

**BLAX300 RS**

**TECHNICAL  
MANUAL**

**Version 003**

---

**Sadis BRUKER SPECTROSPIN**

---

The information in this manual may be altered without notice.

Sadis BRUKER SPECTROSPIN accepts no responsibility for actions taken as a result of use of this manual. Sadis BRUKER SPECTROSPIN accepts no liability for any mistakes contained in the manual, leading to coincidental damage, whether during installation or operation of the instrument. Unauthorised reproduction of manual contents, without written permission from the publishers, or translation into another language, either in full or in part, is forbidden.

This manual was written by

M.Dominique WURTZ

© February 28, 1996 - Sadis BRUKER SPECTROSPIN

Wissembourg, FRANCE

P/N: W1302163

Updated for BASH 2.0 by UR - December 1996

Manual P/N Z31203

DWG-No. 873003

# **Contents**

<b><i>Contents</i></b>	<b>1</b>
<b><i>Index</i></b>	<b>3</b>
<b><i>Block diagram</i></b>	<b>5</b>
<b><i>Power supply</i></b>	<b>7</b>
<b><i>Fan assembly</i></b>	<b>15</b>
<b><i>Preampli BLMX001</i></b>	<b>20</b>
<b><i>Amplifier BLMX300</i></b>	<b>27</b>
<b><i>Blanking BLMX300</i></b>	<b>34</b>
<b><i>Interconnecting</i></b>	<b>39</b>
<b><i>Coupler BDCX40</i></b>	<b>42</b>
<b><i>SBS bus controller</i></b>	<b>47</b>
<b><i>Figures</i></b>	<b>50</b>



