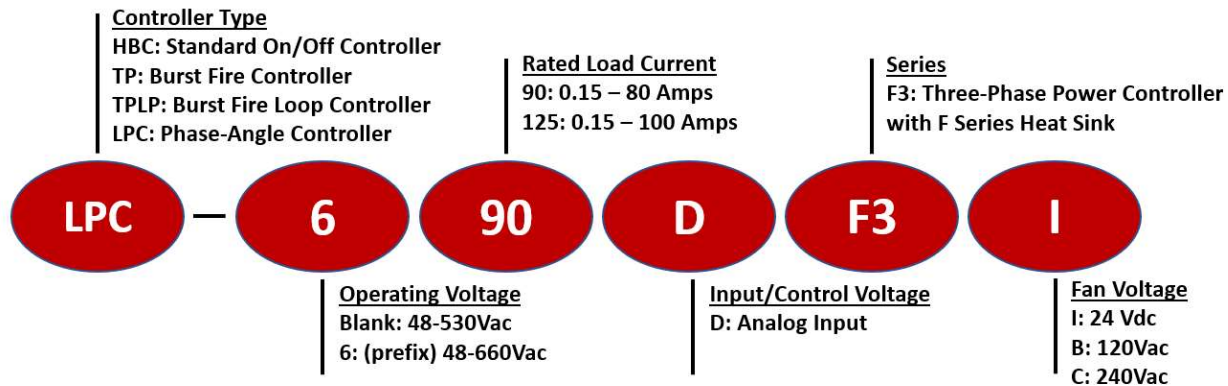


F Series LPC Three-Phase 100 Amp Phase-Angle Power Controller



- SCR output panel mount, three-phase proportional output (phase-angle) Power Controller
- Output ratings up-to 100 amps per-phase @ 40°C ambient temperature
- Forced-air cooled heat sink to maximize overall product life expectancy
- Includes 90°C thermal cutout switch
- 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 -	90DF3x	690DF3x	125DF3x
Operating Voltage (Vrms; 47-440Hz)	48-530	48-660	48-530
Load Current Range (Amps RMS)	.15 - 80	.15 - 80	.15 - 100
Transient Overvoltage (Vpk)	1200	1200	1200
Max. Surge Current (Apk; 50/60Hz)	1145/1200	1145/1200	1670/1750
Max. On-State Voltage Drop (Vrms)	1.15	1.15	1.15
Max I ² T for Fusing (A ² S; 50/60Hz)	6560/5976	6560/5976	13950/12709
Max. Off-State Leakage Current (mArms)	1	1	1
Min. Power Factor with Max. Load	0.5	0.5	0.5



F Series LPC Three-Phase 100 Amp Phase-Angle 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 "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 - +80 °C
Weight	4.3 lbs (1.95 kg) (24Vdc Fan) / 5.1 lbs (2.31 kg) (120/240Vac Fan)
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
- FD Front DIN mounting
- D DIN clip
- CT Current transducer

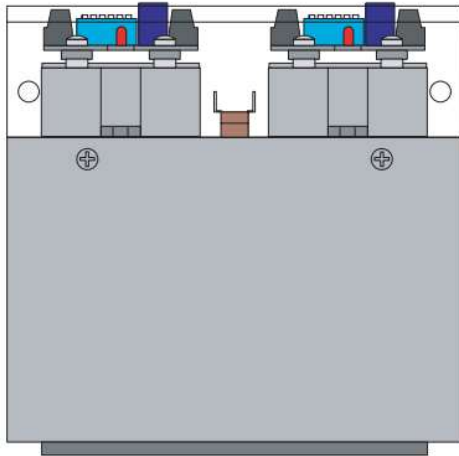
Accessories (add "-3" suffix for three-phase power supply)

- 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

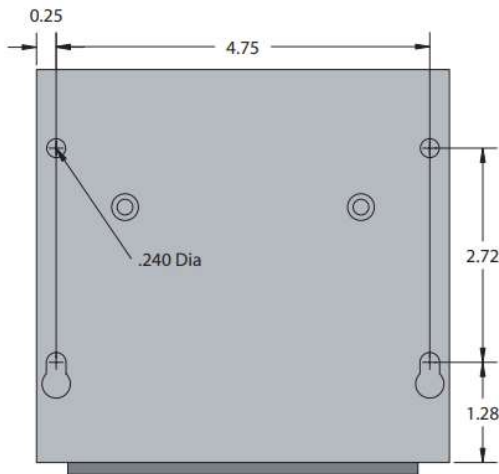
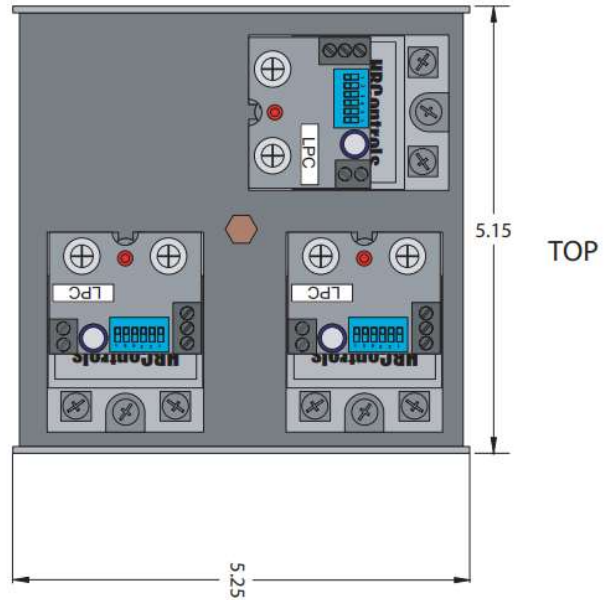
Input Options (Change LPC- prefix to TP or TPLP prefix)

- 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)

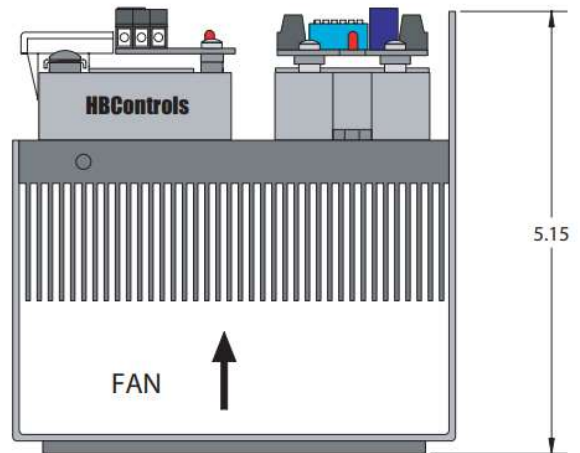
F Series LPC Three-Phase 100 Amp Phase-Angle Power Controller



FRONT



REAR



SIDE