

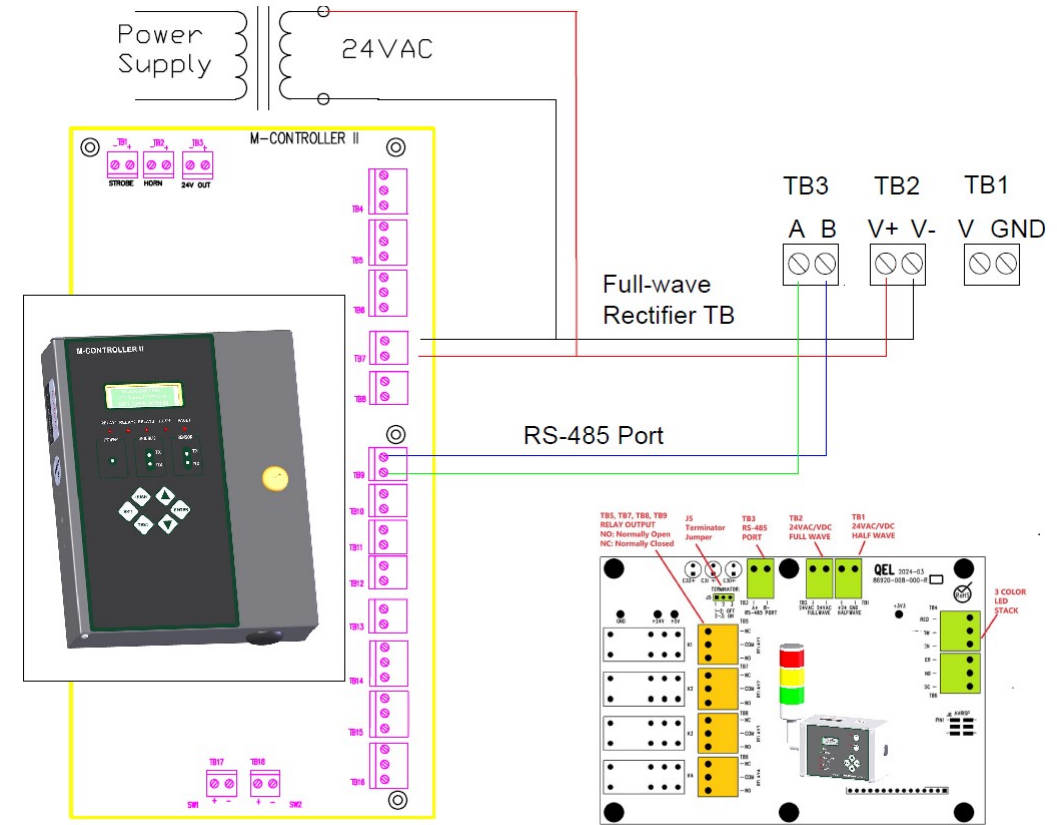
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REVISIONS				
ECN	REV.	DESCRIPTION	DATE	APPROVED
1259	A	FIRST RELEASE	2024-10-22	XY

Specification:	
Power Supply	Voltage: 24VDC nominal, range 18 to 30VDC 24VAC nominal, range 15 to 24VAC 50/60HZ Note: RDF52 has full-wave rectifier and half-wave rectifier circuit on board for flexibility. You will damage devices if you mix half wave and full wave rectifiers on the same AC source. Use extreme caution when sharing a common AC source. Sharing a common DC source is less problematic. Current: max. 0.75 A (fuse protected)
Fuse	F1 on the Main Board: Polyswitch 750mA Polyswitch device resets after the fault is cleared and power to the circuit is removed.
Enclosure	IP66 & NEMA 4, 4X, 12 & 13 ratings UL listed 508 listed (File # E65324)
Environmental conditions	Location: Indoor use only Altitude: Up to 2 000 m Temperature: -20 °C to 50 °C Relative Humidity: 0 to 95% RH (non-condensing) Pollution Degree: 2, in accordance with IEC 664. Installation Categories (Overvoltage Categories) II
Display & Keypad	LCD display c/w backlight 6x tactile & audible keypad
Panel Indicators	8 Status LEDs 2 RS-485 port TX/RX Status 4 Relay Status LEDs 1 FAN Status LED 1 Hush Status LED
On-Board Relays	4 Relays SPDT, Dry contacts, Relay1 to Relay4 Resistive load: 5.0A at 250VAC 5.0A at 30VDC Inductive load: 3.7A at 250VAC 3.7A at 30VDC