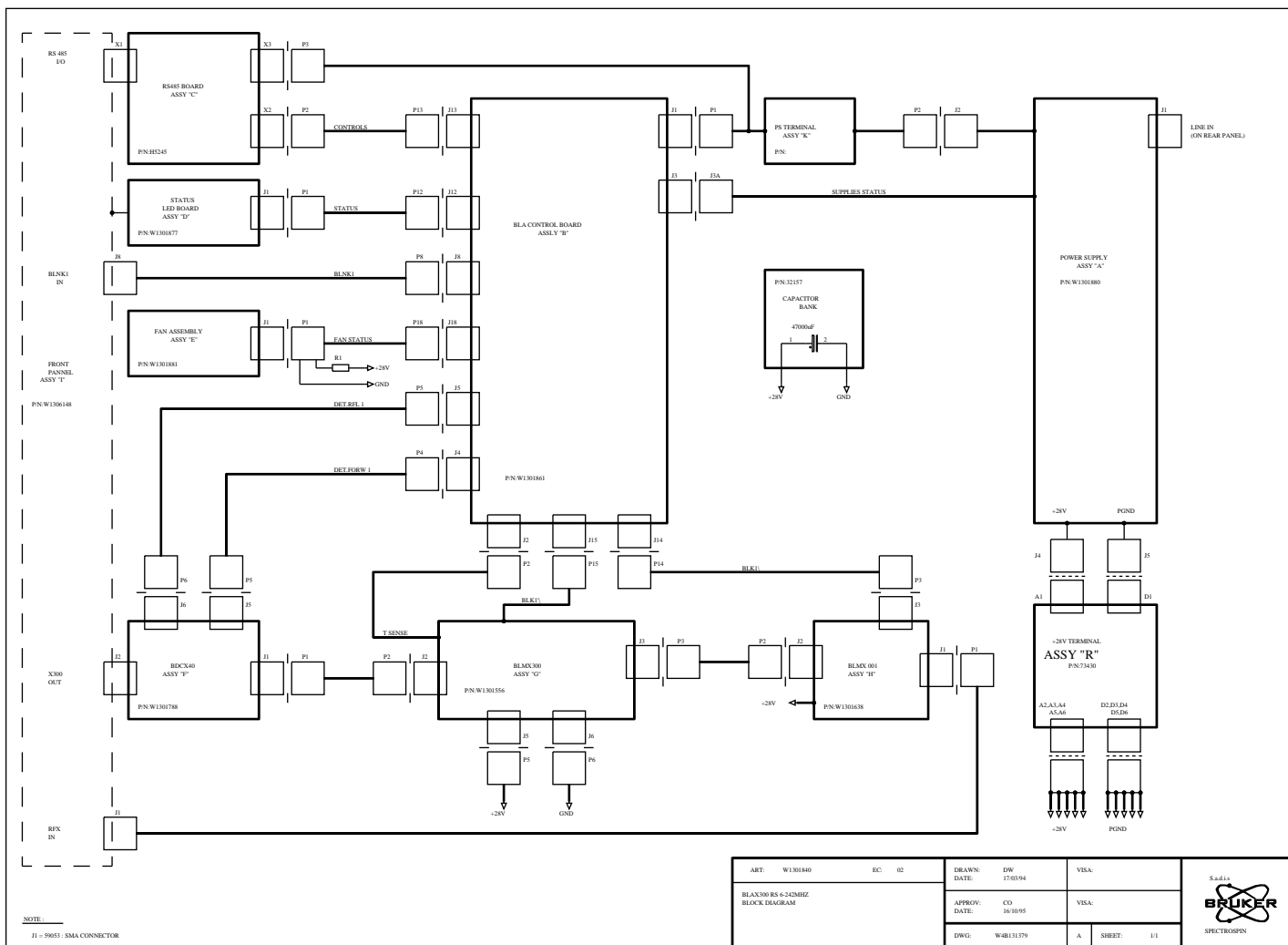
# ***Index***



# ***Block diagram***

# **1**

Figure 1.1. Block diagram

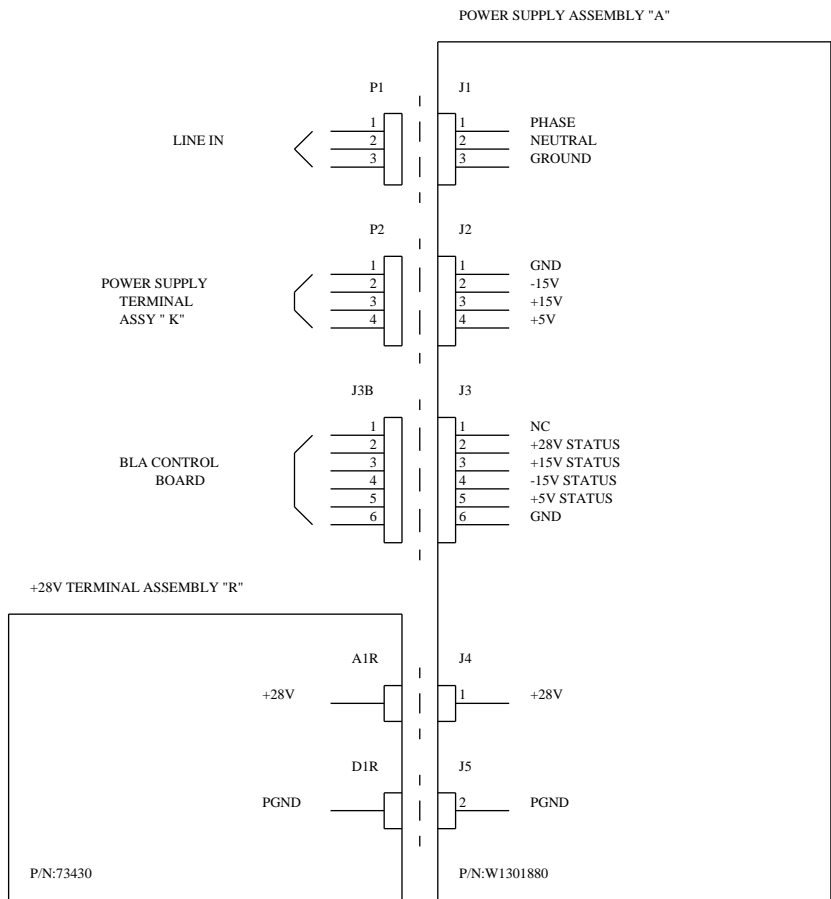




# *Power supply*

# 2

Figure 2.1. Interconnect drawing




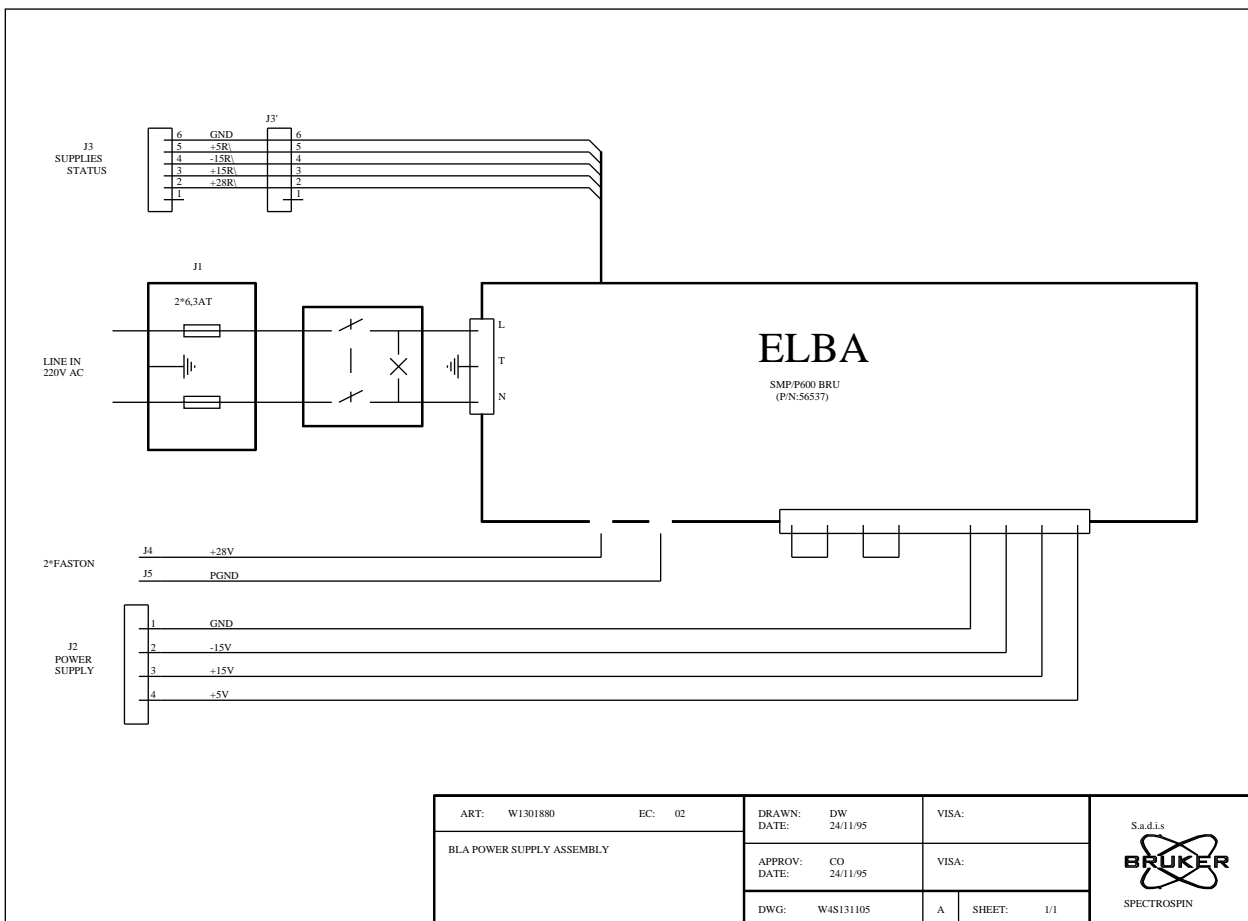
ART: W1301880	EC:	DRAWN: DW	VISA:	<p>S.a.d.i.s</p>  <p>SPECTROSPIN</p>
BLA POWER ASSEMBLY ASSY "A" INTERCONNECT DRAWING		DATE: 03/01/94		
		APPROV: CO	VISA:	
		DATE: 01/06/94		
		DWG: W4W131518	SHEET: 1/1	

Figure 2.2. Power supply wiring diagram




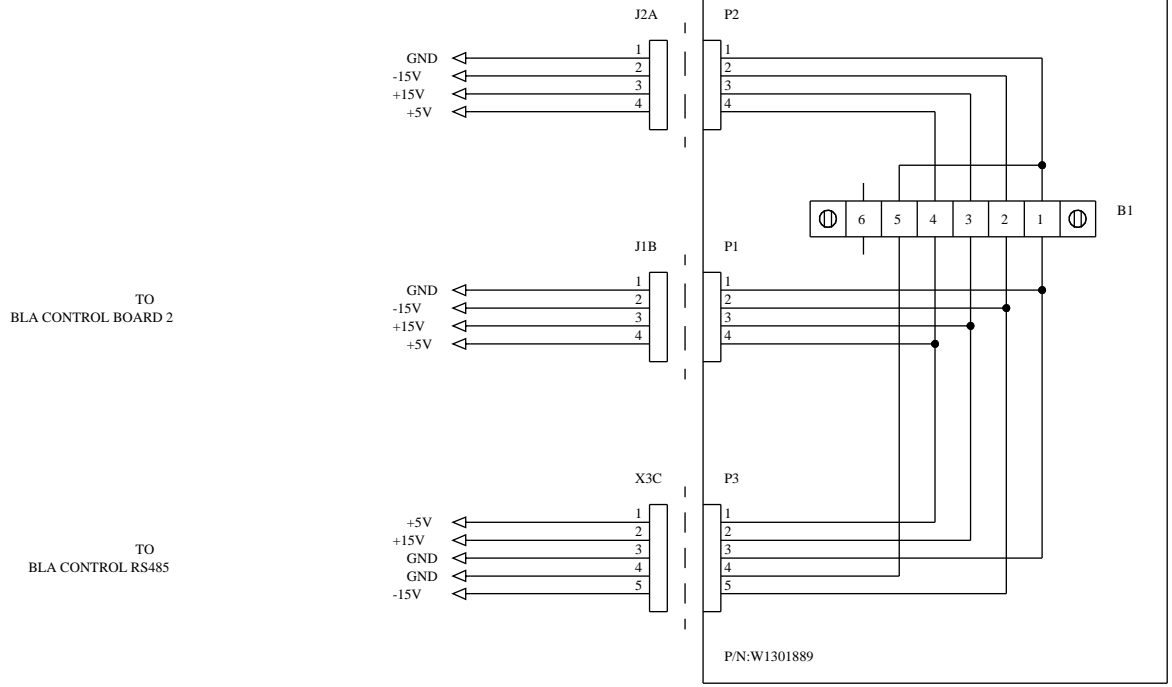

ART: W1301880	EC: 02	DRAWN: DW	VISA:	S.a.d.i.s  SPECTROSPIN
BLA POWER SUPPLY ASSEMBLY		DATE: 24/11/95	DATE: 24/11/95	
		APPROV: CO	VISA:	
		DATE: 24/11/95	A	SHEET: 1/1
		DWG: W4S131105		

