

Digital Output 16-Point Processor

MU-PDOX02

Parameter	Solid State		
	Specification		
	3-30 Vdc FTA	120/240 Vac FTA	31-200 Vdc FTA
FTA Model Numbers	MU-TDOD13, 53, 14, 54	MU-TDOA13, MU-TDOA53	MU-TDOD23, MU-TDOD63
Output Channels	16 (Outputs are independent from each other and can use independent load power supplies.)	16 (Outputs are independent from each other and can use independent load power supplies.)	16 (Outputs are independent from each other and can use independent load power supplies.)
Output Type	Normally open power transistor switch per output (emitter and collector terminals are both available to the user.)	Normally open triac switch per output (both triac terminals are available to the user)	Normally open power transistor switch per output (emitter and collector terminals are both available to the user.)
Load Voltage Range	13, 53 3-30 Vdc 14, 54 5-30 Vdc	120/240 Vac	31-200 Vdc
FTA Max Continuous Load Current	1.25 Adc per output <sup>(2)</sup>	1.25 Adc per output <sup>(2)</sup>	0.5 Adc per output <sup>(2)</sup>
Load Fuse Rating <sup>(5)</sup>	2.5 A 125 V slow blow (5x20 mm) fuse per output (readily replaceable in fuseholders)	2.5 A 125 V slow blow (5x20 mm) fuse per output (readily replaceable in fuseholders)	1 A 125 V slow blow (5x20 mm) fuse per output (readily replaceable in fuseholders)
Fuse Type (BUSS)	GDC-2.5 A	GDC-2.5 A	GDC-1 A
Load Power Factor	N/A	Must be 0.5 or greater <sup>(1)</sup>	N/A
Min. Load Current <sup>(3)</sup>	10 mAdc	50 mA (rms)	10 mAdc
Isolation	1500 V (rms) (field terminals to system power supply common)	1500 V (rms) (field terminals to system power supply common)	1500 V (rms) (field terminals to system power supply common)
On-State Voltage Drop	(@ max. load current) 13, 53 1.6 V max. 14, 54 3.0 V max.	1.6 V max. (@ max. load current)	3.0 V max. (@ max. load current)
Off-State Leakage Max.	13, 53 10 µAdc max. 14, 54 100 µAdc max.	5 mA rms	100 µAdc max.
Turn-on/Turn-off Time	1 ms max.	Next zero voltage/next zero current <sup>(4)</sup>	1 ms max.
Contact Suppression (Shunt)	Diode clamp	Resistor/capacitor snubber plus varistor per output	Diode clamp
Surge withstand capability	ANSI/IEEE C37.90.1-1978	ANSI/IEEE C37.90.1-1978	ANSI/IEEE C37.90.1-1978

- (1) Load power factors less than 0.5 can damage the triac switches. Additional resistor/capacitor snubbing must be added across the triac as discussed in the appropriate *Installation* manual for load power factors less than 0.5; otherwise a load with power factor 0.5, or greater, must be used.
- (2) Individual output rated at maximum 2 Adc, provided that total current for two adjacent channels does not exceed 2.5 amps.
- (3) Surge current rating of solid-state switch at 20°C non-repeating.
- (4) As much as 0.5 line cycle (8.33 ms for 60 Hz line) for power factor <1.0.
- (5) Actual fuse rating is slightly greater than the maximum FTA output allowed. "Use the FTA Max Continuous Load Current" section for maximum FTA output rating.

(Continued)