		UNLESS OTHERWISE SPECIFIED:		NAME		DATE		Greystone Energy Systems Inc.					
		DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±		DRAWN		XY		2024-10-22		TITLE: RDF52, GES INSTALLATION DRAWING			
				CHECKED									
				ENG APPR.									
				MFG APPR.									
		INTERPRET GEOMETRIC TOLERANCING PER:		Q.A.									
		MATERIAL		COMMENTS:									
NEXT ASSY		USED ON											
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										SIZE			
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										SCALE: 1:2			
										WEIGHT:			
										SHEET 1 OF 3			

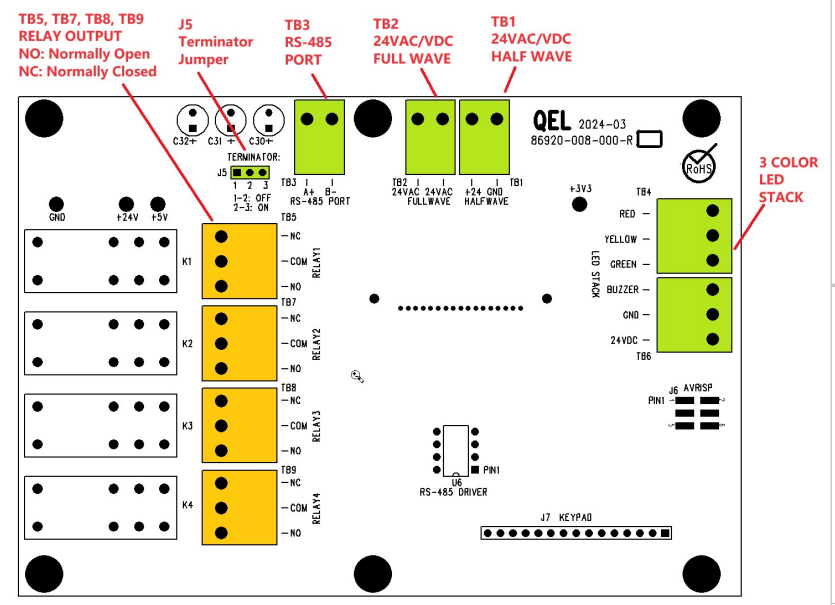
Connect RDF52 to M-Controller II



REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-

RS-485 End-of-Line Terminator (Default is disabled)

