

**DESCRIPTION**

The board DV851 is determined for switching of middle powered appliances. Control board of the set ZAT-DV accesses it through bus VME. Outputs of the board are NO contacts of relay, which are controlled by means of registers ORH (contacts 32 ÷ 17) and ORL (contacts 16 ÷ 1). These registers could be even read. Green LEDs on the front panel indicate switching of relevant contact, state of contacts could be read through VME bus by means of registers SRH (contacts 32 ÷ 17) and SRL (contacts 16 ÷ 1). Contact making responds to lighting indicator, monitoring from: current going through relay coil. Diodes ERR and RUN are controlled in a software way and indicate error and proper board operation. If ERR=1 there could not be written into registers ORL and ORH. Front panel is shown in Fig. 1.

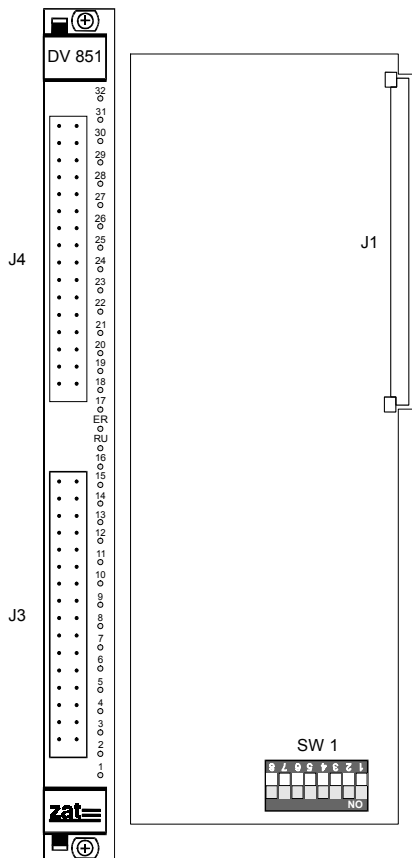


Fig. 1: Front board panel DV851

Control board could access to board DV851 according to specification VME through access

A16:D16. Board address (BASE ADR) is set by switch SW1 (by blocks of length 32 x 16 bits i.e. the switch could set addresses A13÷A6). SW driver of the board DV 851 has for its disposal registers SRL, SRH, ORL and ORH for outputs setting and diagnosing.

In Fig. 2 is drawn map of memory for board DV851.

BASE ADR+0	XXXX
	XXXX
	XXXX
BASE ADR+21	ORL
BASE ADR+22	ORH
BASE ADR+23	SRL
BASE ADR+24	SRH
BASE ADR+25	SR
BASE ADR+26	CR
BASE ADR+27	SAW
BASE ADR+28	DRW
BASE ADR+29	OIW
BASE ADR+30	NAR
BASE ADR+31	BIR

*SHORT ACCESS*

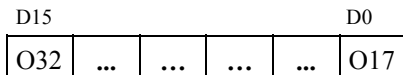
Fig. 2: Map of memory for board DV851

**MAP OF MEMORY**

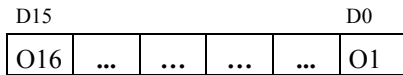
Detailed description of the map of memory is included in document *Access into VME bus for boards of the set ZAT-DV*.

- ◆ BIR - *Board Identification Register*  
board identification no.– AAD1h
- ◆ NAR – *Address Register* - at DV851 it is not used, BASE ADR of the board in access A23 (i.e. address A23-A8).
- ◆ OIW – *Output Input Width*  
length of input and output field - 0000h.
- ◆ DRW – *Length of diagnosing and DPRAM field* - 0000h.
- ◆ SAW - *Length of control and status register* – 7200h.
- ◆ CR - *Control and status register*  
CR0 - controls LED RUN (1- it lights)  
CR1 - controls LED ERR (1- it lights)
- ◆ SR – *Status Register*  
SR15 – WDbits, after RESET 1, set to 1 at each rise pulse time of DTACK signal from the board.

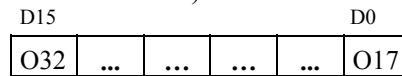
- ◆ SRH - *Status Register High*  
state of contacts 32 ÷ 17.



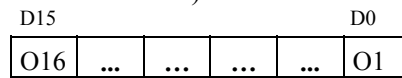
- ◆ SRL - *Status Register Low*  
state of contacts 16 ÷ 1.



- ◆ ORH - *Output Register High*  
control of outputs 32 ÷ 17 (they could be read backward).



- ◆ ORL - *Output Register Low*  
control of outputs 16 ÷ 1 (they could be read backward).



### OUTPUT CONNECTORS

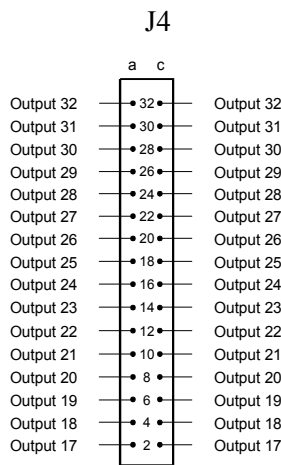


Fig. 3: Outputs 32 ÷ 17

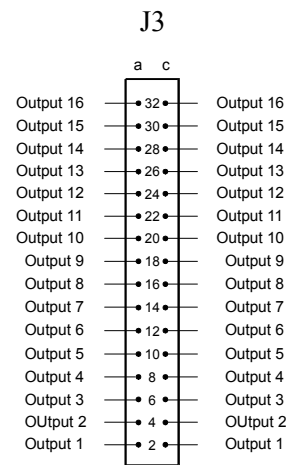


Fig. 4: Outputs 16 ÷ 1

### TECHNICAL DATA

Parameter	Min.	Type	Max.	Units
Current load of contacts at :				
24 V DC			2	A
230 V RMS			2	A
300 V DC			0,15	A
Number of switches – resistance load 24V; 0,2A	10 <sup>6</sup>	10 <sup>7</sup>		
Insulation strength input / system			3700	Vef
Insulation strength input / input			2300	Vef
Feeding (VME)		+5, +12, -12		V
Consumption from source :				
+ 5 V		660	1000	mA
+12 V		150	270	mA
-12 V		150	270	mA
Working temperature	-5		+70	°C
Storing temperature	-20		+85	°C
Humidity (non-condensing)	5		95	%

Connector (OUT 32 ÷ 17)		HARTING 09041326921		
Connector (OUT 16 ÷ 1)		HARTING 09041326921		
VME connector		DIN 41312 C, 96 PIN		
Weight		410		g
Dimension		6HE, 4TE		

**Overview of performance type for board DV851**

<b>Order identification</b>	<b>Number of outputs</b>	<b>Function</b>
DV851	32 x NO contact of relay	32 digital outputs