ZENER 8000



Instruction Sheet

Part Number: AQ08001

Description: Option Board - Extended Features

Compatibility: ZENER 8000

ECODRIVE 8000

Kit Includes: 1x Option Board

1x Insulation Sheet – Mylar 1x Screw (Nylon/Plastic) 1x Terminal Label

Summary:

This option board provides the following additional features:

- Additional 4x Digital Inputs (programmable)
- Additional digital Output (programmable)
- Thermistor Input
- Additional Analogue Input (programmable)
- Analogue Output (programmable)
- 24VDC 20mA loop power supply for external transducer

A maximum of two (2) option boards can be fitted per drive, either Left or Right position. The preferred location is the left slot as this is commonly required with 'applications'.

Terminals & Terminal Numbers:

The terminal numbers are referenced in the menu to identify the inputs and outputs. Eg. AO (36,38) refers to Analogue Output terminals 36 & 38. When the Option board is in the right slot, a sticker (provided) must be attached with the correct terminal numbers.

Terminal Layout / Wiring:

+ 5VDC from Control Board Option Board: Extended Features (LEFT) Top Row Terminals D1 Digital Input 1 33 D2 Digital Input 2 35 D3 Digital Input 3 37 D4 Digital Input 4 39 DO+ Digital Output DO-41 **Bottom Row Terminals** AI+ 32 Analogue Analogue Input Input AI -34 36 AO+ Analogue Output AO -38 40 TH+ Thermistor Input 42 TH-Loop Power Supply 43 +24V Maximum 20mA 0VDC



Specification:

Digital Inputs: 4x; 5VDC logic, programmable

Logic High: ~ >4VDC / Logic low: ~<1V

(Max input voltage is 24VDC)

Digital Output: 1x; Solid State, programmable

Max 48VDC/30VAC 400mA

Analogue Input: 1x; Programmable signal type & zero/scaling

and built-in comparator function

Analogue Output: 1x; Programmable signal type & zero/scaling **Thermistor Input:** PTC type, Trip Resistance >3300 Ohms

short circuit detection (<20 Ohms).

Power supply: 24DC 20mA Max for loop supply of transducer.

Further Information:

For detailed information on functionality and programming refer to the instruction manual for the ZENER 8000.

0.4.	D I-	Endougle d	F t	(DIOLIT)
Option	Board:	Extended	reatures	(RIGHT)

Top Row Terminals				
51	D1	Digital Input 1		
53	D2	Digital Input 2		
55	D3	Digital Input 3		
57	D4	Digital Input 4		
59	DO+	- Digital Output		
61	DO-			
Bottom Row Terminals				
52	AI+	- Analogue Input		
54	AI -			
56	AO+	- Analogue Output		
58	AO -			
60	TH+	Thermistor Input		
62	TH-			
Loop Power Supply				
63	+24V	Maximum 20mA		
64	0VDC			
	51 53 55 57 59 61 Botto 52 54 56 58 60 62 Loop	51 D1 53 D2 55 D3 57 D4 59 DO+ 61 DO- Bottom Row Te 52 AI + 54 AI - 56 AO + 58 AO - 60 TH+ 62 TH- Loop Power Su 63 +24V		

Document: IM00141 Printed: 23-May-18

Installation



There are hazardous voltages inside the ZENER 8000 whenever it is connected to an electrical supply and for some time afterwards.

Before touching anything inside the ZENER 8000 enclosure or other equipment connected to the terminals, disconnect all sources of electrical power, wait at least 11 minutes for capacitors within the ZENER 8000 to discharge to less than 50VDC and then ensure by measurement, that there are no hazardous voltages (AC or DC) present.

All chassis (except CHA IP30)

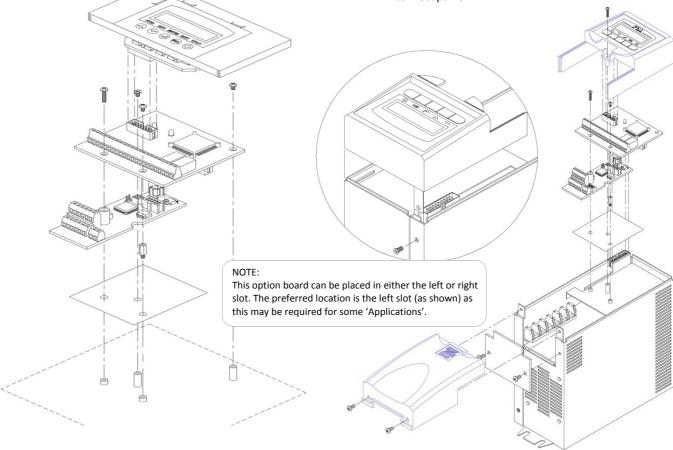
Steps:

- Safely Isolate. Ensure all power sources have been removed for at least 11 minutes and remain that way for the rest of the installation.
- Remove the front door, and remove screws/nuts securing the display assembly and remove.
- Remove the screws securing the control board and remove.
- Turn the control board over and plug the option board into the one of the available slots. The Left (looking from top side) should be used first.
- Lay the insulation sheet on top of the exposed metalwork where the control board sits.
- Remove the spacer where the option board now sits.
- Reposition the control board assembly and fix into place. A plastic screw is provided where the option is fitted on the right side.
- Refit covers and the ZENER 8000 is now ready to re-connect power.

IP30 CHA Installation

Steps:

- Safely Isolate. Ensure all power sources have been removed for at least 11 minutes and remain that way for the rest of the installation.
- Remove the plastic terminal cover and the screw (2) on the top side of the chassis must also be removed.
- Remove the screws securing the control board and remove
- Remove the front screw securing the control board assembly in place and remove the control board assembly.
- Turn the control board over and plug the option board into the one of the available slots. The Left (looking from top side) should be used first.
- Lay the insulation sheet on top of the exposed metalwork where the control board sits.
- Remove the spacer that where the option board now sits
- Reposition the control board assembly and fix into place. A plastic screw is provided where the option is fitted on the right side.
- Refit covers and the ZENER 8000 is now ready to reconnect power.



Document: IM00141 Printed: 23-May-18