

BOX690RT



CENTRAL UNIT

MEMORY

INPUT

INPUT ANA.

INPUT ENCODER

OUTPUT

OUTPUT ANA.

INTERFACES

USB

CAN BUS

POWER SUPPLY

PANEL DIMENSION

DEPTH

Intel® Atom 1.8 GHz D525 dual-core CPU

1GByte Ram, 4 GByte Flash Disk

16 Photocoupled 24V. Active with positive signal

6, 12 Bit 0/5V, 0/10V, 4/20 mA.

4 AXIS Open Collector NPN, on request Line-Driver 5/12Vdc.

16 OUT, 24V PNP 0.5A

4 analog outputs +/- 10V (10 mA. Each)

2 RS232 (opt. 1RS232 + 1RS485/422); 1 Printer; Key PS2;

VGA for Monitor CRT, ETHERNET 10/100MBps

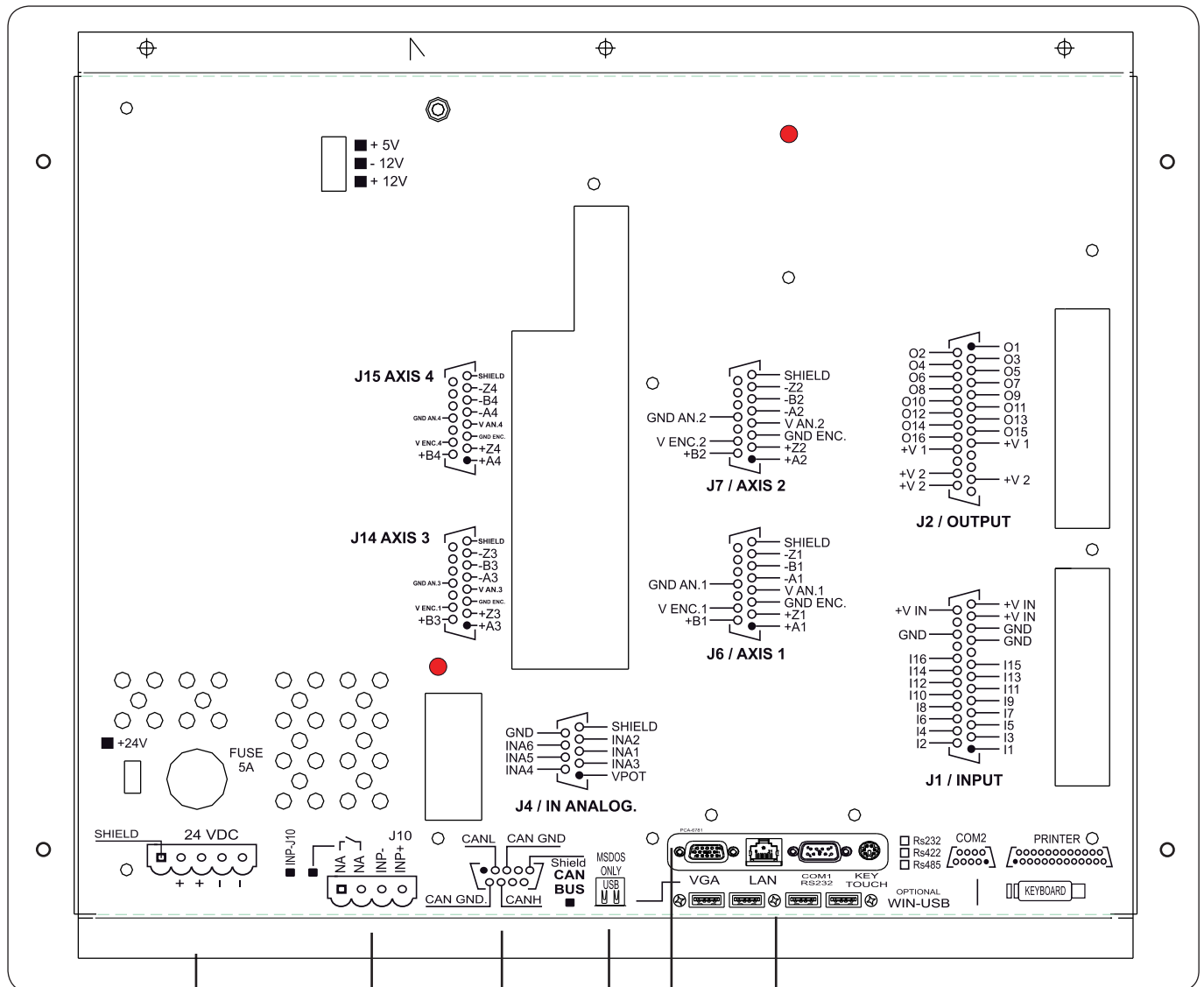
4 (2.0) using Windows XP Embedded RT

1 CAN Master on DB9m

24 Vdc 120 W max

L. 300 mm x H. 250 mm

170 mm with Connectors



J30 Power Supply

J10 Input Service

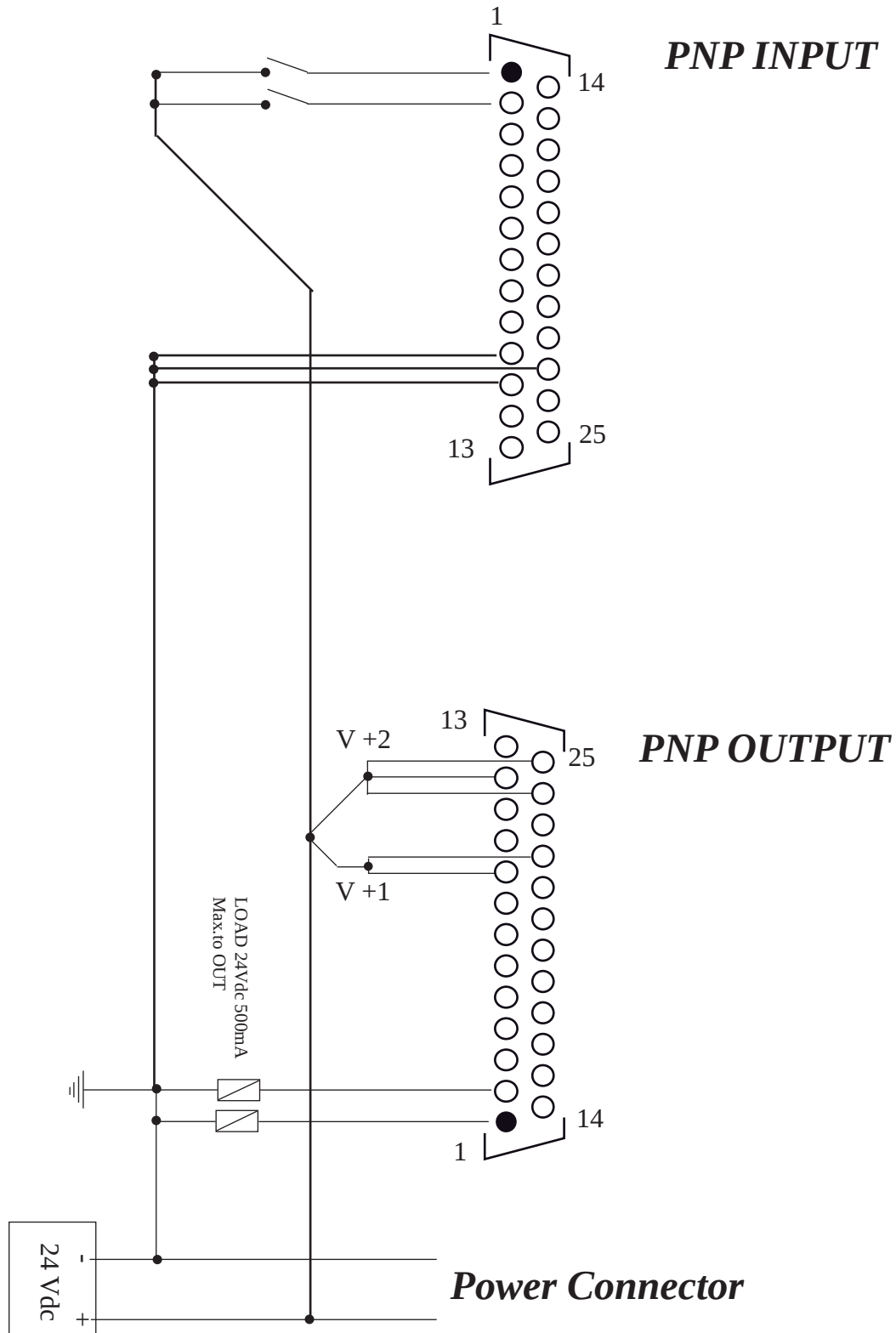
CANBUS

View Rear Section low

USB 2.0 connector operating under Windows XP embedded RT