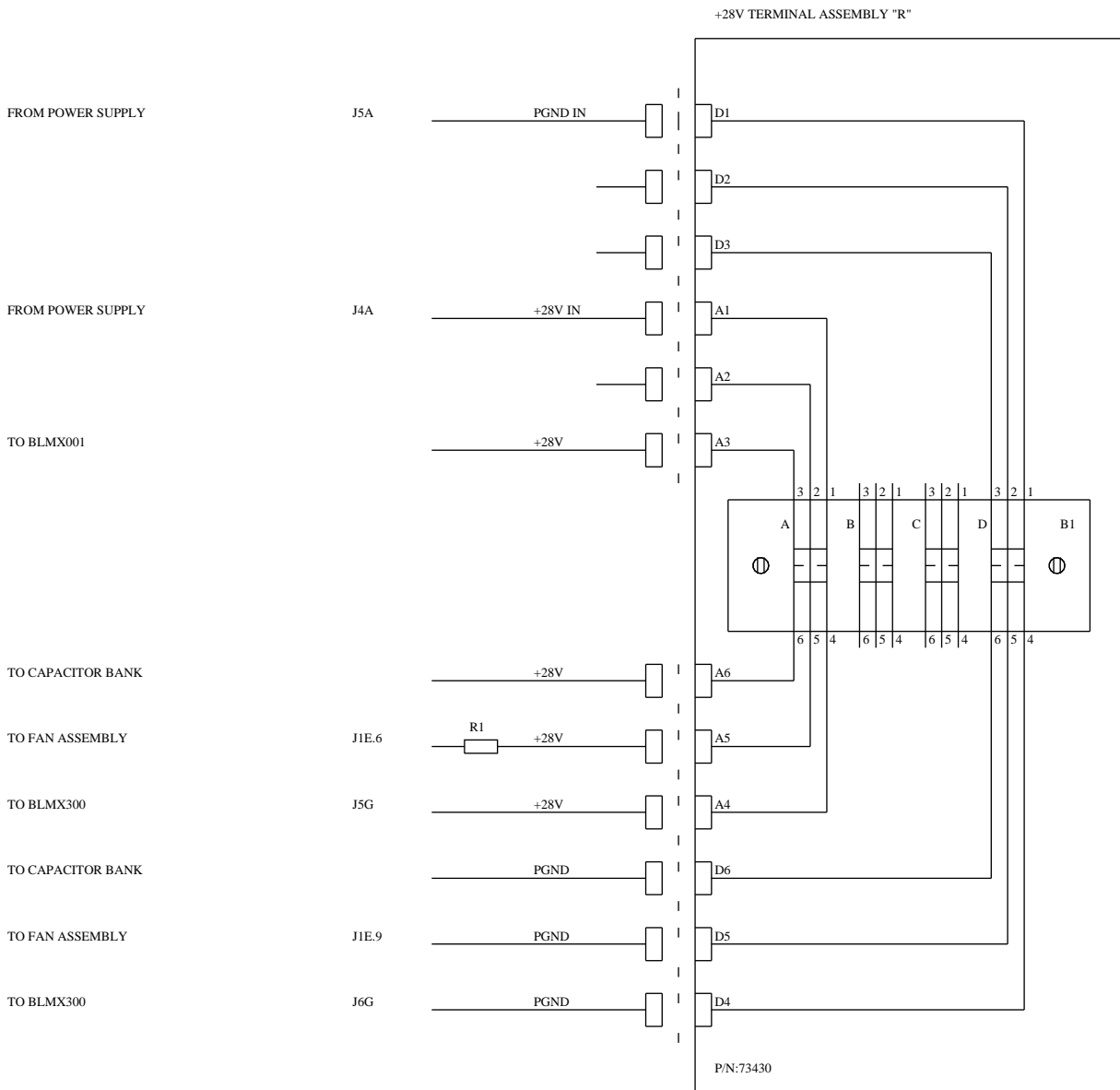
Figure 2.3. Power supply terminal - Interconnect drawing

POWER SUPPLY TERMINAL ASSEMBLY "K"



ART: W1301889	EC: 01	DRAWN: DW	VISA:	<p>S.a.d.i.s</p>  <p>SPECTROSPIN</p>
BLA POWER SUPPLY TERMINAL ASSY "K" INTERCONNECT DRAWING		DATE: 06/05/93	VISA:	
		APPROV:	VISA:	
		DATE:		
		DWG: W4S131418	SHEET: 1/1	

*Figure 2.4. +28V terminal - Interconnect drawing*



**NOTE :**

B1 = 73430 : 3070-PCM-04-5.033  
 R1 = 32327 : RH10 22

ART: 73430	EC:	DRAWN: DW	VISA:	
+28V TERMINAL ASSY "R" INTERCONNECT DRAWING		DATE: 18/03/94		
		APPROV: DATE:	VISA:	
		DWG: W4W131731	SHEET: 1/1	

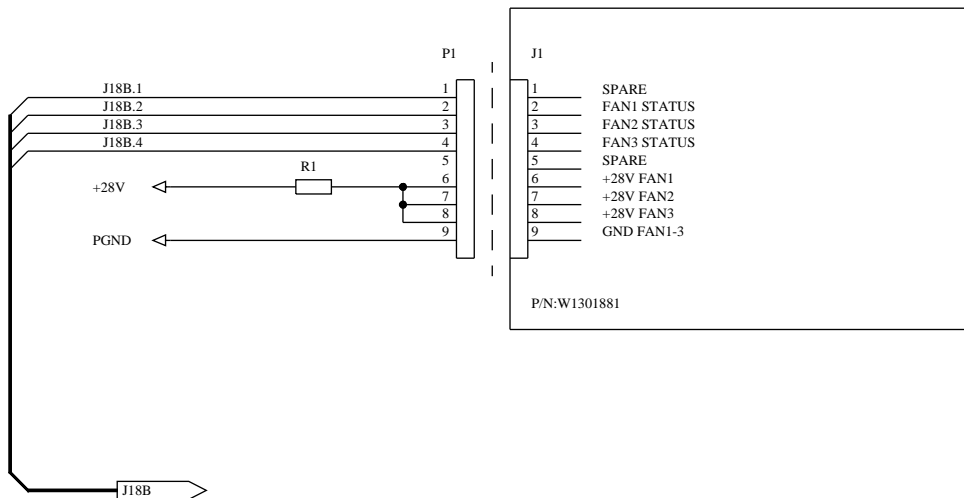


# ***Fan assembly***


# **3**

Figure 3.1. Interconnect drawing

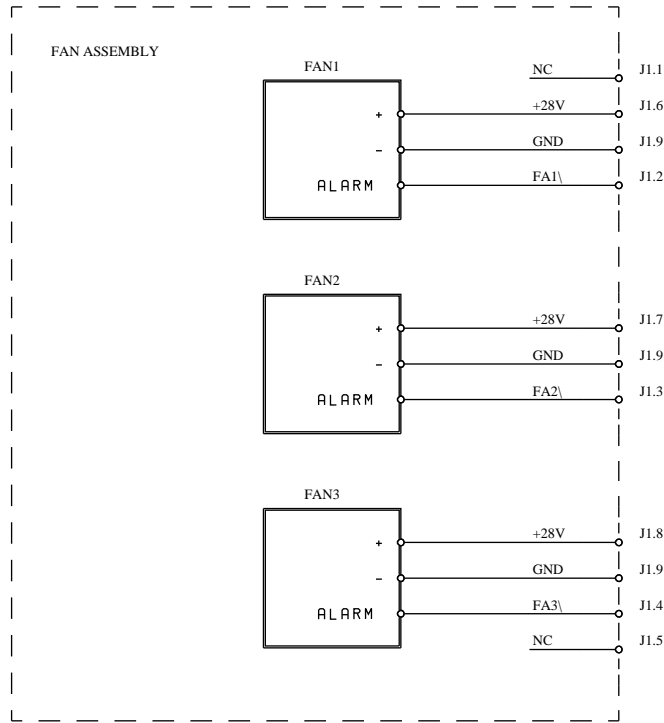
BLA FAN ASSEMBLY "E"



