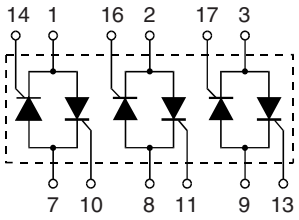
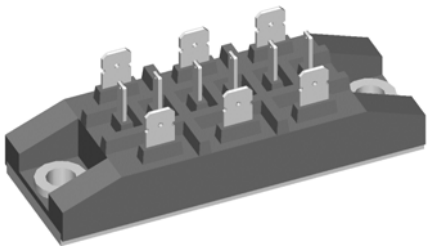
Three Phase AC Controller Modules

I_{RMS} = 3x 39 A
V_{RRM} = 1200-1600 V

Preliminary data

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





Symbol	Conditions		Maximum Ratings	
I_{RMS}	T_K = 85°C, 50 - 400 Hz (per phase)		39	A
I_{TRMS}	$T_{VJ} = T_{VJM}$		28	A
I_{TAVM}	T_K = 85°C (180° sine)		18	A
I_{TSM}	T_{VJ} = 45°C	t = 10 ms (50 Hz), sine	320	A
	V_R = 0	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°C	t = 10 ms (50 Hz), sine	500	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	520	A^2s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	390	A^2s
	V_R = 0	t = 8.3 ms (60 Hz), sine	400	A^2s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f =50 Hz, t_P =200 µs $V_D = {}^2/_3\ V_{DRM}$	repetitive, I_T = 20 A	150	A/µs
	I_G = 0.3 A di_G/dt = 0.3 A/µs	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 µs	10	W
	$I_T = I_{TAVM}$	t_p = 300 µs	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~
	$I_{ISOL} \le$ 1 mA	t = 1 s	3000	V~
M_d	Mounting torque (M5)		5 ± 15%	Nm
		(10-32 UNF)	44 ± 15%	lb.in.
Weight	typ.		110	g

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

Features

- Thyristor controller for AC (circuit W3C acc. to IEC) for mains requency
- 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

Dimensions in mm (1 mm = 0.0394")