**USB connector for USB keys in DOS:
Do not use on Windows XP emb. RT**

**VGA connection to an external monitor
(always connect the monitor before Switch
on the PLC)**



PNP INPUT DISPOSITION (CONNECTOR J1, 25-pin female on PLC)

INPUT					
Pin.	Input	Description	Pin.	Input	Description
01	IN1		14	IN2	
02	IN3		15	IN4	
03	IN5		16	IN6	
04	IN7		17	IN8	
05	IN9		18	IN10	
06	IN11		19	IN12	
07	IN13		20	IN14	
08	IN15		21	IN16	
09	n.c.		22	n.c.	
10	GND	Connect to GND (*)	23	GND	(*)
11	GND	(*)	24	n.c.	
12	+VIN	+24V for Sensor (**)	25	+VIN	(**)
13	+VIN	(**)			

+24V for Sensor (**): you can use this +24V for Sensor Power Supply ,
in [pin 12,13,25] you have input +24V with a Resettable Fuse of 200mA

PNP OUTPUT DISPOSITION (CONNECTOR J2, 25-pin Male on PLC)

OUTPUT					
Pin.	Output	Description	Pin.	Output	Description
01	OUT1		14	OUT2	
02	OUT3		15	OUT4	
03	OUT5		16	OUT6	
04	OUT7		17	OUT8	
05	OUT9		18	OUT10	
