DIGITAL CALL SYSTEM MATIBUS

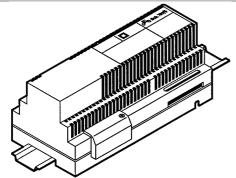
VIDEO POWER SUPPLY ref no. 1752/20D

27.08.2015r.

MATIBUS



VIDEO POWER SUPPLY REF. NO 1752/20D



GENERAL INFORMATIONS

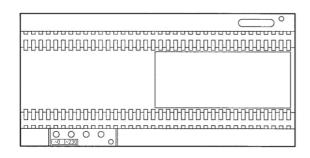
Video Power Supply Ref. no. 1752 / 20D is designed for installations of MATIBUS SE system with the video.

The main features include:

- Ensuring energy efficiency for video installations,
- Commutation main bus data connections and the secondary bus data for rise I and II.
- The ability to integrate video amplifier regulated to the risers.
- The ability to quickly connect up to 3 panels keyboard input, additional or principal.

In addition, the power supply has a green LED indicating connection status to the mains.

CONSTRUCTION



DESCRIPTION OF TERMINAL BOARD

~0V	Input voltage ~0V
~230V	Input voltage ~230V
R2 R1 LU1 LU2 P1 P2 P3	Camera power positive output 18,3 VDC Camera power ground RJ12 connector for riser LU1 RJ12 connector for riser LU2 RJ45 connector – input panel no.1 RJ45 connector – input panel no.2 RJ45 connector – input panel no.3

MAG GL RJ45 connector – input of main bus data IN

MAG GL RJ45 connector – output of main bus

OUT data

WE RJ45 connector – input of secondary

DOD bus data from power supply

ref. no. 1052/31R...33R

WE RJ45 connector – input of main bus

GL data from power supply

ref. no. 1052/31R...33R

USER MANUAL

JUMPERS P1, P2, P3, TER i AMP

In the power supply 1752 / 20D panels can be easily change from the main bus data to secondary bus data and vice versa

To do this, attach a suitable jumper P1, P2 and P3, respectively, for the panel 1, 2 and 3. Then the data line, audio and video signal will be automatically redirected to the correct bus data.

- No jumper means panel working on the secondary bus data,
- Established jumper means panel working on the main bus data

The jumper marked TER is permanently turn on termination video signal in the main bus data.

The jumper labeled as AMP permanently turn on video amplifier to both divisions.

VIDEO AMPLIFIER

The amplifier can increase the range of video transmission in the risers 1 and 2. At longer distances, switching amplifier improves the quality of the video signal. Switching amplifier is performed by setting jumper AMP.

TECHNICAL DATA

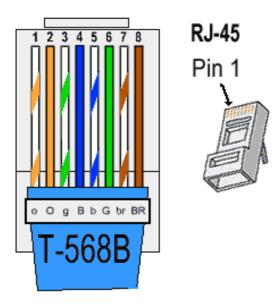
Supply:	230 VAC	
Power:	60VA	
Output voltage of R2, R1:	18,3V / 2,5A DC	
Working temperature:	-5°C ÷ +45°C	
Power security:	thermal	
Dimensions:		
Length	180 mm	
Width	90 mm	
Thickness	75 mm	
Weight:	0,45kg	
The length matches to 10 DIN modules.		

MATIBUS ...



INSTRUCTIONS FOR CONNECTIONS

RJ45 connectors on the both sides of wires should be installed on T-568 standard. The list of wires colors and their corresponding pin standard T-568 shown in the figure below:



No.	Color
1	Orange-white
2	Orange
3	Green-white
4	Blue
5	Blue-white
6	Green
7	Brown-white
8	Brown

For connecting the risers with Dys-Dek 1052/54RM use RJ12 connectors plug (6P6C). The list of wires colors and their corresponding pins shown in the table below:

No.	Color
1	Green-white
2	Orange-white
3	Blue
4	Blue-white
5	Orange
6	Green

A pair of brown color-coded wires should be connected to terminals:

R1 – Brown-white

R2 - Brown.

The list of connectors, wires colors and their corresponding pins shown in the table below:

Connectors LU1 i LU2 (RJ12).

No.	Color	Designation	Description
1	Green-white	0L	Ground line of doorphones
2	Orange-white	VB	Video signal. Line B twisted pair
3	Blue	R2	Positive (+) video power supply (+18V DC)
4	Blue-white	R1	Ground video power supply
5	Orange	VA	Video signal. Line A twisted pair
6	Green	LU	Line of doorphones

On the second end of this wire should be installed plug RJ45 using T-568 standard. Plug with RJ45 connect to Dys-Dek ref. No. 1052/54RM.

Connectors WE DOD (RJ45).

