

## Over and Above Estimate

**Region:** 2

**Location:** NY058

**CSS #:** 32761

**Maximo Work Order No.**14931

**Asset#:**

**Date Issued:** 10/13/2021

**Original Description:** Install electrical heaters in 2 pump stations.

**Description of Repairs:** Revised. Install 2 new 480 Volt 3 phase heaters in pump house

### Non Pre-Priced Estimate:

Quantity	Line Item #	Description	Labor Hours	Unit	Labor	Materials	Equipment	Total
1		Materials (See attached estimate for line items)				\$3861.20	\$0	\$3861.20

*Note: RS Means (Pre-Priced) not used in compiling this estimate.*

*Note: Subcontractor quote attached.*

### Estimate Summary:

Labor Hours	Labor Cost	Material Cost	Equipment Cost	Total Cost	CE Factor	Total Estimate
4hours @ \$235.00 = \$940.00	\$940.00	\$3861.20		\$4801.20	.90%	\$4320.90

**Please see attached estimate**

# ACAV SERVICES

November 14, 2021



## ESTIMATE 100621 CSS32761 WO 14931 (REVISED)

Bill To		Ship To	
Customer	INTERNATIONAL SUPPORT GROUP M DUBOIS	Recipient	99 RSC DPW
Customer ID#	NY058 (Shoreham USARC)	Address	Ernie Pyle USARC BLDG 200 Ft Totten NY
Address		Phone	718 631 6188
Phone	718 790 3562		
Payment Due	NET 30	Delivery Date	N/A
Salesperson	JW	Shipping Method	N/A
Payment Terms		Shipping Terms	N/A

Qty.	Item#	Description	Unit Price	Line Total
1	1	<b>NY058 Shoreham USARC (FIRE SYSTEM PUMP HOUSE)</b> <b>REPLACE 2EA DEFECTIVE ELECTRIC WALL MOUNTED 480 VOLT 3 PHASE HEATERS IN THE PUMP HOUSE</b> <b><u>MATERIAL</u></b> <b>2EA WALL MOUNTED QMQRK MUH 480 VOLT 3 PHASE ELECTRIC HEATERS</b> <b>2EA @ \$1930.60 EA</b> <b><u>LABOR</u></b> <b>4 HRS @ 235.00 PER HOUR</b> <b>TOTAL</b>		<b>\$3861.20</b> <b>\$940.00</b> <b>\$4801.20</b>

### ACAV Services

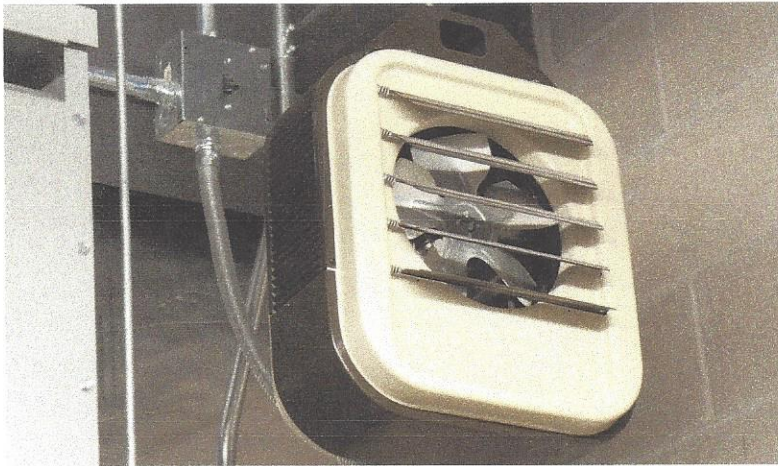
11 Snug Cove Lane  
Bayville NY 11709  
Jacka377@verizon.net  
516 941 6581

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# WHEN SAFETY MATTERS - QMARK MUH ELECTRIC UNIT HEATERS



Marley QMark MUH series electric unit heaters are the perfect solution for heating large commercial spaces where safety is top of mind. These fan-forced heaters provide powerful airflow and heat, without venting or combustion. MUH series unit heaters can be installed either horizontally or vertically, up and away from foot and equipment traffic. Adjustable louvers and bracketing options provide air targeting flexibility.

