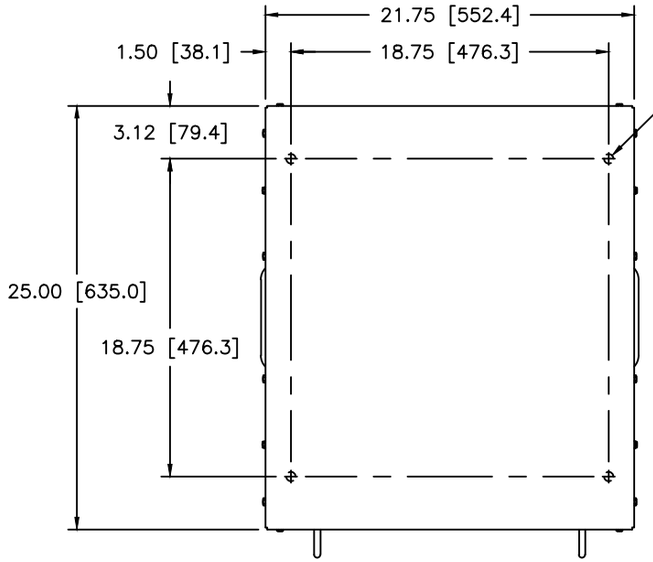
| DWG. SIZE | DWG. NO. |
|---|---|
| D | 031–8291 |

| REVISIONS | | | |
|---|---|---|---|
| SYM. | E.C.N. | DATE | APVD. |




**NOTE:**

SEE THE FRC–20 USER'S HANDBOOK, FORM #003–1922 FOR DETAILED INFORMATION.

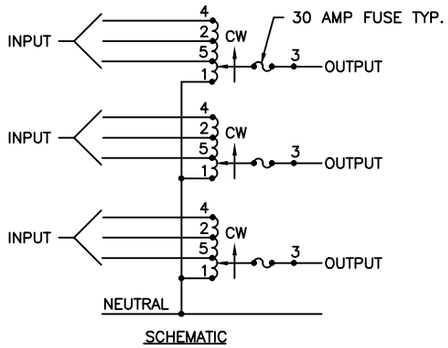
**CONTROLS:**

CONTROLLER ON/OFF SWITCH: THIS SWITCH TURNS OFF POWER TO THE CONTROLLER ONLY.

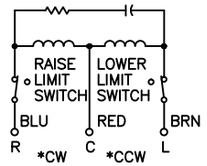
OUTPUT ADJUSTMENT: THIS POTENTIOMETER CONTROL IS ROTATED CLOCKWISE TO INCREASE OUTPUT VOLTAGE SET POINT AND COUNTERCLOCKWISE TO DECREASE THE OUTPUT VOLTAGE SET POINT.

VOLTMETER: THE ANALOG VOLTMETER INDICATES THE REGULATED OUTPUT VOLTAGE SETTING.

RAISE/LOWER SWITCH: THIS SWITCH IS LOCATED INTERNALLY AND IS ACCESSIBLE FROM THE FRONT VIA THE REMOVABLE ACCESS PANEL. THE SWITCH ALLOWS THE REGULATOR TO BE MANUALLY CONTROLLED.




