

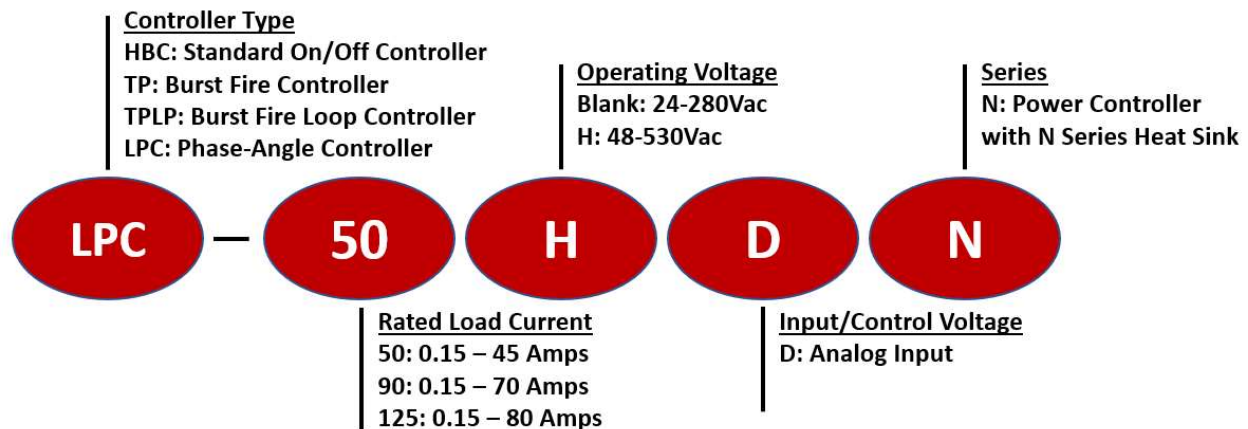
N Series LPC

80 Amp Phase-Angle Power Controller



- SCR output panel mount proportional output (phase-angle) 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)
- Agency approvals; UL, CSA, VDE/TUV, and CE

Series Nomenclature



Output Specifications

Part Number: LPC -	50DN	50HDN	90HDN	125HDN
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	1145/1200
Max. On-State Voltage Drop (Vrms)	1.15	1.15	1.15	1.15
Max I ² T for Fusing (A ² 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



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Input Specifications (Selectable on controller) *

0-10Vdc	4-20mA
0-5Vdc	0-20mA
2-10Vdc	Potentiometer
1-5Vdc	0-135Ω (change prefix to "LPC135-")

* 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)

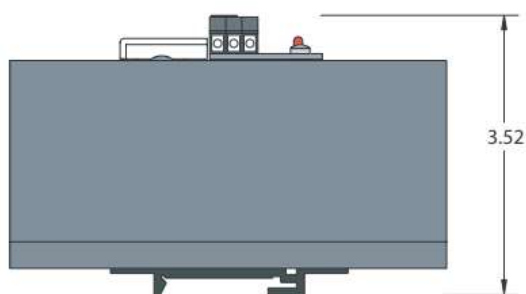
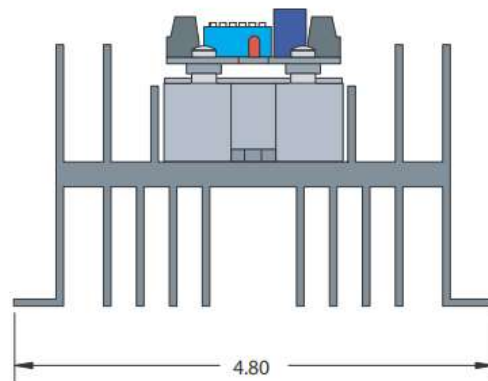
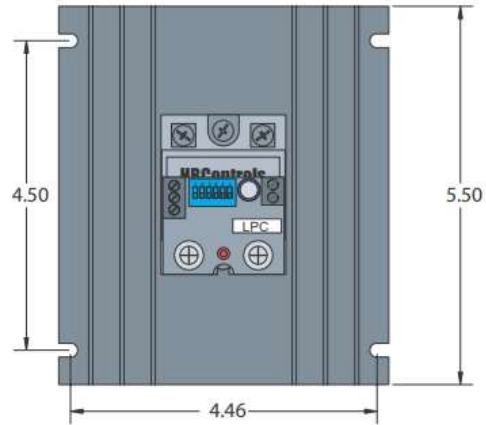
- PS-120 120Vac to 24Vac / 1.5VA power supply
- PS-240 240Vac to 24Vac / 1.5VA power supply
- PS-480 480Vac to 24Vac / 1.5VA power supply

Input Options (Change LPC- prefix to TP or TPLP 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 HBCcontrols PS series if 24Vac supply is not available).
- TPLP** Burst fire loop (time proportioning loop) controller. Analog Input; 4-20mA (24Vac supply not required)

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*Din Mount
(-D Option)*