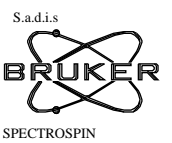
P/N:W1301881

ART: W1301881	EC:	DRAWN: DW	VISA:	
BLA FAN ASSY "E" INTERCONNECT DRAWING		DATE: 10/03/94	DATE:	
		APPROV: DATE:	VISA:	
DWG: W4W131423	A	SHEET: 1/1		

*Figure 3.2. Fan assembly*



ART: W1301881	EC: 01	DRAWN: DW	VISA:
FAN ASSEMBLY		DATE: 05/05/93	
		APPROV:	VISA:
		DATE:	
DWG: W4S131424		SHEET: 1/1	

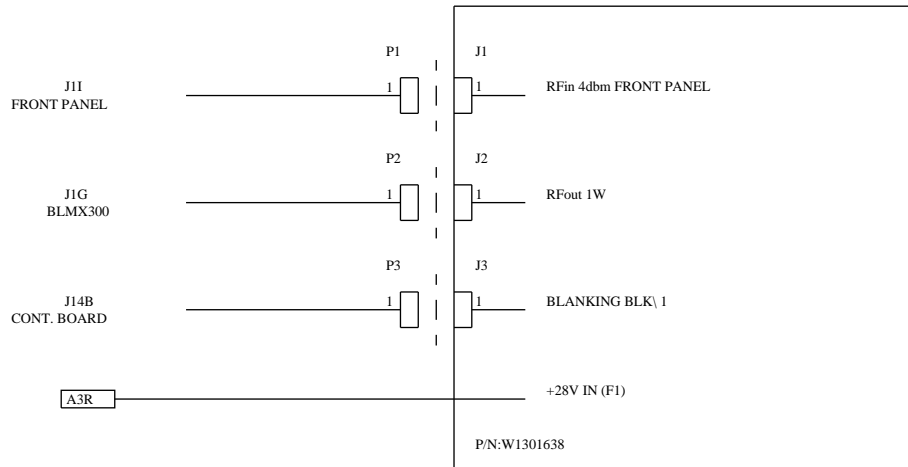


# ***Preamplic BLMX001***

# **4**

Figure 4.1. Interconnect drawing

BLMX 001 ASSEMBLY "H"



ART: W1301638	EC:	DRAWN: DW	VISA:	
BLMX001 ASSY "H" INTERCONNECT DRAWING		DATE: 18/03/94		
		APPROV: CO	VISA:	
		DATE: 13/02/96		
		DWG: W4W131425	A	SHEET: 1/1



Figure 4.2. *BLMX001 - Block diagram*

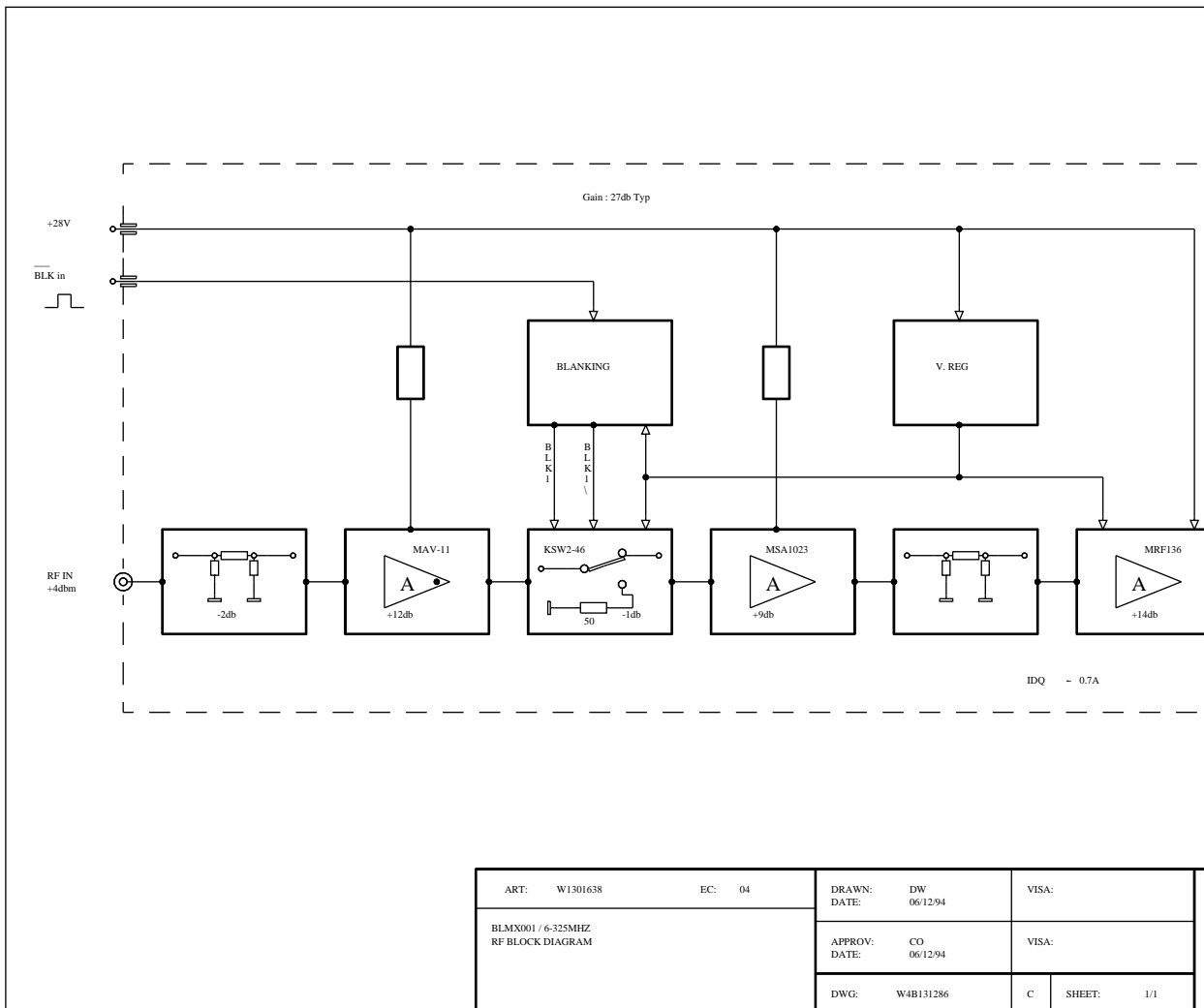
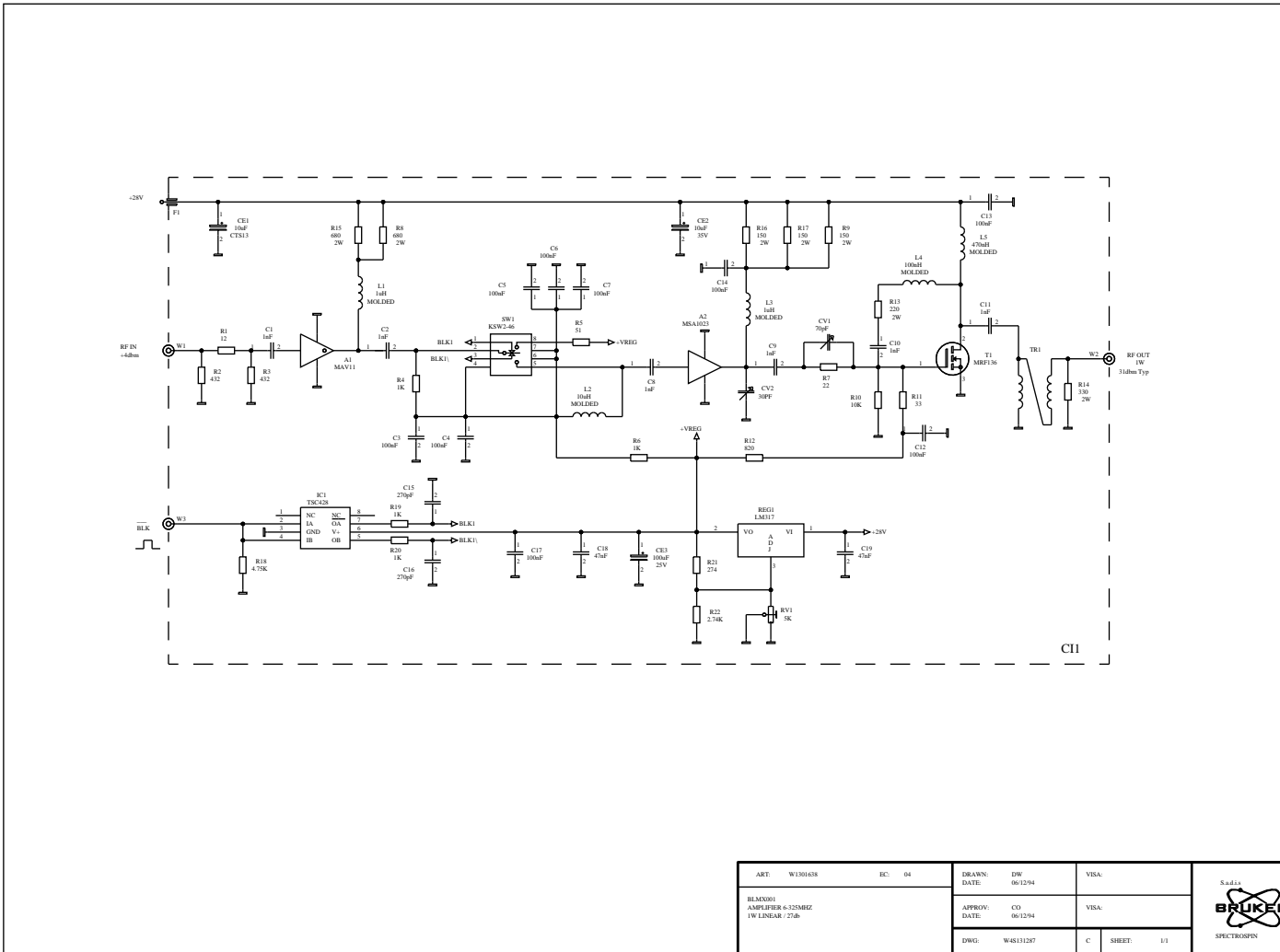


