

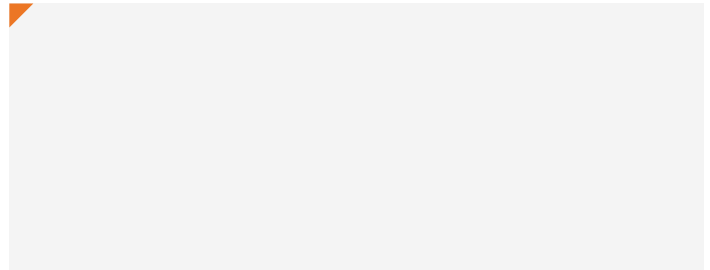
Q-LINK VFD

1-56A, 200-480VAC, 3Ø

UL Type 1 Enclosure



Special Instructions:



The Q-link is a revolutionary new connected drive. Control and support via a smartphone provides a simple, intuitive and safer user experience that greatly enhances and expedites setup and service processes.

FEATURES

- Simple and intuitive display
- Designated HOA buttons
- Native communications (BACnet & Modbus)
- R³ Filtering for harmonic mitigation
- Built in damper control
- Compact UL Type 1 Frame
- Finger-safe power terminals
- Meets latest harmonized UL standard

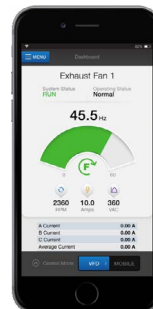
TECHNOLOGIES

R³FILTERING **SMARTSTART**



Q-LINK COMPANION APP

- Guided Start-UP
- In-App Troubleshooting Solutions
- Pre-Call Fault and Troubleshooting Reports
- Over-the-air Firmware Updates
- Monitoring via Bluetooth® Connection
- Start-up Report Generation
- iOS & Android Compatible
- Save and Store Device Settings
- Create Configuration Templates



Sizing Information Table

Q-Link Variable Frequency Drive - 3-Phase

208 VAC	230 VAC	380-480 VAC	FLA	KAIC	Part Number
HP	HP	HP			
0.5	0.5	1	3	100	QLNK-003-DV
1	1	3	5	100	QLNK-005-DV
2	2	5	9	100	QLNK-009-DV
3	3	7.5	12	100	QLNK-012-DV
5	5	10	17	100	QLNK-017-DV
5	7.5	15	24	100	QLNK-024-DV
7.5	10	20	28	100	QLNK-028-DV
10	10	25	38	100	QLNK-038-DV
10	15	30	45	100	QLNK-045-DV
15	20	40	56	100	QLNK-056-DV



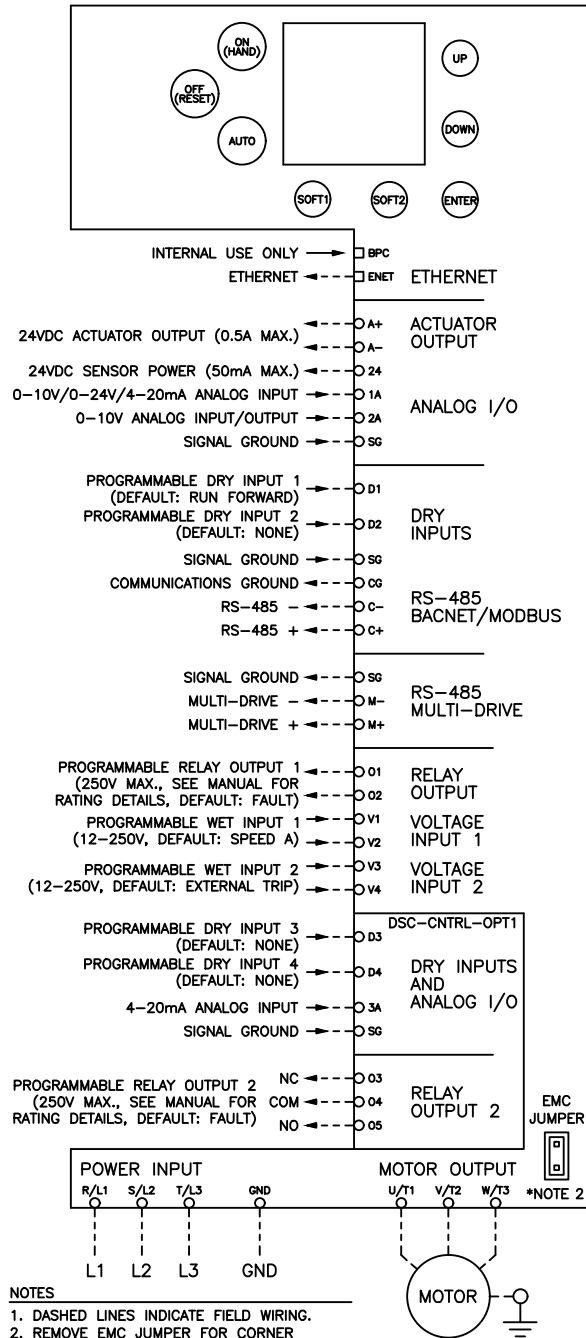
SUBMITTED EQUIPMENT SCHEDULE

QTY	Part #	HP	Voltage	Phase	Tag
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓
	✓	✓	✓	✓	✓

