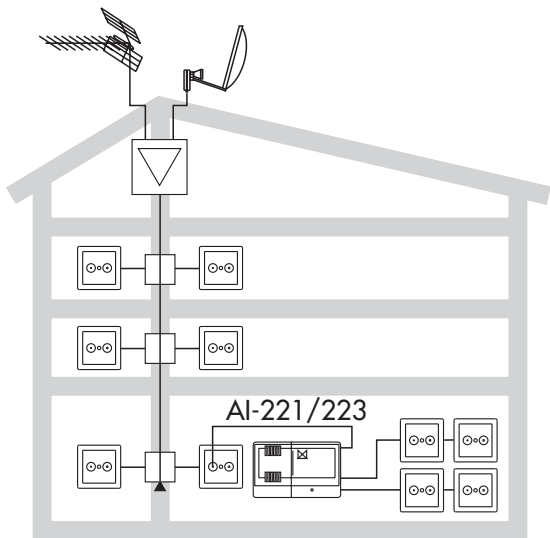
TOMA  
OUTLET  
PRISE  
TOMADA  
ANTENNENSTECKDOSE



- ▶ INSTALACIÓN CATV
- ▶ CATV INSTALLATION
- ▶ INSTALLATION RESEAU CABLE
- ▶ INSTALAÇÃO CATV
- ▶ CATV-ANLAGE



- ▶ INSTALACIÓN COLECTIVA CON CANALES S
- ▶ COLLECTIVE INSTALLATION WITH S CHANNELS
- ▶ INSTALLATION COLLECTIVES AVEC CANAUX EN BANDE S
- ▶ INSTALAÇÃO COLECTIVA COM CANAIS S
- ▶ GEMEINSCHAFTSANLAGE MIT S-KANALEN





# DECLARATION OF CONFORMITY

according to EN 45014

**Manufacturer's Name:** ALCAD, S.A.  
**Manufacturer's Address:** Pol. Ind. Arreche-Ugalde, 1  
Apdo. 455  
**20305 IRUN** (Guipúzcoa)  
**SPAIN**

declares that the product

**Product Name:** 904 Series: AMPLIFIERS  
**Model Number(s):** AI-100, AI-200, AI-400, CA-210, CA-215,  
AI-221, AI-223  
**Product Option(s):** INCLUDING ALL OPTIONS

is in conformity with:

Safety: EN50083-1

EMC: EN 50083-2, EN 61000-6-3 Electromagnetic Compatibility for Equipment  
IEC 61000-4-2:1995 / EN 61000-6-1:2001 ESD 8KV AD, 4KV CD.  
IEC 61000-4-4:1995 / EN 61000-6-1:2001 EFT 4KV-2,5KHz Sig. Lines, 4KV-2,5KHz Power Lines.  
IEC 61000-4-5:1995 / EN 61000-6-1:2001 CWG 1KV Power Lines.  
IEC 61000-4-11:1994 / EN 61000-6-1:2001 Dips and Variation.

Technical Features : EN50083-3

## Supplementary Information:

The product herewith complies with the requirements of the Low Voltage Directive 73/23/ECC and the EMC Directive 89/336/EEC and their relevant amendments, gathered under the directives 93/68/EEC.

Note: to comply with these directives, do not use the products without covers and operate the system as specified.



Irún,

3-01-05

Date

Antton Galarza / General Manager

Especificaciones sujetas a modificación sin previo aviso  
Specifications subject to modifications without prior notice  
Les spécifications sont soumises à de possible modifications sans avis préalable

Especificaciones sujetas a modificación sin previo aviso  
Die Spezifikationen können ohne vorherigen Bescheid geändert werden



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**CZECH REPUBLIC** - Ostrovačice  
Tel. 546 427 059



ISO 9001



ER-0196/1996