Figure 4.3. *BLMX001 - 1W linear 6-240 MHz / 27 dB*



ART: W1301638	EC: 04	DRAWN: DW	DATE: 06/12/94	VISA:
BLAX300 AMPLIFIER 6-325MBZ 1W LINEAR / 27db		APPROV: CO	DATE: 06/12/94	VISA:
		DWG: W48131287	C	SHEET: 1/1

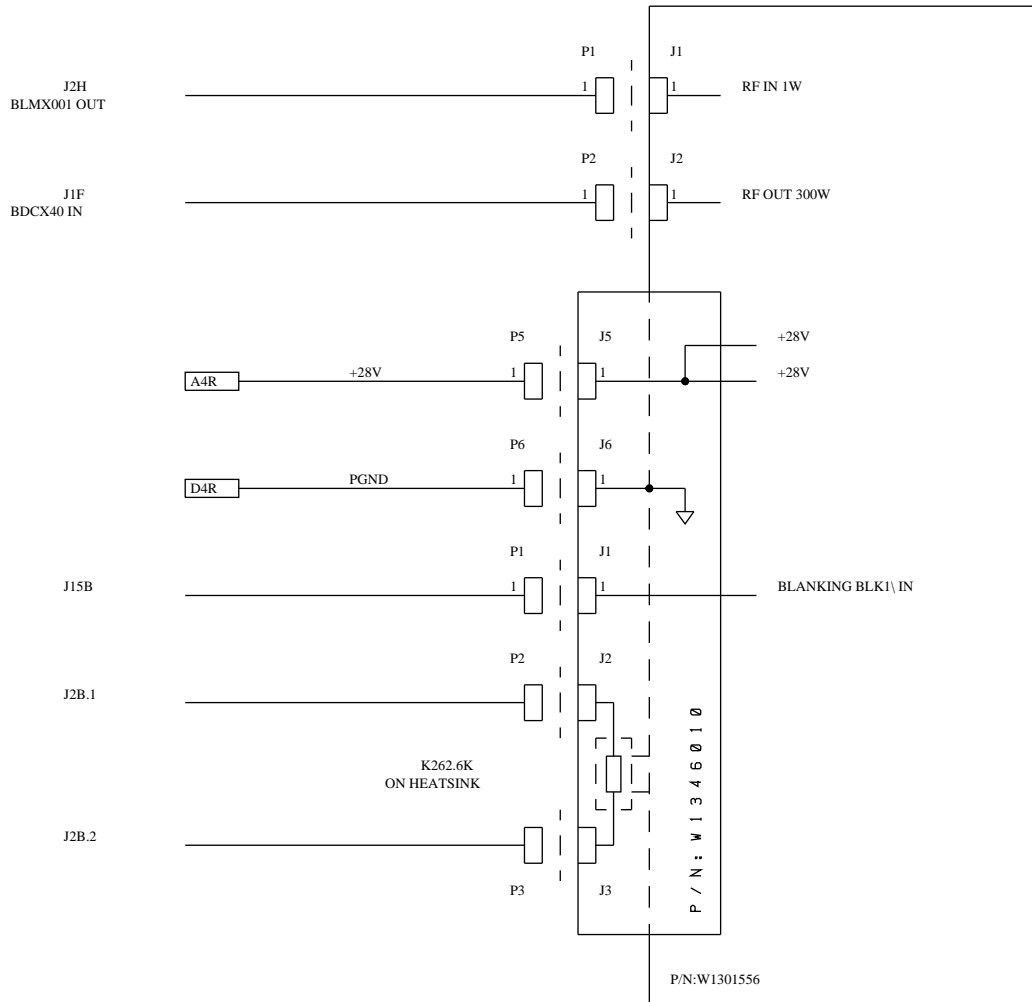


# ***Amplifier BLMX300***

# **5**

Figure 5.1. Interconnect drawing

BLMX300 ASSEMBLY "G"



ART: W1301556	EC:	DRAWN: DW	DATE: 18/03/94	VISA:
BLMX300 ASSY "G" INTERCONNECT DRAWING		APPROV: CO	DATE: 13/02/96	VISA:
		DWG: W4W131732		SHEET: 1/1