J5P: Pin 1-2: Disabled
JP5: Pin 2-3: Enabled

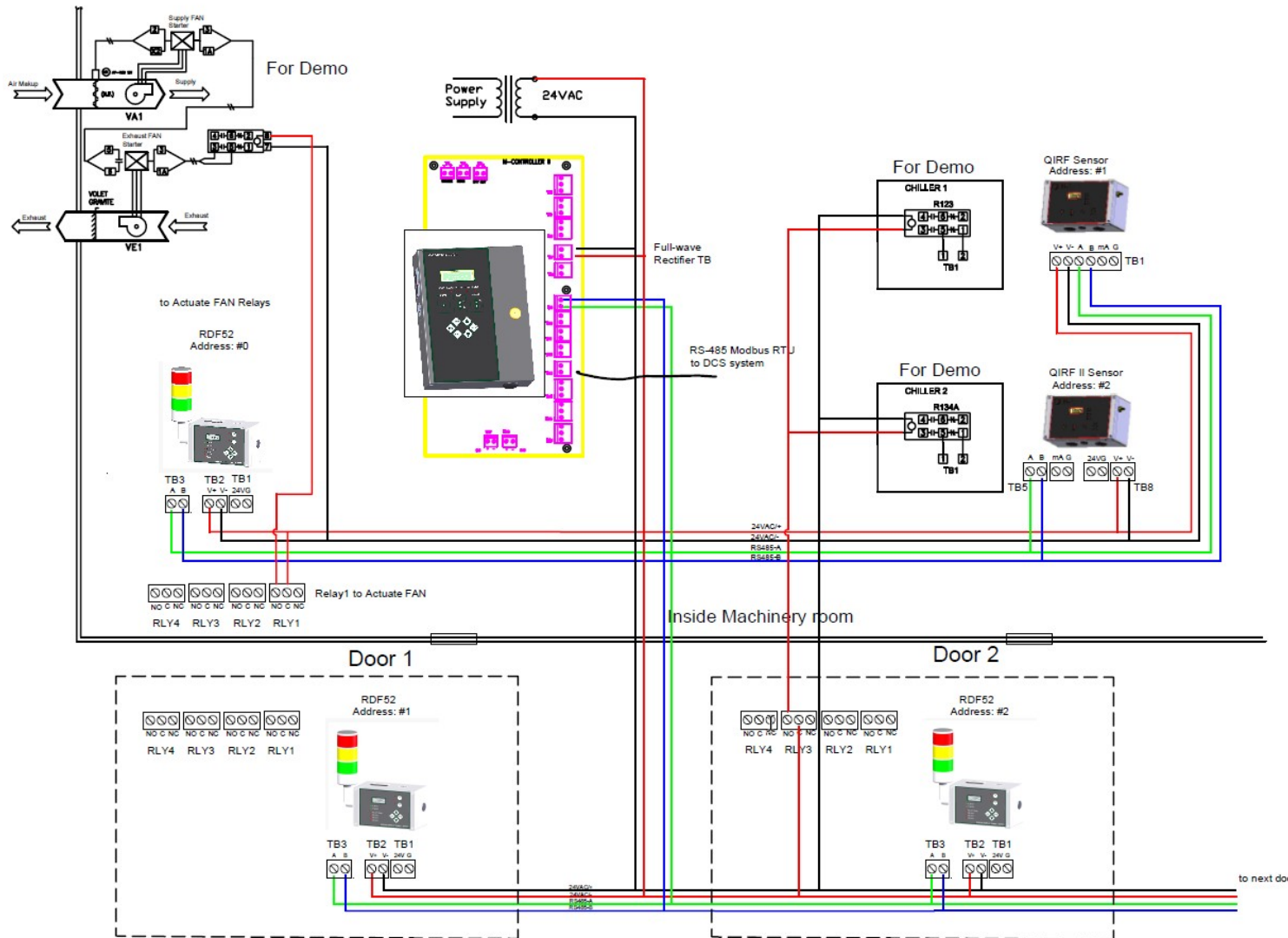


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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE	Greystone Energy Systems Inc.	
		DIMENSIONS ARE IN INCHES	DRAWN	XY	TITLE: RDF52, GES INSTALLATION DRAWING	
		TOLERANCES:	CHECKED			
		FRACTIONAL: ±	ENG APPR.			
		ANGULAR: MACH ± BEND ±	MFG APPR.			
		TWO PLACE DECIMAL ±	Q.A.			
		THREE PLACE DECIMAL ±	COMMENTS:	SIZE DWG. NO. REV		
		INTERPRET GEOMETRIC TOLERANCING PER:		B 86950-002-005 A		
		MATERIAL		SCALE: 1:2 WEIGHT: SHEET 2 OF 3		
		FINISH				
	NEXT ASSY	USED ON				
	APPLICATION		DO NOT SCALE DRAWING			

Config M-Controller System to meet CSA-B52 standard

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
-	-	See Sheet1	-	-



Settings

The RDF52 Fan Switches inside of the room is set to "Unlatched", the RDF52 Fan Switch outside of the room is set to "Latched". If they all in the same zone, any Fan Switch is pressed, the relay1 will actuate the FAN relay, but the Fan Switch outside of the room shall be capable of starting but not stopping the ventilation.

The RDF52 located inside room is option. Actually you can reset the latched relay1 through M-Controller Keypad, but with the RDF52 inside the operating is more straight-forward.

RDF52 Relays:

Relay1: turns ventilation fans on when gas > 300ppm or when any FAN SW is pressed

Relay2: shuts down Chiller1/2 when gas > 500ppm

Relay4: Buzzer will be on when relay3 is on

RDF52 defaults: (programmable)

Low alarm: 300ppm / 250ppm

High alarm: 500ppm / 450ppm

FAN Switch to trigger Relay1

M-Controller can connect to max. 16 RDF52

Greystone Energy Systems Inc.		
TITLE:		
RDF52, GES INSTALLATION DRAWING		
SIZE	DWG. NO.	REV
B	86950-002-005	A
SCALE: 1:2	WEIGHT:	SHEET 3 OF 3