

MULTIDRIVE 3 PHASE THYRISTOR UNIT FROM 1000 TO 2600A



GENERAL DESCRIPTION

- **MULTIDRIVE IS A FULL DIGITAL AND UNIVERSAL THYRISTOR UNIT BASED ON A VERY POWERFUL DEDICATED MICRO CONFIGURABLE VIA SERIAL COMMUNICATION PORT FOR ALL INPUTS, FIRING MODES, FEEDBACK MODES AND LOADS TYPES.**
- **SUITABLE TO DRIVE RESISTIVE AND TRANSFORMER LOADS REQUIRING CURRENT LIMIT OR POWER FEEDBACK.**
- **FRONTAL KEYPAD STANDARD TO CONFIGURE ALL THE INTERNAL FUNCTIONS AND PARAMETERS.**
- **UNIVERSAL INPUT SIGNAL WITH AUTOMATIC ZERO/SPAN CALIBRATION.**
- **UNIVERSAL FIRING MODES, CUSTOMER CONFIGURABLE VIA KEYPAD OR COMMUNICATION PORT AS BURST FIRING AND PHASE ANGLE.**
- **SOFT START CAN BE USED IN ADDITION TO BURST FIRING AND PHASE ANGLE.**
- **UNBALANCED LOAD AND HEATER BREAK ALARM.**
- **RS485 PORT. MODBUS.**
- **COMPLY WITH EMC AND CE.**

TECHNICAL SPECIFICATION

Operating temperature	0÷40°C for higher temperature see derating curve
Voltage power supply	24V minimum, 480V std and 600V on request
Universal Input signal	SSR, 4÷20mA ,0÷10V, 10 K Pot, Communication port. Second Set Point 0÷10V or 4÷20ma
Universal Firing	One of these firing modes can be configured on line via serial port: Burst Firing BF; Single Cycle SC; Soft Start + Burst Firing S+BF; PhaseAngle PA
Soft Start	Digital adjustable ramp rate can be used in up or/end down mode.
Auxiliary voltage supply	90÷240V ±15%; 20VA power consumption. Fan voltage supply: 240V ±15%
Retransmission	Current or Voltage or Power can be retransmitted as a standard signal 0÷10V.
Heater break alarm	Circuit microprocessor based to diagnose partial or total load failure and short circuit on Thyristors.
Unbalanced load	This protection allow to have Multidrive working up to 20% of unbalance on one of phases.
Line Drop Voltage	Automatic compensation ±15% of supply voltage with analog input
Fuses	High speed fuses fitted internally with micro switch for fuse failure.
Communication	RS485 Port. Modbus communication protocol 9600bauds
Thermal protection	Available on each heatsink.
Mounting	Panel mounting.

ORDERING CODE

Model	Current (A)	Supply Voltage (V)	Load connections	Load type	Feedback mode	Main input	Second input
MULTIDRIVE	1000	120	3D 3 Wire Delta	RES Resistive	W Power	SSR	0÷10V
	1100	240	3S 3 Wire Star	IND Inductive		0÷10V	4÷20mA
	1300	380		Transformer		4÷20mA	
	1500	415				10 Kpot	
	1600	440				Comm	
	1700	480				Keypad	
	2100	500					
	2300	600					

Ritransmission	Firing mode	Standard Features
V10 Voltage 0÷10V	ZC (Zero Crossing)	HB (Heater Break Alarm)
I10 Current 0÷10V	BF (Burst Firing)	UL (Max Unbalanced Load std)
W10 Power 0÷10V	Delayed Triggering	FF (Fuses fail microswitch)
		RS (RS485 Modbus protocol)
	Note: for Burst Firing specify the desired n° of cycles ON at 50% of power demand	

FUSES

Internal Fuses are standard on Multidrive.

INPUT FEATURES

Input signal	Maximum current drain	Input impedance	ON condition	Off condition
SSR	5mA constant current drain		≥4V-max 30V	≤1V
0÷10V		8200Ω		
4÷20mA		100Ω		
10K Pot.		8200Ω		

Auxiliary Power Supply
90-240Vac

TREE PHASE STACK WITH EXTRAIBLE PHASES MODULE

Model	I Max (A) Ta=40°C	V Max SCR PRV (V)	SCR	Fuse		Fan	Power Loss	Dimensions L x P x H	Weight	Draw
				n	660 V					
TAF1000	1000	2400	CDT807	1	800 A	W2E-200HH	3,5	500x720x410	55	4141
TAF1100	1100	1600	CDT804	1	1000 A	W2E-200HH	3,5	500x720x410	55	4141
TAF1300	1300	1600	CDT1005	1	1100 A	W2E-250HL	4,8	570x910x405	82	4110
TAF1500	1500	1600	CDT1004	1	1250 A	W2E-250HL	5	570x910x405	82	4110
TAF1600	1600	1600	CDT1003	1	1250 A	W2E-250HL	5,8	570x910x405	82	4110
TAF1700	1700	1600	CDT636	1	1400 A	W2E-250-CE65-01	6,2	570x910x405	90	4112
TAF2100	2100	1600	CDT636	2	1000 A	W2E-250-CE65-01	7,2	736x920x520	165	4143
TAF2300	2300	1600	CDT726	2	1000 A	W2E-250-CE65-01	7,5	736x920x520	165	4143
TAF2600	2600	1600	CDT738	2	1100 A	W2E-250-CE65-01	9	736x1040x465	165	4104

Note: For more deep information about derating curve, fuseholder dimensions and wiring see our web site: www.cdautomation.com