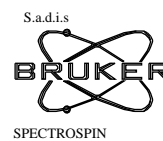
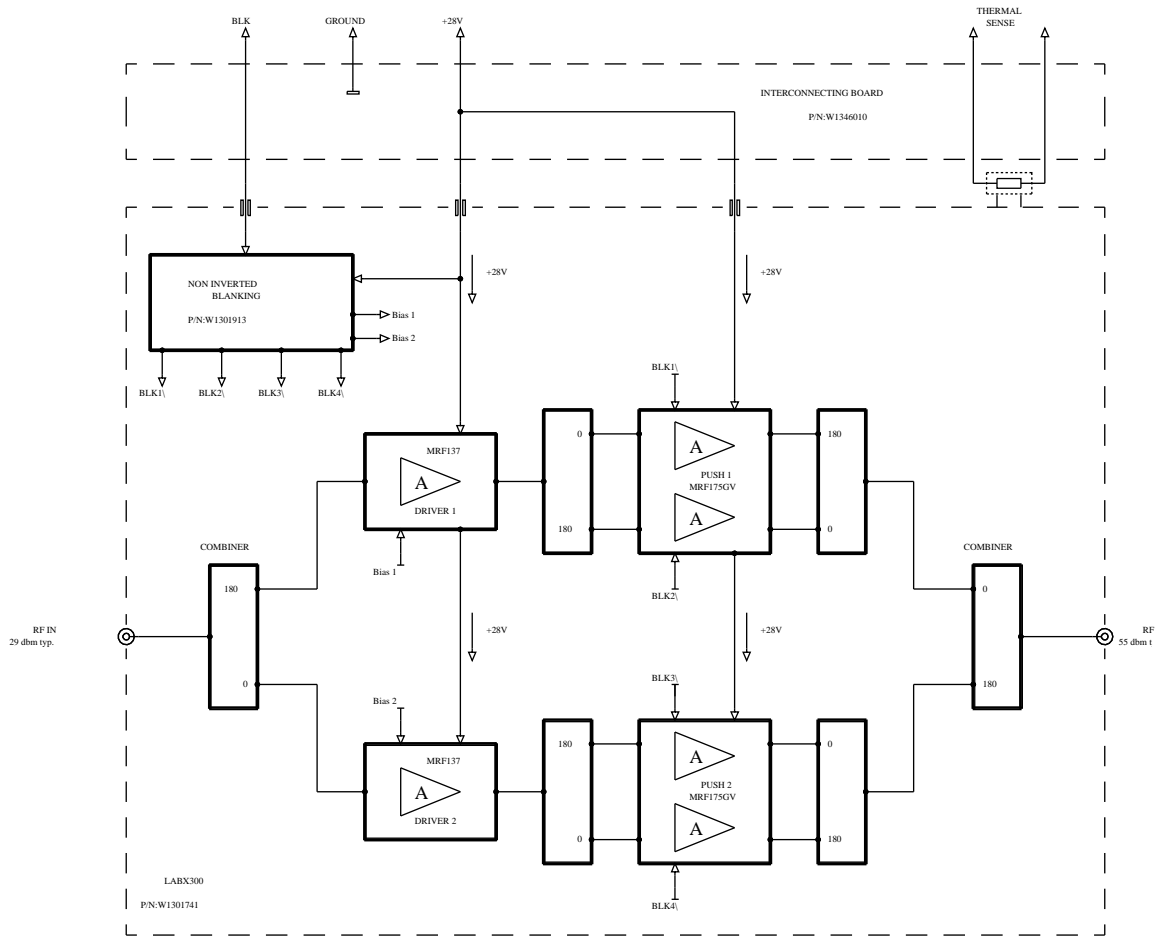


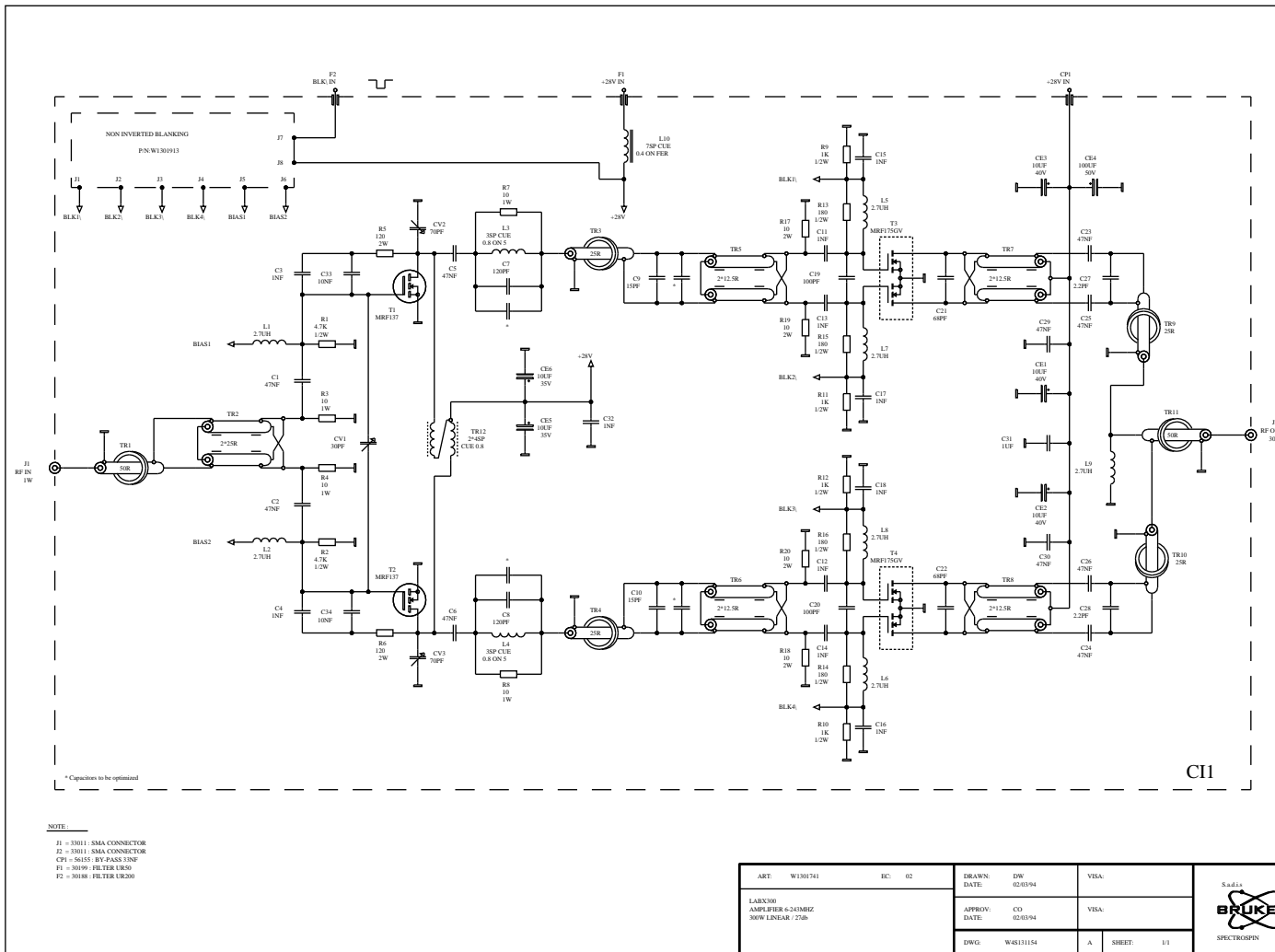
Figure 5.2. *BLMX300 - Block diagram*





ART: W1301556	EC: 01	DRAWN: DW	VISA:
---------------	--------	-----------	-------

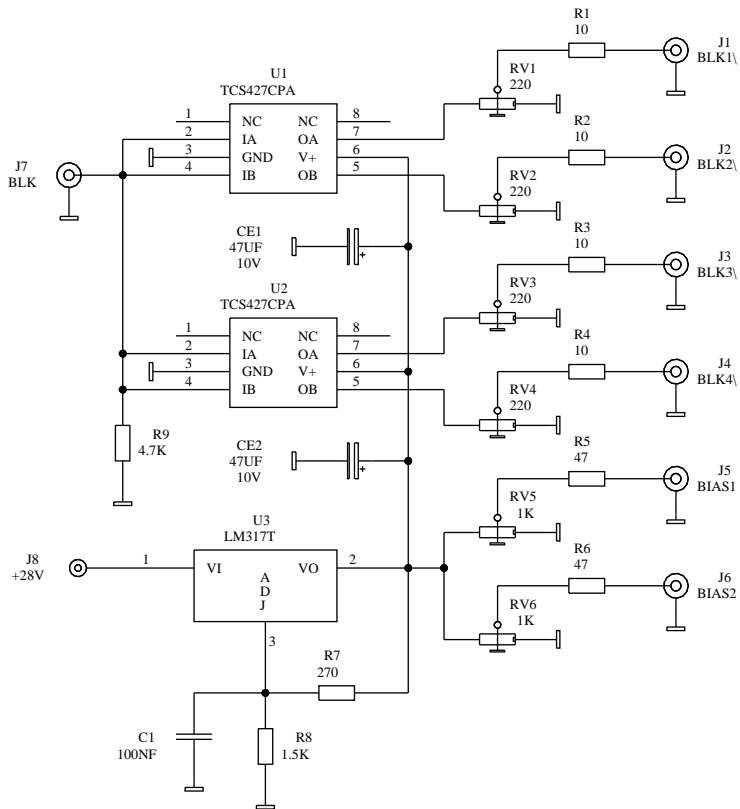
Figure 5.3. LABX - 300W linear / 6-240 MHz / 27 dB