No.	Color	Designation	Description
1	Orange-white	0L	Ground line of doorphones LU1
2	Orange	LU1	Line of doorphones LU1
3	Green-white	0L	Ground line of sound
4	Blue	DD+	Data line of secondary bus data DG+
5	Blue-white	DD-	Data line of secondary bus data DG-
6	Green	LD	Line of sound for secondary bus data
7	Brown-white	0L	Ground line of doorphones LU2
8	Brown	LU2	Line of doorphones LU2

The second end of this wire should be connected to power supply ref. No. 1052/31R...33R.



Connectors WE GL (RJ45).

No.	Color	Designation	Description
1	Orange-white	-	Not connected
2	Orange	-	Not connected
3	Green-white	0L	Ground line of doorphones
4	Blue	DG+	Data line of main bus data DG+
5	Blue-white	DG-	Data line of main bus data DG-
6	Green	LG	Line of sound for main bus data
7	Brown-white	ЕО	Switching the video signal from the main bus data to the riser
8	Brown	-	Not connected

The second end of this wire should be connected to power supply ref. No. 1052/31R...33R.

Connectors MAG GL (R.145).

No.	Color	Designation	Description
1	Orange-white	VB	Video signal. Line B twisted pair
2	Orange	VA	Video signal. Line A twisted pair
3	Green-white	0L	Ground line of sound
4	Blue	DG+	Data line of main bus data DG+
5	Blue-white	DG-	Data line of main bus data DG-
6	Green	LG	Line of sound for main bus data
7	Brown-white	R1	Ground video power supply
8	Brown	R1	Ground video power supply

The second end of this wire should be connected to next power supply ref. No. 1752/20D.

Connectors P1, P2 i P3 (RJ45).

No.	Color	Designation	Description
1	Orange-white	VB	Video signal. Line B twisted pair
2	Orange	VA	Video signal. Line A twisted pair
3	Green-white	0L	Ground line of sound
4	Blue	DG+	Data line of bus data DG+
5	Blue-white	DG-	Data line of bus data DG-
6	Green	LG	Line of sound
7	Brown-white	R1/GND	Ground video power supply
8	Brown	R	Switching camera

The second end of this wire should be connected to panel with camera module for ex. 1752/141D.

WAY TRANSMISION OF SIGNAL VIDEO IN THE SYSTEM

In the complex video installations, it is recommended that the video signal from the panels pinned in the main bus leading distribute from the space located in the middle of the system, so that the video signal has unidirectional character. This method is illustrated on Fig. 4a.

Suppose that the total length of the bus data video denoted as S, then:

$$S = A1 + A2 + ... + An + B1 + B2 + ... + Bn + C1$$

$$S = A1 + A2 + ... + An + B1 + B2 + ... + Bn + C2$$

$$S = A1 + A2 + ... + An + B1 + B2 + ... + Bn + Cn.$$

In the case where the video bus data length S exceeds 250m use the video distributor Ref. 955/40. How to connect the distributor Ref. 955/40 is shown in Fig. 4b.

MONTAGE

The power supply is mounted on a DIN rail or screwed to the substrate using two screws or bolts minimum dimensions Ø4 / 50mm Fig. 3. The method of mounting the power supply is shown in Figure 1a and 1b. To mount the power supply for DIN rail use a flat screwdriver to pull the pin locking, then put the power supply on a DIN rail, then release the pin. After mounting the power supply on the rail, you can protect it against dismantling by fusing the pin with the casing using bolt and nut dimensions Ø4 / 36mm. The protection method shown in Figure 2.

MATIBUS



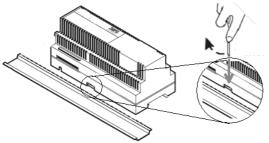
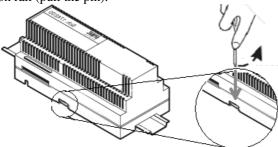
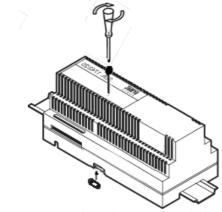


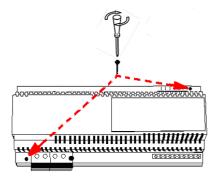
Fig. 1a The method of mounting the power supply on rail (pull the pin).



Rys. 1b The method of mounting the power supply on rail (release the pin).



