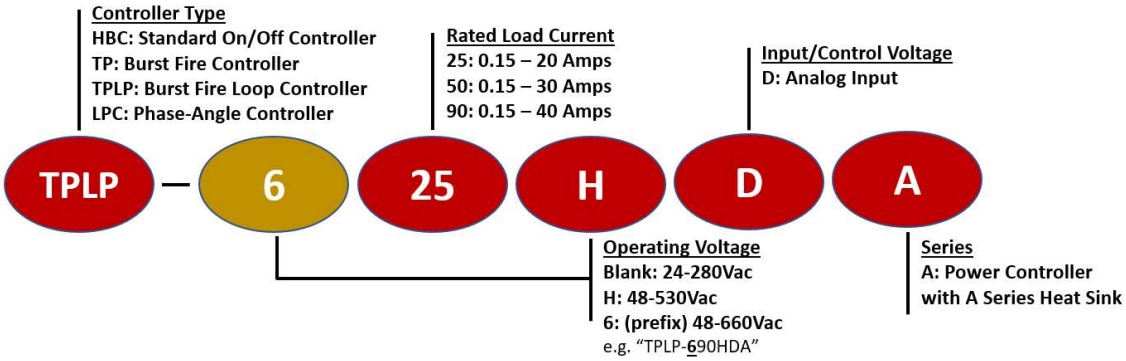
A Series TPLP
40 Amp Burst Fire Power Controller

- SCR output DIN mount proportional output (burst fire) Power Controller
- Output ratings up-to 40 amps @ 40°C ambient temperature
- Loop powered – auxiliary power supply not required
- 4-20mA input
- 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)
- Agency approvals; UL, CSA, VDE/TUV, and CE

Series Nomenclature



Output Specifications

Part Number: TPLP -	25DA	25HDA	50DA	50HDA	90HDA	690HDA
Operating Voltage (Vrms; 47-440Hz)	24-280	48-530	24-280	48-530	48-530	48-660
Load Current Range (Amps RMS)	.15 - 20	.15 - 20	.15 - 30	.15 - 30	.15 - 40	.15 - 40
Transient Overvoltage (Vpk)	600	1200	600	1200	1200	1200
Max. Surge Current (Apk; 50/60Hz)	239/250	239/250	597/625	597/625	1145/1200	1145/1200
Max. On-State Voltage Drop (Vrms)	1.15	1.15	1.15	1.15	1.15	1.15
Max I^2T for Fusing (A^2S; 50/60Hz)	285/259	285/259	1770/1629	1770/1629	6560/5976	6560/5976
Max. Off-State Leakage Current (mArms)	1	1	1	1	1	1
Min. Power Factor with Max. Load	0.5	0.5	0.5	0.5	0.5	0.5

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Input Specifications *

4-20mA

* Loop powered; 24Vac power supply not required

General Specifications

Description	Specification
Dielectric Strength (Input/Output/Heat Sink)	4,000 Vrms
Ambient Operating Temperature Range	-40 to +80 °C
Weight	0.75 lbs (340 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)

-10 Random/Instantaneous turn-on (inductive loads)
-M MOV (metal oxide varistor) overvoltage protection
-P Internal TVS overvoltage protection
-TP Through-panel mounting
-PM Panel mounting
-ND Without DIN rail clip
-CT Current transducer
-2 Two-pole configuration (for three-phase loads)
-3 Three-pole configuration (for three-phase loads)

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

TP Burst fire (time proportioning) controller. Analog Input; 0-10Vdc, 0-5Vdc, 2-10Vdc, 1-5Vdc, 4-20mA, potentiometer or 0-135Ω rheostat (TP135 prefix). 24Vac power supply required (optional HBControls PS series if 24Vac supply is not available).

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 HBControls PS series if 24Vac supply is not available).

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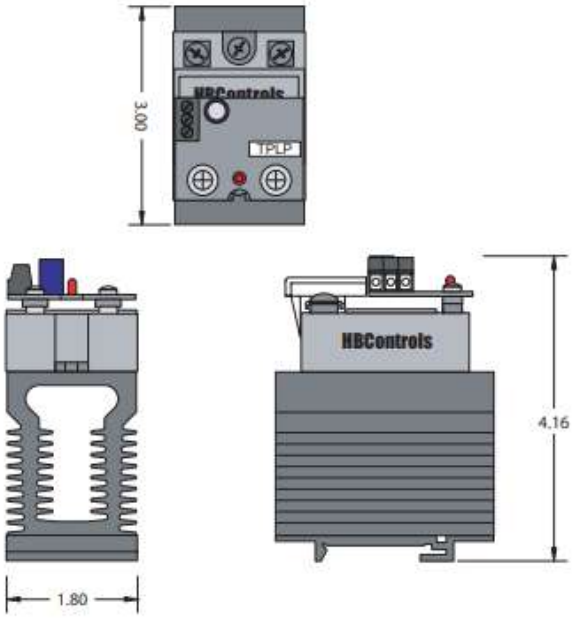
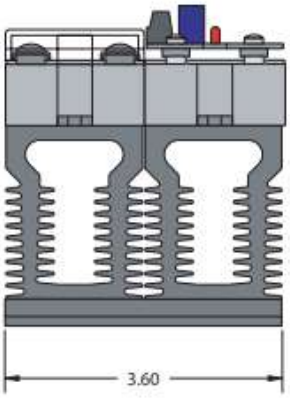
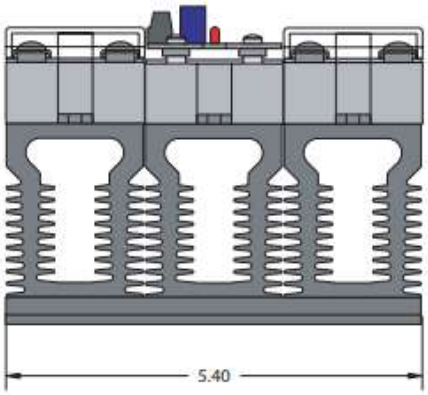




3 Phase/
2 Pole
(-2 Option)



3 Phase/
3 Pole
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