06	OUT11		19	OUT12	
07	OUT13		20	OUT14	
08	OUT15		21	OUT16	
09	V +1	A	22	V+1	A
10	n.c.		23	n.c.	
11	n.c.		24	V +2	B
12	V +2	B	25	V +2	B
13	n.c.				

PNP digital outputs. The outputs provide +24 Vdc when active. Max. 500 mA to output.

(V+1) & (V+2) MUST BE CONNECTED TO 24 Vdc for Out 1/8 (A) and Out9/16 (B)

AXIS 1

ENCODER1 DISPOSITION / ANALOG OUTPUT 1 (CONNECTOR J6, 15pin Female on PLC)

Pin.	Input	Description
01	+A1	....
02	+Z1	....
03	GND ENC.	....
04	V AN.1	....
05	-A1	....
06	-B1	....
07	-Z1	....
(*) 08	SHIELD	....
09	+B1	....
10	Venc.1	
11	n.c.	
12	GND AN.1	....
13	n.c.	
14	n.c.	
15	n.c.	

AXIS 2

ENCODER2 DISPOSITION / ANALOG OUTPUT 2 (CONNECTOR J7, 15pin Female on PLC)

Pin.	Input	Description
01	+A2	....
02	+Z2	....
03	GND ENC.	....
04	V AN.2	....
05	-A2	....
06	-B2	....
07	-Z2	....
(*) 08	SHIELD	....
09	+B2	....
10	Venc.2	
11	n.c.	
12	GND AN.2	....
13	n.c.	
14	n.c.	
15	n.c.	

