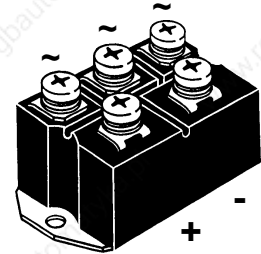
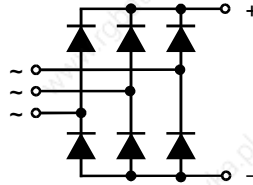


# Three Phase Rectifier Bridge

**$I_{dAV} = 63/88 \text{ A}$**   
 **$V_{RRM} = 800-1800 \text{ V}$**

| $V_{RSM}$<br>V | $V_{RRM}$<br>V | Type          |               |
|----------------|----------------|---------------|---------------|
| 600            | 600            | VUO 62-06NO7  | VUO 82-06NO7  |
| 800            | 800            | VUO 62-08NO7  | VUO 82-08NO7  |
| 1200           | 1200           | VUO 62-12NO7  | VUO 82-12NO7  |
| 1400           | 1400           | VUO 62-14NO7  | VUO 82-14NO7  |
| 1600           | 1600           | VUO 62-16NO7  | VUO 82-16NO7  |
| 1800           | 1800           | VUO 62-18NO7* | VUO 82-18NO7* |



\* delivery time on request

| Symbol     | Test Conditions   | Maximum Ratings                    |               |        |                  |
|------------|---|------------------------------------|---------------|--------|------------------|
|            |   | VUO 62                             |               | VUO 82 |                  |
| $I_{dAV}$  | $T_C = 110^\circ\text{C}$ , module                                | 63                                 | 88            | A      |                  |
| $I_{dAV}$  | $T_A = 45^\circ\text{C}$ ( $R_{thCA} = 0.6 \text{ K/W}$ ), module | 48                                 | 57            | A      |                  |
| $I_{FSM}$  | $T_{VJ} = 45^\circ\text{C}$ ;<br>$V_R = 0$                        | $t = 10 \text{ ms}$ (50 Hz), sine  | 550           | 750    | A                |
|            |   | $t = 8.3 \text{ ms}$ (60 Hz), sine | 600           | 820    | A                |
| $I^2t$     | $T_{VJ} = T_{VJM}$<br>$V_R = 0$                                   | $t = 10 \text{ ms}$ (50 Hz), sine  | 500           | 670    | A                |
|            |   | $t = 8.3 \text{ ms}$ (60 Hz), sine | 550           | 740    | A                |
| $I^2t$     | $T_{VJ} = 45^\circ\text{C}$<br>$V_R = 0$                          | $t = 10 \text{ ms}$ (50 Hz), sine  | 1520          | 2800   | A <sup>2</sup> s |
|            |   | $t = 8.3 \text{ ms}$ (60 Hz), sine | 1520          | 2800   | A <sup>2</sup> s |
| $T_{VJ}$   | $T_{VJM}$   | $T_{stg}$                          | -40...+150    | 150    | $^\circ\text{C}$ |
|            |   |                                    | -40...+125    |        | $^\circ\text{C}$ |
| $V_{ISOL}$ | 50/60 Hz, RMS   | $t = 1 \text{ min}$                | 2500          | V~     |                  |
|            | $I_{ISOL} \leq 1 \text{ mA}$                                      | $t = 1 \text{ s}$                  | 3000          | V~     |                  |
| $M_d$      | Mounting torque (M5)  |                                    | $5 \pm 15 \%$ | Nm     |                  |
|            | Terminal connection torque (M5)                                   |                                    | $5 \pm 15 \%$ | Nm     |                  |
| Weight     | typ.  |                                    | 160           | g      |                  |

### Features

- Package with screw terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- UL registered E72873

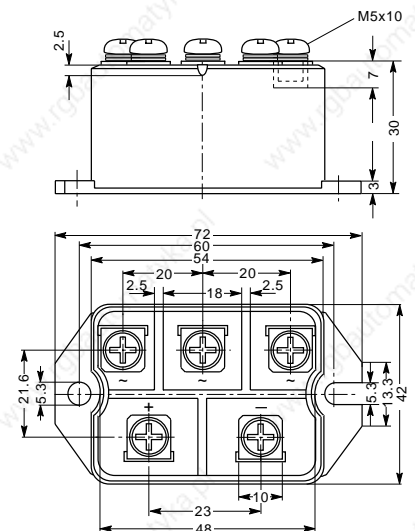
### Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

### Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling

### Dimensions in mm (1 mm = 0.0394")



| Symbol     | Test Conditions                                     | Characteristic Values |      |                  |
|------------|---|-----------------------|------|------------------|
|            |   | VUO 62                |      | VUO 82           |
| $I_R$      | $V_R = V_{RRM}$ ; $T_{VJ} = 25^\circ\text{C}$       | $\leq$                | 0.3  | 0.3 mA           |
|            | $V_R = V_{RRM}$ ; $T_{VJ} = T_{VJM}$                | $\leq$                | 5    | 5 mA             |
| $V_F$      | $I_F = 150 \text{ A}$ ; $T_{VJ} = 25^\circ\text{C}$ | $\leq$                | 1.8  | 1.6 V            |
| $V_{T0}$   | For power-loss calculations only                    |                       | 0.8  | 0.8 V            |
| $r_T$      |   |                       | 8    | 5 mΩ             |
| $R_{thJC}$ | per diode   |                       | 1.45 | 1.1 K/W          |
|            | per module  |                       | 0.24 | 0.183 K/W        |
| $R_{thJH}$ | per diode   |                       | 1.87 | 1.52 K/W         |
|            | per module  |                       | 0.31 | 0.253 K/W        |
| $d_s$      | Creeping distance on surface                        |                       | 10   | mm               |
| $d_A$      | Creepage distance in air                            |                       | 9.4  | mm               |
| $a$        | Max. allowable acceleration                         |                       | 50   | m/s <sup>2</sup> |

Data according to IEC 60747 and refer to a single diode unless otherwise stated.  
 IXYS reserves the right to change limits, test conditions and dimensions.