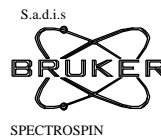
# ***Blanking BLMX300***

# **6**

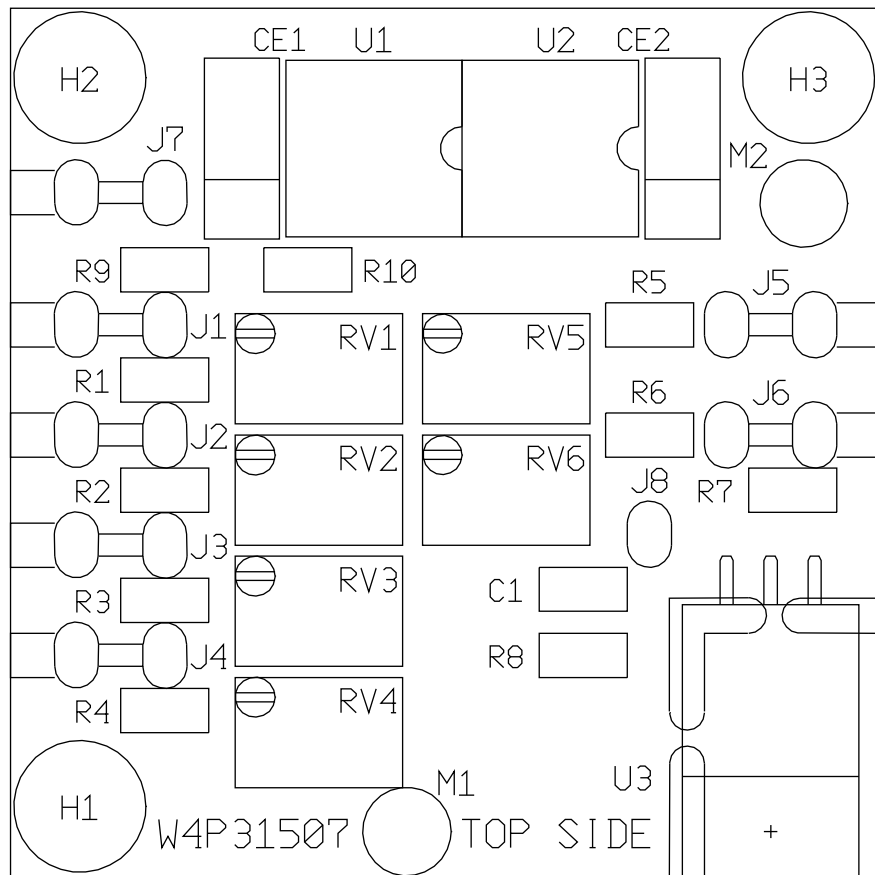
Figure 6.1. *Blanking BLA 300W*



ART: W1301913	EC: 01	DRAWN: DW	DATE: 13/09/93	VISA:
NON INVERTED BLANKING		APPROV: CO	DATE: 13/09/93	VISA:
		DWG: W4S131508		SHEET: 1/1



*Figure 6.2. Blanking BLA 300W - Location*

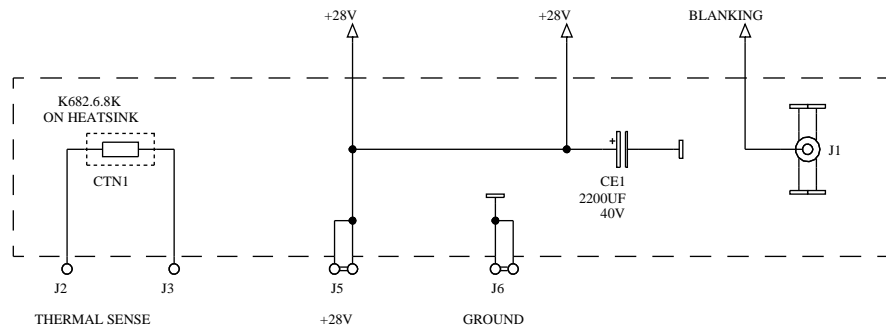




# *Interconnecting*

# 7

Figure 7.1. Interconnecting board



NOTE:

CTN1 = 56521 : CTN 6K8 K682

ART: W1346010	EC: 01	DRAWN: DW	VISA:
INTERCONNECTING BOARD		DATE: 01/02/94	

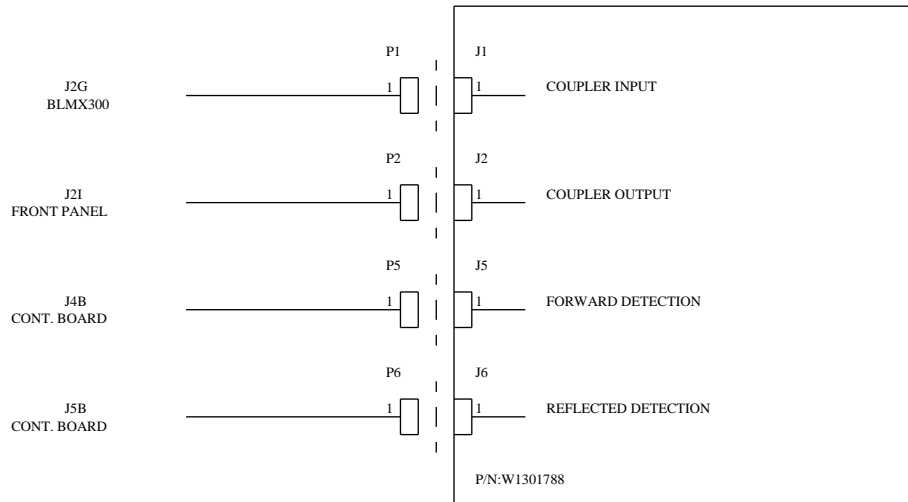
S.a.d.  