SCHEMATIC




MOTOR CIRCUIT
120V, 50/60 HZ
* ROTATION AS VIEWED FROM TOP END
MOTOR SPEEDS: SEE CHART

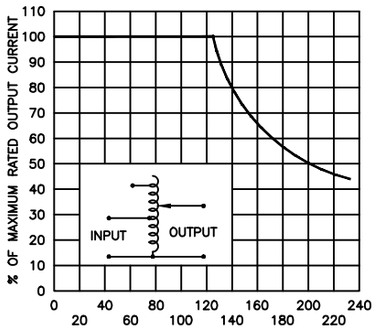
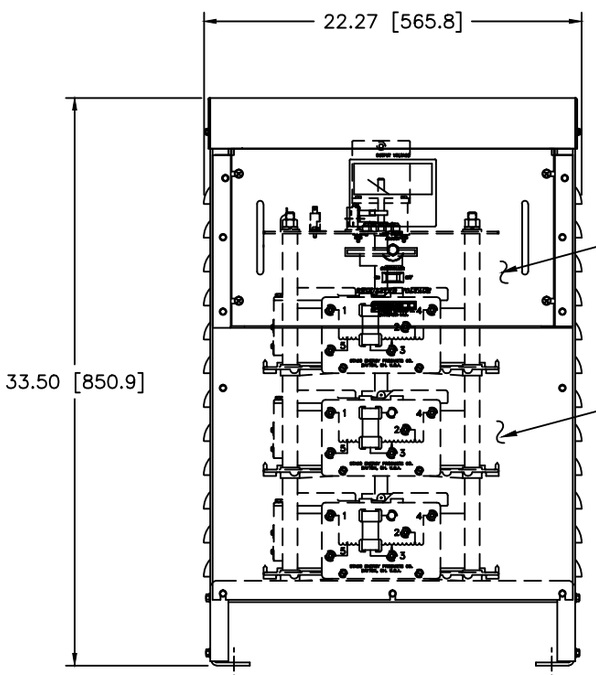
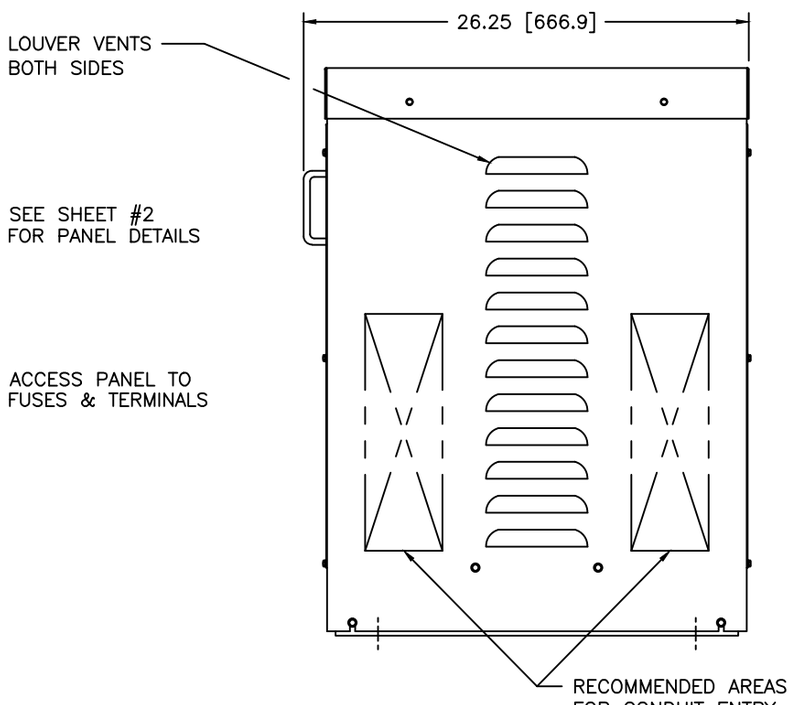



**FIGURE A**

MAXIMUM OUTPUT CURRENT OF ANY DUAL INPUT VOLTAGE OR VOLTAGE DOUBLER UNIT OPERATED AT LOWER INPUT VOLTAGE.




* MAXIMUM OUTPUT CURRENT IN OUTPUT VOLTAGE RANGE FROM 0 TO 25 PERCENT ABOVE LINE VOLTAGE. AT HIGHER OUTPUT VOLTAGES, OUTPUT CURRENT MUST BE REDUCED ACCORDING TO RATING CURVE (SEE FIGURE A).

++ MAXIMUM KVA AT MAXIMUM OUTPUT AND CORRESPONDING DE–RATED CURRENT. MAXIMUM KVA AT LOWER OUTPUT VOLTAGES MAY BE CALCULATED FROM RATING CURVE, (SEE FIGURE A).