Rys. 2 Protect against dismantling by fusing the pin with the casing



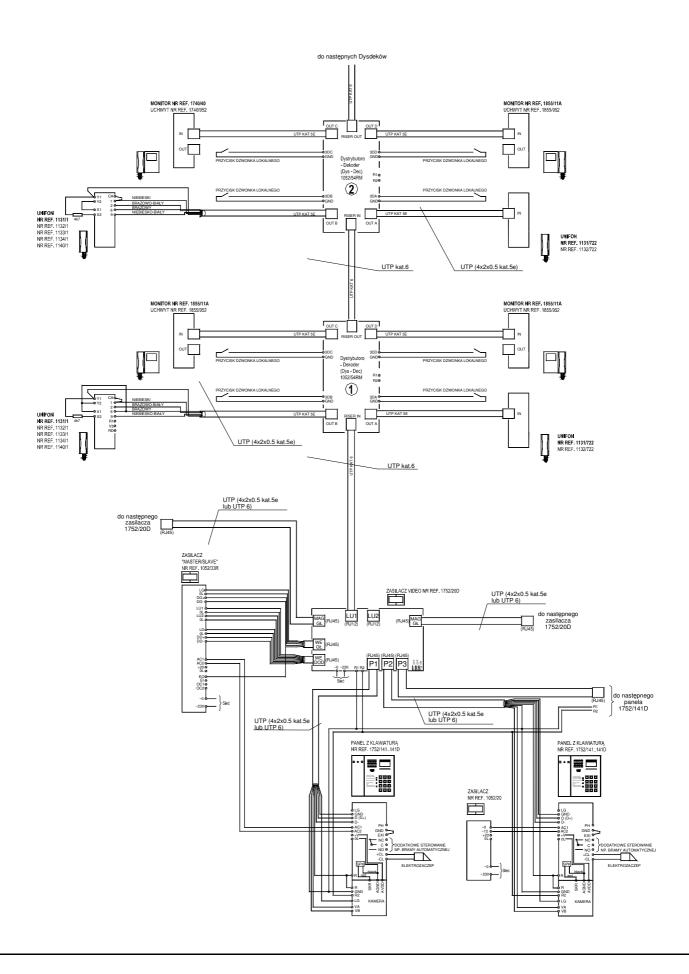
Rys.3 Screwing to the substrate using two screws or

ELECTRICAL CONNECTIONS

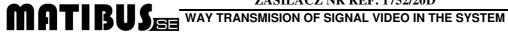
Electrical connections should be performed by a person with knowledge of the basic issues of electrical engineering. All connections should be made in accordance with the attached schedule, and with disconnected power supply. The building installation should include, multipole connector adapter with at least 3 mm spacing between all poles. The supply voltage must be accompanied only after all connections and the protective cover after screwing supply terminals.

MATIBUS DOORPHONE SYSTEM IN MASTER / SLAVE CONNECTION WITH POWER SUPPLY 1752/20D





ZASILACZ NR REF. 1752/20D





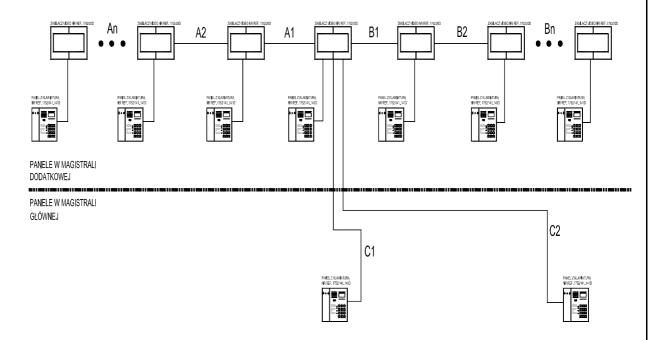
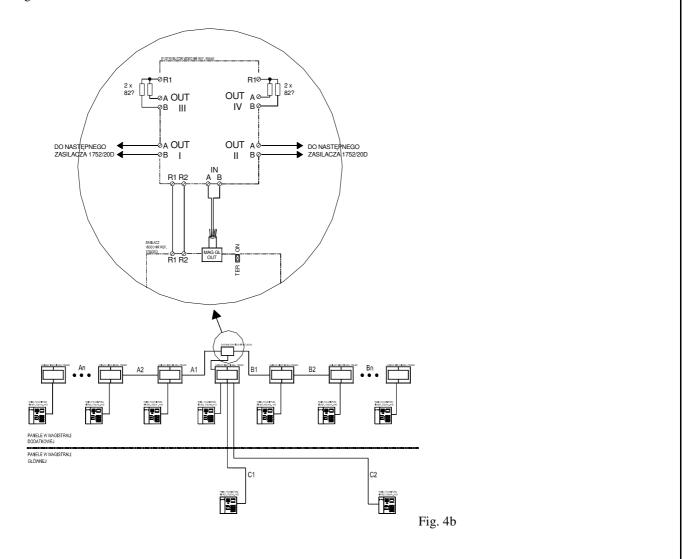


Fig.4a



MIWI-URMET sp. z o. o. ul. Pojezierska 90A 91-341 Łódź tel: (0-42) 616-21-00 fax: (0-42) 616-21-13

e-mail: miwi@miwiurmet.com.pl http:/www.miwiurmet.pl