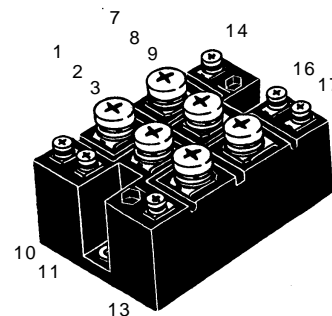
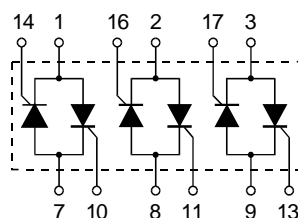


Three Phase AC Controller Modules

$I_{RMS} = 50\text{ A}$
 $V_{RRM} = 800\text{-}1600\text{ V}$

Preliminary data

V_{RSM} V_{DSM} V	V_{RRM} V_{DRM} V	Type
800	800	VWO 50-08io7
1200	1200	VWO 50-12io7
1400	1400	VWO 50-14io7
1600	1600	VWO 50-16io7



Symbol	Test Conditions	Maximum Ratings
I_{RMS}	$T_C = 85^\circ\text{C}$, 50 - 400 Hz (per phase)	50 A
I_{TRMS}	$T_{VJ} = T_{VJM}$	36 A
I_{TAVM}	$T_C = 85^\circ\text{C}$; (180° sine)	23 A
I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	t = 10 ms (50 Hz), sine 520 A
		t = 8.3 ms (60 Hz), sine 560 A
$I_{\beta t}$	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine 460 A
		t = 8.3 ms (60 Hz), sine 500 A
$I_{\beta t}$	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	t = 10 ms (50 Hz), sine 1350 A ² s
		t = 8.3 ms (60 Hz), sine 1320 A ² s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f = 50 Hz, $t_p = 200\ \mu\text{s}$ $V_D = 2/3 V_{DRM}$ $I_G = 0.3\text{ A}$	repetitive, $I_T = 150\text{ A}$ 100 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}	$T_{VJ} = T_{VJM}$	$t_p = 30\ \mu\text{s}$ 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)	5/44±15 % Nm/lb.in.
	Terminal connection torque (M3; M5)	1.5/13±15 % Nm/lb.in.
Weight	typ.	180 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

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
- High power density

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

