

Three Phase Rectifier Bridge

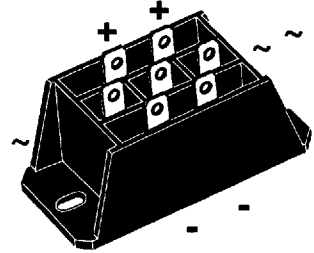
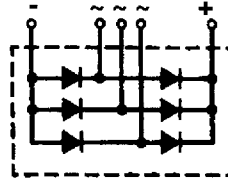
VUO 60

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

$I_{dAV} = 58 \text{ A}$

| V_{RSM} | V_{RRM} | Type |
|-----------|-----------|---------------|
| V | V | |
| 900 | 800 | VUO 60-08NO3 |
| 1300 | 1200 | VUO 60-12NO3 |
| 1500 | 1400 | VUO 60-14NO3 |
| 1700 | 1600 | VUO 60-16NO3 |
| 1900 | 1800 | VUO 60-18NO3* |

* delivery time on request



| Symbol | Test Conditions | Maximum Ratings | |
|---------------|--|---|--|
| I_{dAV} ① | $T_C = 85^\circ\text{C}$, module | 58 A | |
| I_{dAVM} ① | module | 75 A | |
| I_{FSM} | $T_{VJ} = 45^\circ\text{C}$; $V_R = 0$ | $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine | 600 A 525 A |
| | $T_{VJ} = T_{VJM}$ $V_R = 0$ | $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine | 415 A 440 A |
| $\int i^2 dt$ | $T_{VJ} = 45^\circ\text{C}$ $V_R = 0$ | $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine | 1250 A ² s 1160 A ² s |
| | $T_{VJ} = T_{VJM}$ $V_R = 0$ | $t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine | 860 A ² s 810 A ² s |
| T_{VJ} | | -40...+125 °C | |
| T_{VJM} | | 125 °C | |
| T_{stg} | | -40...+125 °C | |
| V_{ISOL} | 50/60 Hz, RMS | $t = 1 \text{ min}$ | 3000 V~ |
| | $I_{ISOL} \leq 1 \text{ mA}$ | $t = 1 \text{ s}$ | 3600 V~ |
| M_d | Mounting torque (M5) (10-32 UNF) | | 2-2.5 Nm 18-22 lb.in. |
| Weight | typ. | | 50 g |

Features

- Package with DCB ceramic base plate
- Isolation voltage 3600 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- 1/4" fast-on terminals
- UL registered E 72873

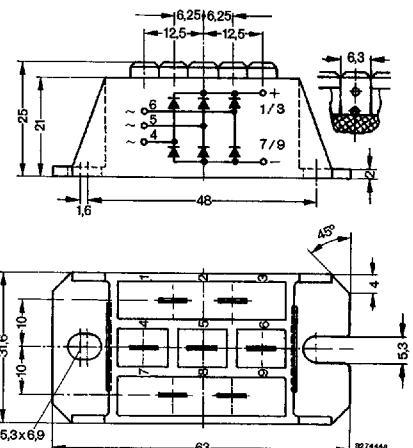
Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Rectifier for DC motors field current

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 |
|------------|--|-----------------------|
| I_R | $V_R = V_{RRM}$; $T_{VJ} = 25^\circ\text{C}$ | 0.3 mA |
| | $V_R = V_{RRM}$; $T_{VJ} = T_{VJM}$ | 5 mA |
| V_F | $I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$ | 1.9 V |
| V_{T0} | For power-loss calculations only | 0.9 V |
| r_T | $T_{VJ} = T_{VJM}$ | 6.0 mΩ |
| R_{thJC} | per diode, DC current | 1.62 K/W |
| | per module | 0.27 K/W |
| R_{thJK} | per diode, DC current | 2.22 K/W |
| | per module | 0.37 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 ² |

Data according to DIN/IEC 747 and refer to a single diode unless otherwise stated.

① for resistive load at bridge output

IXYS reserves the right to change limits, test conditions and dimensions.

Use output terminals in parallel connection!