Q-Link Specification Table

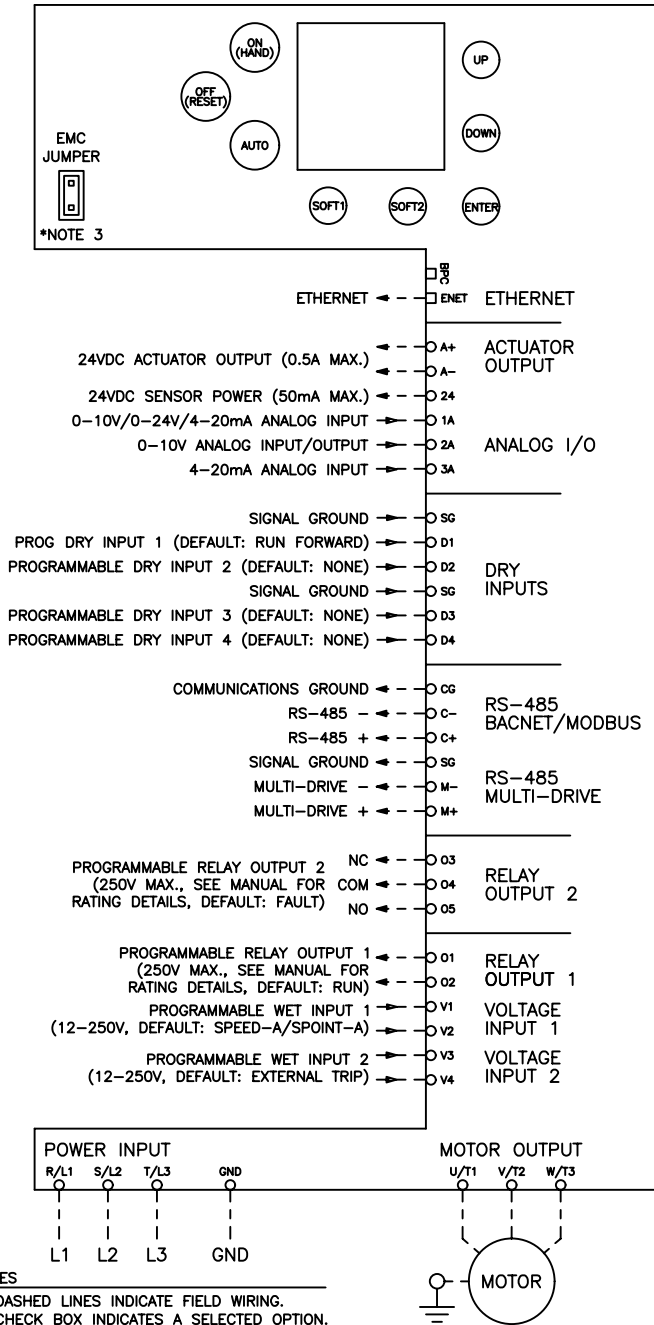
Input ratings	Voltage (V)	Three phase, 200–480V (-10%, +15%)
	Frequency (Hz)	50~60Hz (±5%)
	Efficiency	>=98%, Full Load and Full Voltage
	Input Power Factor	>.99
Output ratings	Current	1-56A (200–460V)
	Voltage (V)	0-100% of Supply Voltage
	Frequency (Hz)	0~240Hz
Control	Control method	V/F Scalar Pulse Width Modulation
	Carrier Frequency	2kHz - 10kHz, 0.1kHz resolution, Default 2.5kHz
	Output Frequency Resolution	0.01Hz
	Frequency Setting Accuracy	Digital: 0.01 % of Max. Output Frequency Analog: 1 % of Max. Output Frequency
	V/F ratio	Linear, Square Pattern
	Overload Capacity	110% for 60s
Operation	Operation Method	OLED display, HOA keypad, Terminals, Bluetooth® mobile app, Communications
	Programming Method	OLED display, Programming Keypad, Bluetooth® mobile app, Communications
	PID	Standard
	Communications Interface	Physical (RS-485, Bluetooth®) Protocols (Native BACnet MS/TP Modbus RTU)*
	Logging	100 Faults/100 Alarms/100 Parameter Changes - w/ Real Time & Date
	Indication	3 LEDs: Hand, Off, Auto
	Operation Functions	Frequency Limit / Skip Frequencies / Reverse Rotation Prevention / Auto Restart / Flying Start / Damper Control / Motor Pre-Heat / Torque Boost / Stall Prevention / DC Trip Prevention / DC Braking / DC Start / Analog Signal Loss / Auto Bypass (Bypass models only) / Fireman's Override / Auto Fault Restart
Dry Inputs	Count	4 configurable (NO or NC)
	Programmable Inputs	None / Enable / Fireman's Override / Speed- A / Speed- B / Setpoint-A / Setpoint-B / Damper LSW / Flow Switch / External Trip / Run Forward / Run Reverse / 2nd Acc/Dec Time / 3-Wire Start / 3-Wire Stop / HOA Auto / HOA Hand Shutdown / Fault Reset / Bypass / Switch 1A to 2A/3A
	Logic	PNP or NPN
	Voltage Level	24 VDC, 5mA Max
Wet (Voltage) Inputs	Count	2 configurable
	Programmable Inputs	None / Enable / Fireman's Override / Speed- A / Speed- B / Setpoint-A / Setpoint-B / Damper LSW / Flow Switch / External Trip / Run Forward / Run Reverse / 2nd Acc/Dec Time / 3-Wire Start / 3-Wire Stop / HOA Auto / HOA Hand / Shutdown / Fault Reset / Bypass / Switch 1A to 2A/3A
	Voltage Level	12-240 ± 10%V, 5mA Max
Analog I/O	Count	3 Selectable: 1A = AI, 0-10V/0-24V/4-20mA 2A = AIO / 0-10V input or 0-10V/4-20mA output 3A = AI 4-20mA
