

# Three Phase Rectifier Bridge

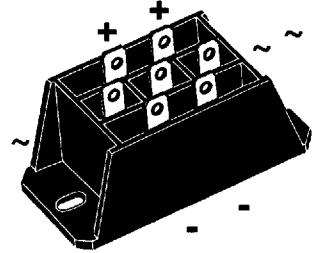
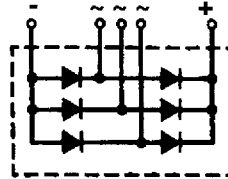
## VUO 60

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

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

$V_{RSM}$	$V_{RRM}$	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 <sup>2</sup> s 1160 A <sup>2</sup> 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 <sup>2</sup> s 810 A <sup>2</sup> 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

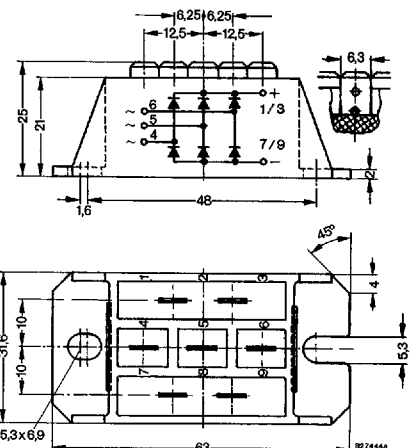
### Applications

- 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 <sup>2</sup>

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!**