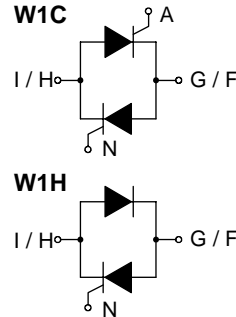


AC Controller Modules

$I_{RMS} = 175 A$
 $V_{RRM} = 800-1600 V$

Preliminary Data

V_{RSM} V_{DSM} V	V_{RRM} V_{DRM} V	Type	
800	800	MMO 175-08io7	MLO 175-08io7
1200	1200	MMO 175-12io7	MLO 175-12io7
1600	1600	MMO 175-16io7	MLO 175-16io7



Symbol	Conditions	Maximum Ratings	
I_{RMS}	$T_C = 85^\circ C$, 50 - 400 Hz, (per single controller)	175	A
I_{TRMS}		125	A
I_{TAVM}	$T_C = 85^\circ C$; 180° sine	80	A
I_{TSM}	$T_{VJ} = 45^\circ C$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	1500 A 1600 A
	$T_{VJ} = 125^\circ C$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	1350 A 1450 A
I^2t	$T_{VJ} = 45^\circ C$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	11200 A ² s 10750 A ² s
	$T_{VJ} = 125^\circ C$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	9100 A ² s 8830 A ² s
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ C$ f = 50 Hz, $t_p = 200 \mu s$ $V_D = \frac{2}{3} V_{DRM}$ $I_G = 0.45 A$ $di_G/dt = 0.45 A/\mu s$	repetitive, $I_T = 80 A$	150 A/ μs
		non repetitive, $I_T = I_{TAVM}$	500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = 125^\circ C$; $V_{DR} = \frac{2}{3} V_{DRM}$ $R_{GK} = \infty$; method 1 (linear voltage rise)		1000 V/ μs
P_{GM}	$T_{VJ} = 125^\circ C$ $I_T = I_{TAVM}$	$t_p = 30 \mu s$ $t_p = 300 \mu s$	10 W 5 W
			0.5 W
P_{GAVM}			0.5 W
V_{RGM}			10 V
T_{VJ}			-40...+150 °C
T_{VJM}			150 °C
T_{stg}			-40...+125 °C
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1 mA$	t = 1 min t = 1 s	2500 V~ 3000 V~
M_d	Mounting torque (M4)		1.5...2.0/14...18 Nm/lb.in.
Weight	typ.		18 g

Features

- Thyristor controller for AC (circuit W1C acc. to IEC) for mains frequency
- Isolation voltage 3000 V~
- Planar glass passivated chips
- Low forward voltage drop
- Lead suitable for PC board solering

Applications

- Switching and control of single and three phase AC circuits
- Light and temperature control
- Softstart AC motor controller
- Solid state switches

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling
- High power density
- Small and light weight

Data according to IEC 60747 and to a single thyristor/diode unless otherwise stated.

