

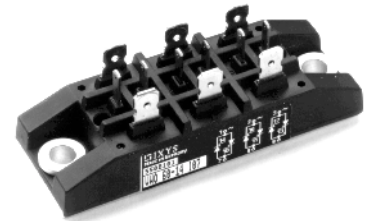
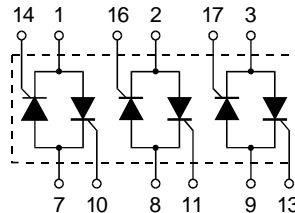
Three Phase AC Controller Modules

$$I_{RMS} = 3 \times 39 \text{ A}$$

$$V_{RRM} = 800-1600 \text{ V}$$

Preliminary data

V_{RSM}	V_{RRM}	Type
V_{DSM}	V_{DRM}	
V	V	
800	800	VWO 36-08io7
1200	1200	VWO 36-12io7
1400	1400	VWO 36-14io7
1600	1600	VWO 36-16io7



Symbol	Test Conditions	Maximum Ratings	
I_{RMS}	$T_K = 85^\circ\text{C}$, 50 - 400 Hz (per phase)	39	A
I_{TRMS}	$T_{VJ} = T_{VJM}$	28	A
I_{TAVM}	$T_K = 85^\circ\text{C}$; (180° sine)	18	A
I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	t = 10 ms (50 Hz), sine	320 A
		t = 8.3 ms (60 Hz), sine	350 A
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	280 A
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	310 A
I^2t	$T_{VJ} = 45^\circ\text{C}$	t = 10 ms (50 Hz), sine	500 A ² s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	520 A ² s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	390 A ² s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	400 A ² s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f = 50 Hz, $t_p = 200 \mu\text{s}$ $V_D = 2/3 V_{DRM}$	repetitive, $I_T = 20 \text{ A}$	150 A/ μs
	$I_G = 0.3 \text{ A}$ $di_G/dt = 0.3 \text{ A}/\mu\text{s}$	non repetitive, $I_T = I_{TAVM}$	500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$; $R_{GK} = \infty$; method 1 (linear voltage rise)	$V_{DR} = 2/3 V_{DRM}$	1000 V/ μs
P_{GM}	$T_{VJ} = T_{VJM}$	$t_p = 30 \mu\text{s}$	10 W
	$I_T = I_{TAVM}$	$t_p = 300 \mu\text{s}$	5 W
P_{GAVM}			0.5 W
V_{RGM}			10 V
T_{VJ}		-40...+125	°C
T_{VJM}		125	°C
T_{stg}		-40...+125	°C
V_{ISOL}	50/60 Hz, RMS	t = 1 min	2500 V~
	$I_{ISOL} \leq 1 \text{ mA}$	t = 1 s	3000 V~
M_d	Mounting torque (M5) (10-32 UNF)		5 ± 15 % Nm
			44 ± 15 % lb.in.
Weight	typ.		110 g

Features

- Thyristor controller for AC (circuit W3C acc. to IEC) for mains frequency
- Package with metal base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- UL applied
- ¼" fast-on power terminals

Applications

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

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability
- High power density
- Light weight and compact

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