V.D. = VOLTAGE DOUBLER.

| SPEED (SECONDS) | MODEL NUMBER |
|---|---|
| 5 | FV5M5021E–3Y |
| 15 | FV15M5021E–3Y |
| 30 | FV30M5021E–3Y |
| 60 | FV60M5021E–3Y |

SPECIFICATIONS

| WIRING | INPUT VOLTS | INPUT HERTZ | OUTPUT VOLTS | OUTPUT CONSTANT CURRENT LOAD MAX. AMPS | OUTPUT CONSTANT CURRENT LOAD MAX. KVA | SHAFT ROTATION FOR VOLTAGE INCREASE | TERMINAL CONNECTIONS FOR INCREASING VOLTAGE AS VIEWED FROM TOP INPUT | TERMINAL CONNECTIONS FOR INCREASING VOLTAGE AS VIEWED FROM TOP OUTPUT |
|---|---|---|---|---|---|---|---|---|
| THREE PHASE WYE | 480 | 50/60 | 0–480 | 28 | 23.3 | CW | 4–4–4 | 3–3–3 |
| | | 60 | 0–560 | 28 | 27.2 | CW | 2–2–2 | 3–3–3 |
| | 240 | 60 | 0–560 | *28–12 V.D. | 11.8 ++ | CW | 5–5–5 | 3–3–3 |

UNLESS OTHERWISE SPECIFIED, TOLERANCE IS ± DECIMALS .X .12, .XX .05, .XXX .005; HOLES .03; ANGLES 1°; DRAFT 1–1/2°. UNITS IN [mm]. MATERIAL : ALL DIMENSIONS APPLY AFTER PLATING