# ***Coupler BDCX40***

**8**

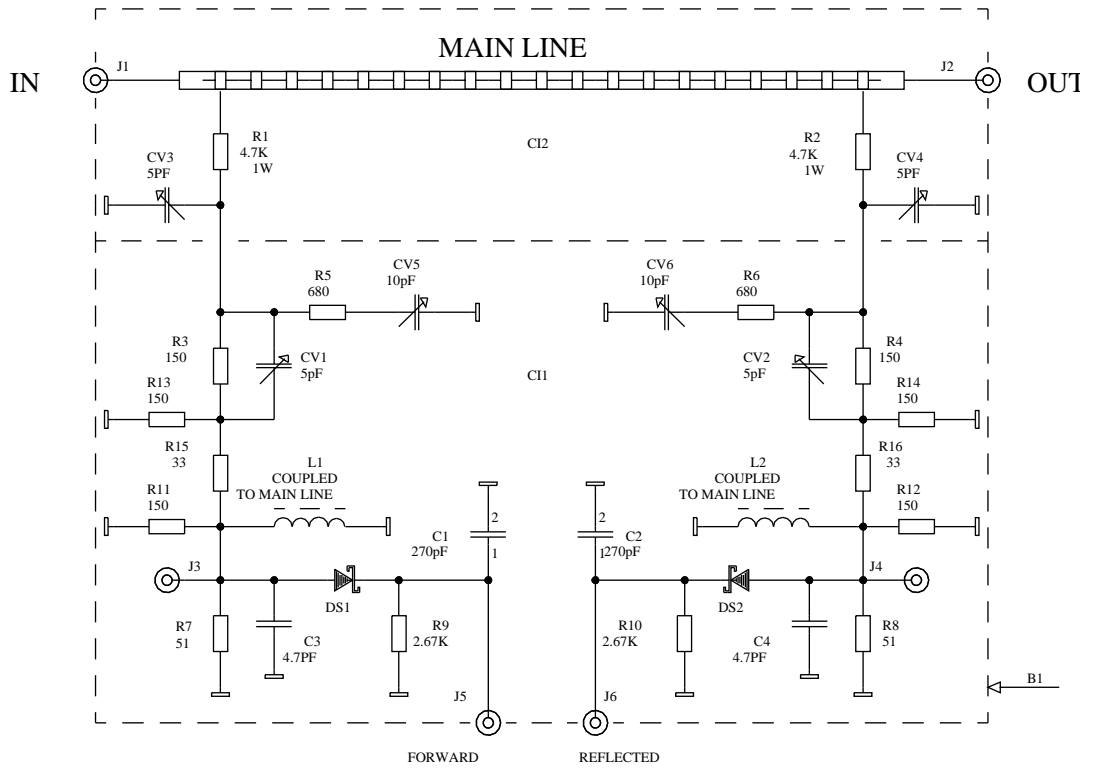
Figure 8.1. Interconnect drawing

BDCX40 ASSEMBLY "F"



ART: W1301788	EC:	DRAWN: DW	VISA:	
BDCX40 ASSY "F" INTERCONNECT DRAWING		DATE: 11/05/93		
		APPROV: CO	VISA:	
		DATE: 13/02/96		
		DWG: W4W131427	SHEET: 1/1	

*Figure 8.2. Bi-directional coupler*



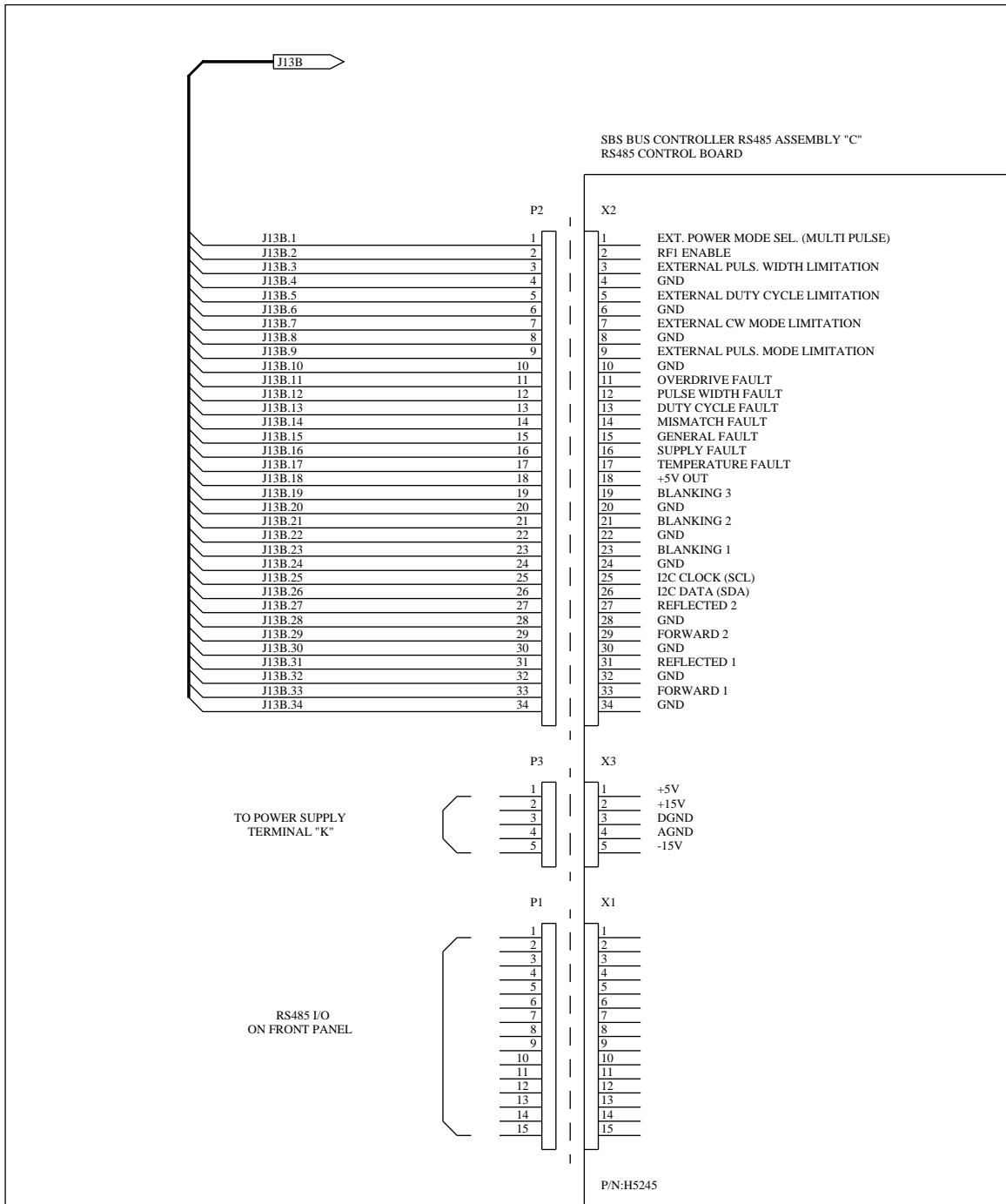
ART: W1301788	EC: 01	DRAWN: DW	VISA:	S.a.d. 
BDCX40		DATE: 20/03/95		



# ***SBS bus controller***

**9**





ART: H5245	EC:	DRAWN: DW	VISA:
		DATE: 06/01/94	
SBS BUS CONTROLLER ASSY "C" RS485 CONTROL BOARD INTERCONNECT DRAWING		APPROV:	VISA:
		DATE:	
		DWG: W4W131557	SHEET: 1/1



# Figures

<b>Contents</b>	<b>1</b>
<b>Index</b>	<b>3</b>
<b>1 Block diagram</b>	<b>5</b>
Figure 1.1. Block diagram .....	6
<b>2 Power supply</b>	<b>7</b>
Figure 2.1. Interconnect drawing .....	8
Figure 2.2. Power supply wiring diagram .....	9
Figure 2.3. Power supply terminal - Interconnect drawing .....	11
Figure 2.4. +28V terminal - Interconnect drawing .....	13
<b>3 Fan assembly</b>	<b>15</b>
Figure 3.1. Interconnect drawing .....	16
Figure 3.2. Fan assembly .....	18
<b>4 Preampli BLMX001</b>	<b>20</b>
Figure 4.1. Interconnect drawing .....	21
Figure 4.2. BLMX001 - Block diagram .....	23
Figure 4.3. BLMX001 - 1W linear 6-240 MHz / 27 dB .....	25
<b>5 Amplifier BLMX300</b>	<b>27</b>
Figure 5.1. Interconnect drawing .....	28
Figure 5.2. BLMX300 - Block diagram .....	30
Figure 5.3. LABX - 300W linear / 6-240 MHz / 27 dB .....	32
<b>6 Blanking BLMX300</b>	<b>34</b>
Figure 6.1. Blanking BLA 300W .....	35
Figure 6.2. Blanking BLA 300W - Location .....	37
<b>7 Interconnecting</b>	<b>39</b>
Figure 7.1. Interconnecting board .....	40
<b>8 Coupler BDCX40</b>	<b>42</b>
Figure 8.1. Interconnect drawing .....	43
Figure 8.2. Bi-directional coupler .....	45
<b>9 SBS bus controller</b>	<b>47</b>

***Figures***

**50**

