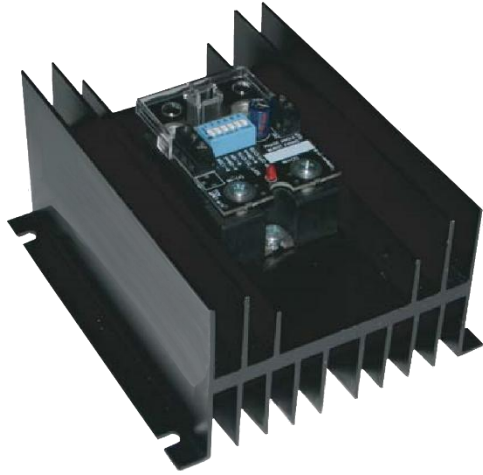


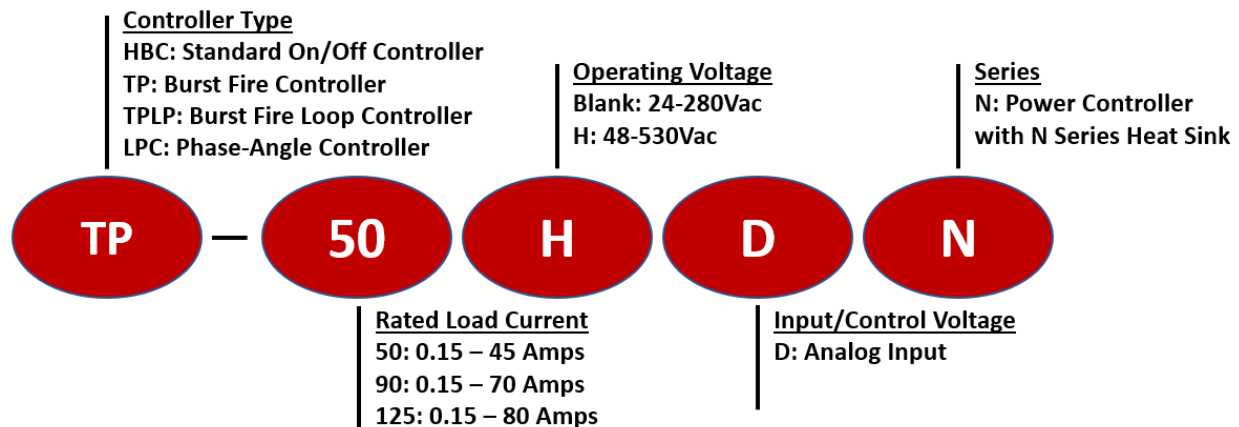
# N Series TP

## 80 Amp Burst Fire Power Controller



- SCR output panel mount proportional output (burst fire) Power Controller
- Output ratings up-to 80 amps @ 40°C ambient temperature
- True linear output controller with selectable soft-start, suitable for resistive or inductive loads
- Selectable analog input; 0-10Vdc, 1-5Vdc, 2-10Vdc, 1-5Vdc, 4-20mA or potentiometer
- Line-voltage compensation with automatic 50/60Hz operation
- Thermally efficient heat sink to maximize overall product life expectancy
- Direct-bond copper (DBC) substrate for superior thermal performance
- MTBF > 7 million hours (>800 years)
- Solid-state relay approvals include VDE/TÜV and CE

### Series Nomenclature



### Output Specifications

Part Number: TP -	50DN	50HDN	90HDN	125HDN
Crydom Solid-State Relay Utilized*	D2450	HD4850	HD4890	HD48125
Operating Voltage (Vrms; 47-440Hz)	24-280	48-530	48-530	48-530
Load Current Range (Amps RMS)	.15 – 45	.15 – 45	.15 – 70	.15 – 80
Transient Overvoltage (Vpk)	600	1200	1200	1200
Max. Surge Current (Apk; 50/60Hz)	597/625	597/625	1145/1200	1670/1750
Max. On-State Voltage Drop (Vrms)	1.15	1.15	1.15	1.15
Max I <sup>2</sup> T for Fusing (A <sup>2</sup> S; 50/60Hz)	1770/1629	1770/1629	6560/5976	6560/5976
Max. Off-State Leakage Current (mArms)	1	1	1	1
Min. Power Factor with Max. Load	0.5	0.5	0.5	0.5

\*UL Recognized Components - E116949 or E116950



# N Series TP

## 80 Amp Burst Fire Power Controller

### Input Specifications (Selectable on controller)\*

0-10Vdc	4-20mA
0-5Vdc	0-20mA
2-10Vdc	Potentiometer
1-5Vdc	0-135Ω (change prefix to "TP135-")

\*24Vac power supply required (optional HBCcontrols PS series if 24Vac supply is not available). Must be connected to same phase as the Power Controller.