	Mode	Voltage or Current
	Level	0-10VDC or 4-20mA
Analog Output	Control Power	24VDC, 50mA Max
Damper Output	Count	1 damper actuator output
	Control Power Rating	24VDC, 0.5Amp Max
Relay Outputs	Count	2 Relay Outputs
	Programmable	Status, Run, Fault, SW Configurable
	Control Power Rating	125VAC, 1.25Amp Max, switching voltage 250VAC
Protection	Functions	OV/UV (Line or DC Bus) / Inverter Over Current / Inverter Overheat / Input Phase Loss / Output Phase Open / Ground Fault / Locked Rotor / Stall / Under Power / Over Power / Inverter Short Circuit Protection / Temperature Sensor Fault / Communication Loss / Loss of Analog Signal / Hardware Fault / Broken Belt / Max time to start / Bypass contactor
	Short Circuit Rating	100 kAIC fused protected
Environmental	Ambient Temperature	-10 to 40°C (104°F), 50°C (122°F) achievable following derate rules
	Storage Temperature	-20 to 65°C
	Location	Pollution Degree 2 Environment
	Altitude	1000m (3280ft) above sea level. De-rate 10% for installations up to 2000m (6560ft). Additional 20% for installations 2000-3000m (6560–9840ft). *OR reduce max ambient temp rating by 1°C per 200m (6560ft) altitude above 1000m (3280ft).
	Relative Humidity	95% Relative Humidity (non-condensing)
Certifications	Agency Approvals	UL, cUL
	Safety	UL 61800-5-1 (Harmonized Safety Standard)
	Enclosure Rating	UL Type 1 (Consult factory for UL Type 12/IP54, UL Type 3R/IP54, UL Type 4X/IP66 options)
	Keypad Rating	UL Type 1 (IP21)
	Harmonic Distortion	≤ 35% via R ³ Filtering to help meet IEEE519 and EN50160
	EMC	EN 61800-3 (Radiated and Conducted Emissions)

Q-LINK WIRING DIAGRAMS (1-28A)



*For general reference only, not field wiring.
Consult installation instructions.

Q-LINK WIRING DIAGRAMS (38-56A)



- NOTES**
1. DASHED LINES INDICATE FIELD WIRING.
 2. CHECK BOX INDICATES A SELECTED OPTION.
 3. REMOVE EMC JUMPER FOR CORNER GROUNDED DELTA SYSTEMS.

**For general reference only, not field wiring.
Consult installation instructions.*

Q-LINK VFD DIMENSIONS

*All measurements in inches

Q-LINK VFD	H x W x D, (A x B x C)
QLNK-003-DV	15.75" x 5.5" x 6.75" (400mm x 140mm x 171mm)
QLNK-005-DV	
QLNK-009-DV	
QLNK-012-DV	
QLNK-017-DV	
QLNK-024-DV	
QLNK-028-DV	27.875" x 6.5" x 7.3" (708mm x 165mm x 186mm)
QLNK-038-DV	
QLNK-045-DV	
QLNK-056-DV	

