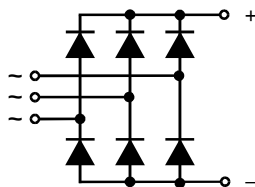


## Three Phase Rectifier Bridge

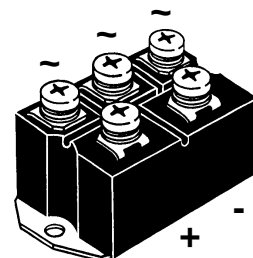
$$I_{dAV} = 63/88 \text{ A}$$

$$V_{RRM} = 800-1800 \text{ V}$$

| $V_{RSM}$<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               |
| $I_{dAV}$  | $T_A = 45^\circ\text{C}$ ( $R_{thCA} = 0.6 \text{ K/W}$ ), module | 48              | 57               |
| $I_{FSM}$  | $T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine   | 550             | 750              |
|            | $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine                    | 600             | 820              |
|            | $T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz), sine            | 500             | 670              |
|            | $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine                    | 550             | 740              |
| $I^2t$     | $T_{VJ} = 45^\circ\text{C}$ ; $t = 10 \text{ ms}$ (50 Hz), sine   | 1520            | 2800             |
|            | $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine                    | 1520            | 2800             |
|            | $T_{VJ} = T_{VJM}$ ; $t = 10 \text{ ms}$ (50 Hz), sine            | 1250            | 2250             |
|            | $V_R = 0$ ; $t = 8.3 \text{ ms}$ (60 Hz), sine                    | 1250            | 2250             |
| $T_{VJ}$   |                                                                   | -40...+150      | $^\circ\text{C}$ |
| $T_{VJM}$  |                                                                   | 150             | $^\circ\text{C}$ |
| $T_{stg}$  |                                                                   | -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

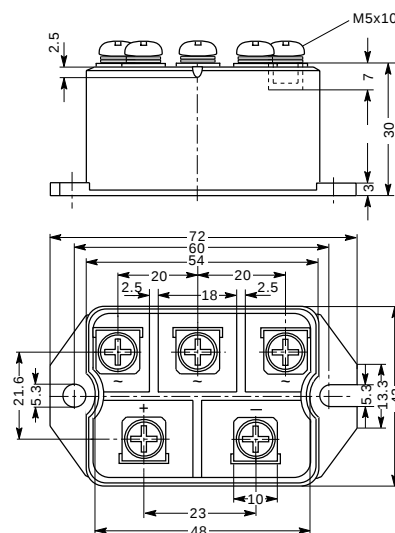
### Applications

- 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.