TITLE: SPEC. CONTROL DRAWING MOTORIZED VARIABLE XFMR. TYPE: FVM5021E–3Y

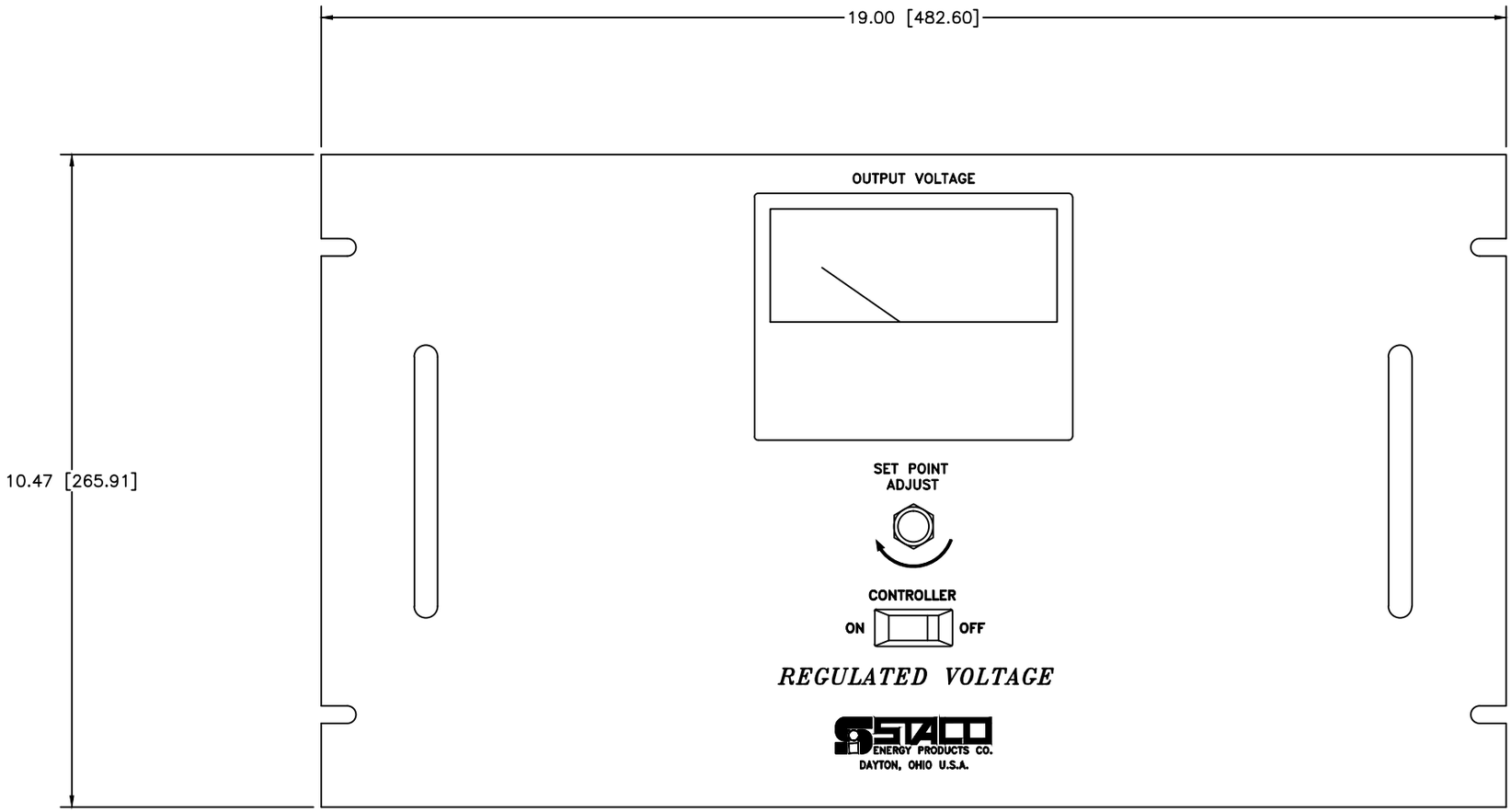
STACO ENERGY PRODUCTS CO. A DIVISION OF EMERSON ELECTRIC CO. DAYTON, OHIO U.S.A.



| DRAWN BY | DATE | FIRST USED ON | DO NOT SCALE DWG. | CUSTOMER APPROVAL | DATE |
|---|---|---|---|---|---|
| TIM RAU | 12/15/99 | | | | |
| CHECKER | DATE | WEIGHT APPROX. | CODE IDENT. NO. 83008 | DWG. SIZE D | DWG. NO. 031–8291 |
| ENGINEER | DATE | SCALE .25=1 | SHEET 1 OF 2 | | |

| DWG. SIZE | DWG. NO. |
|---|---|
| D | 031–8291 |

| REVISIONS | | | |
|---|---|---|---|
| SYM. | E.C.O. | DATE | APVD. |




| UNLESS OTHERWISE SPECIFIED, TOLERANCE IS ± | | | | UNITS IN [mm] |
|---|---|---|---|---|
| DECIMALS | HOLES | ANGLES | DRAFT | |
| .XX .010 | .005 | 1° | 1–1/2° | |
| .XXX .005 | | | | |
| MATERIAL : | | | | ALL DIMENSIONS APPLY AFTER PLATING |



TITLE: SPEC. CONTROL DRAWING
MOTORIZED VARIABLE XFMR
TYPE: FVM5021E–3Y

| DRAWN BY | DATE | FIRST USED ON | DO NOT SCALE DWG. |
|---|---|---|---|
| TIM RAU | 12/15/99 | | |
| CHECKER | DATE | WEIGHT APPROX. | CAGE CODE 83008 |
| ENGINEER | DATE | SCALE 1=1 | SHEET 2 OF 2 |

STACO ENERGY PRODUCTS CO.
A Components Corporation of America Company
301 Gaddis Boulevard Dayton, Ohio 45403 USA

| DWG. SIZE | DWG. NO. |
|---|---|
| D | 031–8291 |