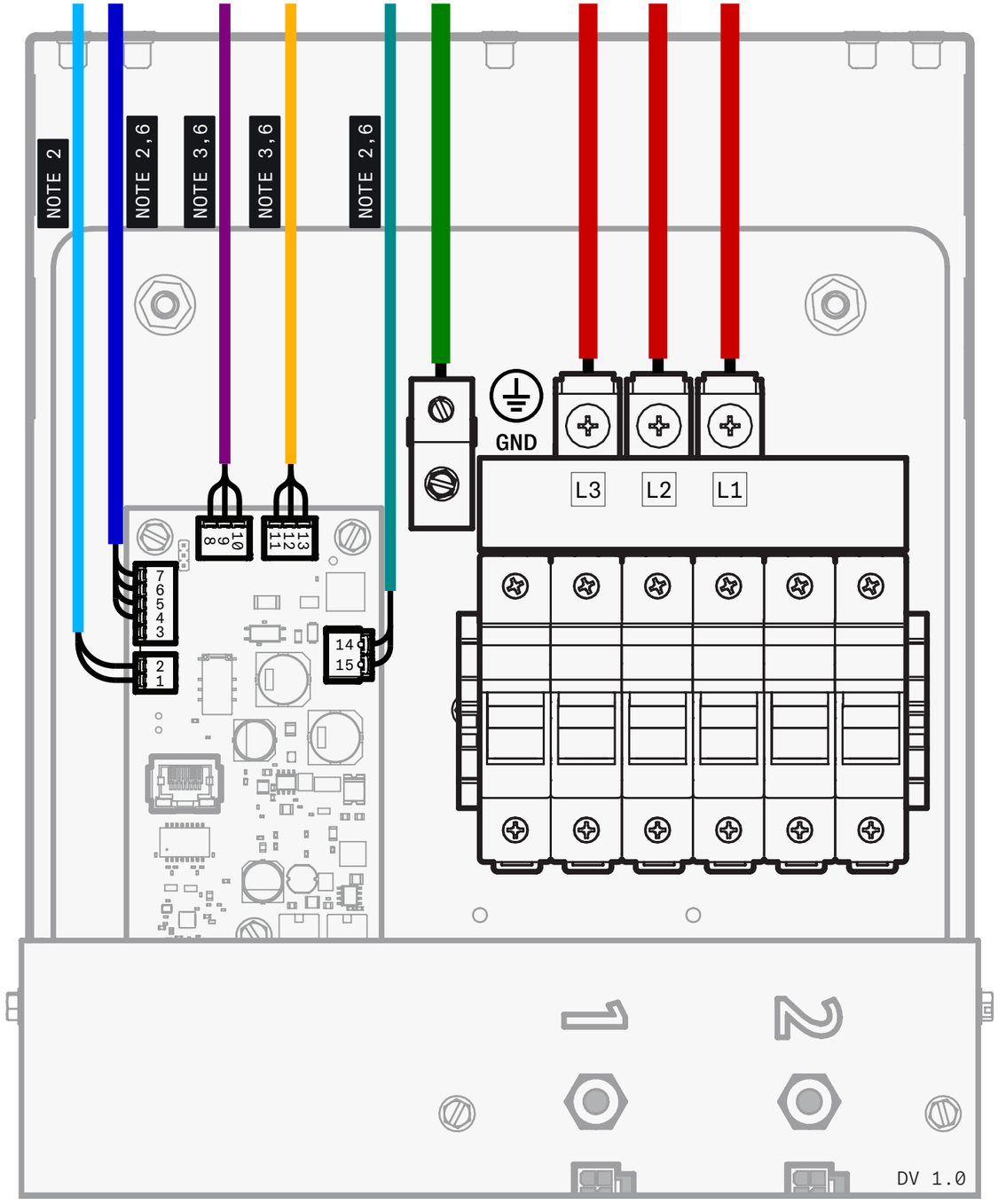
Q-PAC FAN WIRING GUIDE
V3.2.0

Q-PAC

Use this wiring guide to connect the **Q-PAC Fan** to a third party control panel or other interface. For support connecting to a Q-PAC Control Panel or Disconnect, refer to the corresponding Q-PAC Wiring Guide or contact Q-PAC Support for assistance at 904-863-5300 or support@q-pac.com.

For more information on Modbus communication points and fan features, refer to the Q-PAC User Manual. Basic descriptions of the fan terminals are provided below:

			NOTES	REQUIRED
CN2				
1	AI1+	0-10V signal proportional to the motor speed	2	Yes
2	AI1-	0V reference for AI1+	2	Yes
CN1				
3	K1A	Normally closed (unpowered) contact of the alarm relay. When the controller receives power, the contact opens to indicate the absence of an alarm. If a fault occurs the contact will close again. No connection at this terminal for use of the alarm relay.	2, 6	No Connection
4	K1C	Common contact of the alarm relay. When a fault is present in the unit, this pin is connected to Alarm relay NC K1A and disconnected from Alarm relay NO K1B.	2, 6	
5	K1B	Normally open (unpowered) contact of the alarm relay. When the controller receives power, this contact closes to indicate the absence of an alarm. If a fault occurs the contact will open again.	2, 6	
6	AO1+	0-10V signal proportional to the calculated airflow	2, 6	
7	AO1-	0V reference for AO1+	2, 6	
CN4				
8	GND	Ground/Shield/Common	3, 6	
9	-	RS485 negative data terminal	3, 6	
10	+	RS485 positive data terminal	3, 6	
CN5				
11	GND	Ground/Shield/Common	3, 6	
12	-	RS485 negative data terminal	3, 6	
13	+	RS485 positive data terminal	3, 6	
CN3				
14	0V	Connection to power supply, neutral for AC or ground DC	2, 6	
15	24V	Connection to supply voltage, 24V AC/DC-500mA	2, 6	
INPUT POWER				Yes
L1/L2/L3		3 Phase 208V or 480V input voltage, per Fan Controller Nameplate		
EARTH GROUND				Yes



NOTES:

1. Conductor size to be determined by NEC Article 310.15(B), Table 310.16, and Q-PAC Fan MCA per the Fan Controller Nameplate.
2. Minimum 24 AWG (stranded CU) to CN1, CN2, and CN3.
3. Minimum 24 AWG (stranded CU) shielded twisted pair to CN4 and CN5, if connected.
4. All open-ended lines indicate connections to external devices, to be completed by others in the field.
5. CN3 provides power to the Fan Controller Board (microcontroller) and is only required if using the fan alarm relay (K1A-K1C), airflow signal voltage (AO1), and/or Modbus Communication (CN4 and CN5).