**DIMENSIONS** | Varies (see diagram)

**TEMP RANGE** | 40°-90° F

**CFM** | 350-3000

**COLORS** | Beige/Bronze

**IDEAL SPACES** | Factories; Warehouses; Garages; Stairwells; Shipping Docks; Power Stations; Mechanical Rooms



## FEATURES & BENEFITS |

- Wide range of optional control kits are field-installable, increasing the unit's adaptability to specification market
- Small- to medium-case construction is 20-gauge steel with larger cabinet 18-gauge steel
- Advanced pull-through air flow design draws air across heating element for even air distribution and cooler element operation
- Specially designed venturi outlet to meet required additional air throw in vertical position
- Branch circuit fusing (when required)
- Completely enclosed fan motor
- 2-speed fan selector switch (25 to 50 kW models)
- Optional fan-only switch for air movement with no heat
- 1- or 3-phase wiring on 5 kW through 10 kW 208/240V and 15 kW 208V units (field-interchangeable)
- Aluminum-finned, copper-clad steel sheath heating element extends life due to cooler sheath temperature and faster heat dissipation
- 24V control transformer standard on most models, providing safer and more accurate means of temperature control. 3 kW and 5 kW, 208-277V, have line voltage controls as standard (24V control available on made-to-order basis)
- Automatic reset linear thermal cut-out, capillary type, provides protection over entire length of element areas (manual reset protection available on made-to-order basis)
- No piping flues, valves or traps needed for installation
- Individually adjustable louvers to direct air flow

FOR CUSTOMER INTERNAL USE ONLY

**QMARK**  
A Marley Engineered Products Brand



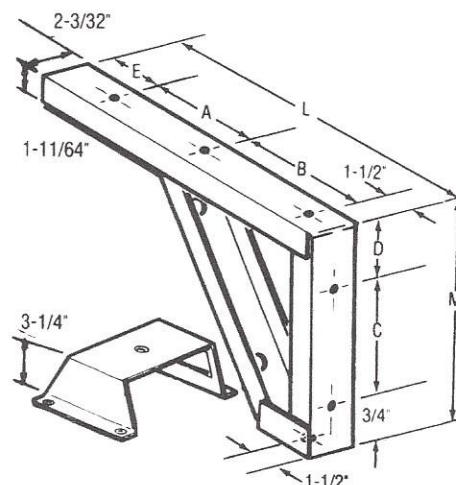
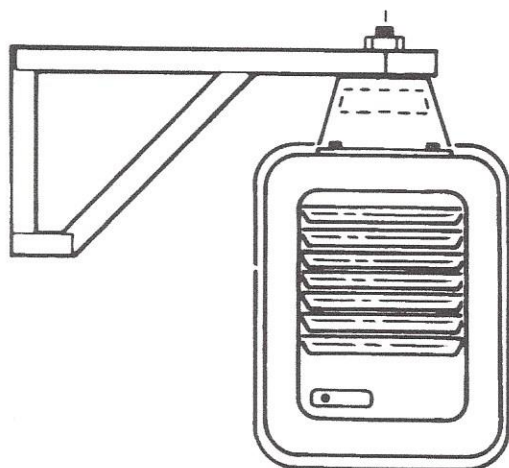
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# QMARK MUH ELECTRIC UNIT HEATERS - BRACKETS



## BRACKET SIZE

DIMENSION	3-20 kW (IN)	25 - 50 kW (IN)
A	7-1/4	9-7/16
B	9-1/2	14-3/8
C	7-1/4	12-1/8
D	11-5/16	2-1/16
E	2-1/4	3
L	20-1/2	28-15/16
M	9-15/16	14-15/16
N	3-1/4	4-1/2

## FACTORY-INSTALLED OPTIONS FOR CONTROLS & ACCESSORIES

DESCRIPTION
MUH03 & 05 (208, 208/240, 277V Supply) 24 or 120V Control Transformer and Power Contactor 24 or 120V H.C. Power Contactor
MUH03 & 05 (480V Supply) & MUH07 thru MUH50 Optional 120V Control
2-Stage Control of Elements (See Note 5)
Manual Reset
Outlet Mesh (Bird Screen) For all MUH Heaters

NOTE: Any factory-installed options require added surcharge. See price book for charges or contact factory.

**MOUNTING LIMITATIONS:** Unit heaters should not be used in potentially explosive atmospheres. The finish is not intended for direct salt spray exposure in marine applications or the highly corrosive atmospheres of swimming pools, chemical storage bins, etc. Do not install unit heaters above recommended maximum mounting height. Obstructions must not block unit heater air inlet or discharge. Heaters must be mounted at least 7 ft. above the floor to prevent accidental contact with the heating element or fan blade which could cause injury.

**NOTE:** Any field installed options assembled in the factory require added surcharge. MPDS60 disconnect switch is not suitable for field installation on 7.5kw and 10kw unit heaters.

### NOTES FOR MODELS & SPECIFICATIONS CHART ON PAGE 2:

All standard units are supplied with a low voltage control transformer and contactor (24V) except MUH03 and MUH05, 208V, 240V and 277V models. Low voltage control on these units is available on made to order. All units are also available on special order for 120V control; internal with transformer or external without transformer. On dual-voltage units CFM, FPM, & RPM ratings are listed at higher voltage operation. On dual-phase units maximum amp draw is listed for respective voltage. 25 thru 50 KW models having two-speed motors and dual CFM ratings are listed in Full Line Catalog. 5A. Standard; 5B. Optional - made to order - amp load unbalanced on three-phase; 5C. Optional - made to order - amp load balanced on three-phase. \*Must use two-stage Thermostat on 3Ø operation.