### General Specifications

Description	Specification
Dielectric Strength (Input/Output/Heat Sink)	4,000 Vrms
Ambient Operating Temperature Range	-40 to +80 °C
Weight	1.5 lbs (680 g)
Solid State Relay Housing Material	UL94 V-0 Polymers
Heat Sink Material	Aluminum
Input Terminal Screw Torque Range (in-lb/Nm)	13-15 / 1.5-1.7
Load Terminal Screw Torque Range (in-lb/Nm)	18-20 / 2.0-2.2
MTBF (Mean Time Between Failures) @ 40°C ambient	~11 Million Hours (>1,300 years)
MTBF (Mean Time Between Failures) @ 60°C ambient	~7 Million Hours (>800 years)

### Available Options (Suffix at end of part number)

- M MOV (metal oxide varistor) overvoltage protection
- P Internal TVS overvoltage protection
- D DIN mounting

### Accessories (add "-3" suffix for three-phase power supply)

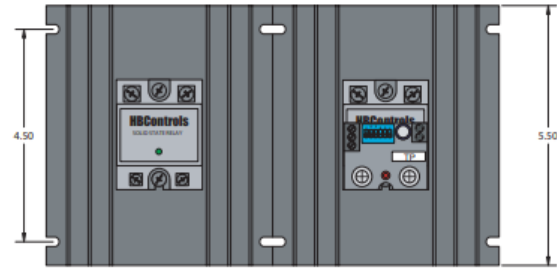
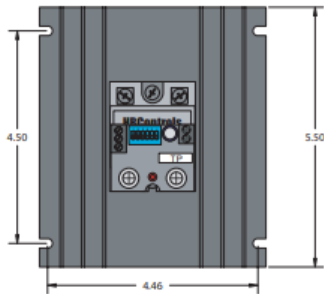
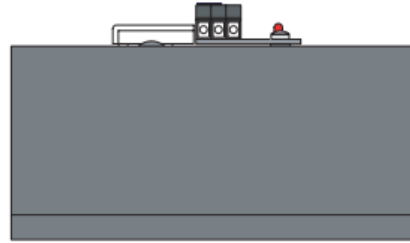
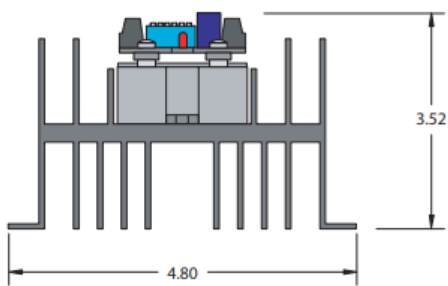
- PS-120 120Vac to 24Vac / 1.5VA power supply
- PS-240 240Vac to 24Vac / 1.5VA power supply
- PS-480 480Vac to 24Vac / 1.5VA power supply

### Input Options (Change TP- prefix to TPLP or LPC prefix)

- TPLP** Burst fire loop (time proportioning loop) controller. Analog Input; 4-20mA (24Vac supply not required)
- LPC** Linear phase-angle controller. Analog Input; 0-10Vdc, 0-5Vdc, 2-10Vdc, 1-5Vdc, 4-20mA, potentiometer or 0-135Ω rheostat (LPC135 prefix). 24Vac power supply required (optional HBCcontrols PS series if 24Vac supply is not available)

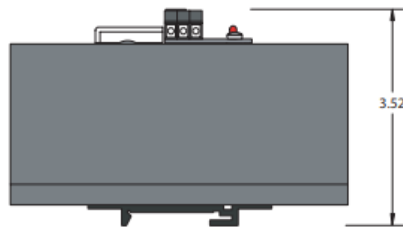
# N Series TP

## 80 Amp Burst Fire Power Controller



**3 Phase /  
2 Pole  
(-2 Option)**

**Din Mount  
(-D Option)**



**3 Phase /  
2 Pole  
(-2 Option)**