Encoder inputs open collector NPN or PUSH-PULL. Voltage Power Supply from 5/12 Vdc, 400 mA.

(*) SHIELD must be connected to SHIELD point and disconnect from the side ENCODER

AXIS 3

ENCODER3 DISPOSITION / ANALOG OUTPUT 3

(CONNECTOR J14, 15pin Female on PLC)

Pin.	Input	Description
01	+A3	....
02	+Z3	....
03	GND ENC.	....
04	V AN.3	....
05	-A3	....
06	-B3	....
07	-Z3	....
(*) 08	SHIELD	....
09	+B3	....
10	Venc.3	
11	n.c.	
12	GND AN.3	....
13	n.c.	
14	n.c.	
15	n.c.	

AXIS 4

ENCODER4 DISPOSITION / ANALOG OUTPUT 4

(CONNECTOR J15, 15pin Female on PLC)

Pin.	Input	Description
01	+A4	....
02	+Z4	....
03	GND ENC.	....
04	V AN.4	....
05	-A4	....
06	-B4	....
07	-Z4	....
(*) 08	SHIELD	....
09	+B4	....
10	Venc.4	
11	n.c.	
12	GND AN.4	....
13	n.c.	
14	n.c.	
15	n.c.	

Encoder inputs open collector NPN or PUSH-PULL. Voltage Power Supply from 5/12 Vdc, 400 mA.

(*) SHIELD must be connected to SHIELD point and disconnect from the side ENCODER

IN Analog

(J4 CONNECTOR, 9-pin female on PLC)

Pin.	Input	Description
01	VPOT	Reference voltage 5V
02	A3	
03	A1	
04	A2	
(*) 05	SHIELD	Shielding Analog
06	A4	
07	A5	
08	A6	
09	GND	Analog GND

Analog inputs 12 Bit, 0/5 Vdc Available reference voltage 5Vdc for the connection of potentiometers 5/10 K. To request 0 / 10V, 4/20 mA.

(*) The shield must be connected to SHIELD point and must be disconnected from the side transducers.

POWER SUPPLY

(CONNECTOR J30)

Pin.	Description
01	Shield
02	+ 24 Vdc
03	+ 24 Vdc
04	GND
05	GND

Connector power supply direct (24 Vdc). See wiring diagrams.
This model can only be powered with DC current.

CANopen (CONNECTOR 9-pin Male on PLC)

Pin.	Description	
01	n.c.	
02	CAN L	CAN L Line
03	GND CAN	CAN GND Line
04	n.c.	
05	SHIELD	
06	GND CAN	CAN GND Line
07	CAN H.	CAN H Line
08	n.c.	
09	n.c.	

Optoisolated CANopen interface. Speed from 10 Kbit / s to 1Mbit / s.

Internal terminator 120 ohm present, this PLC must be in first position on CAN Line.
Use CAN OPEN 120 ohm Twist Cable shield, use Couple for CAN H & L and Shield for GND

INPUT SERVICE (CONNECTOR J10 - 4 pole extractable)

Pin.	Description	
01	NA	relè run by Elcon Software (LED OK_OUT
02	NA	Red lights as close the pins 01 and 02)
03	INP-	24Vdc input PNP service (led INP-J10 / OK_IN
04	INP+	Green lights comes as a + 24Vdc between 03:04) manageable from Elcon Software

PC COM2 (CONNECTORS 9-pin Male on PLC)

RS422-RS485 Interface with internal card E1185v02 / E1215 (optional)

Pin.	COM 2 - INTERNAL SETTING :		
	RS232	RS422	RS485
01	DCD	TX-	RTX-
02	RX	TX+	RTX+
03	TX	RX+	
04	DTR	RX-	
05	GND	GND	GND
06	DSR		
07	RTS		
08	CTS		
09	RI		

