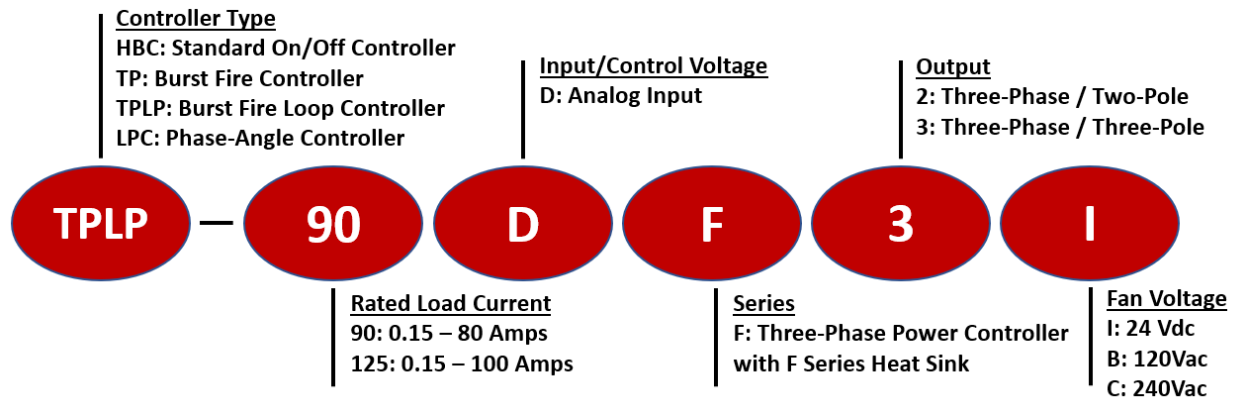


F Series TPLP Three-Phase 100 Amp Burst Fire Power Controller



- SCR output panel mount, three-phase proportional output (burst fire) 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
- 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 (calculated value)
- Incorporates Crydom solid-state relays: UL Recognized Components
- Additional relay approvals include VDE/TÜV and CE

Series Nomenclature



Output Specifications

Part Number: TPLP -	90DF2x	90DF3x	125DF2x	125DF3x
Crydom Solid-State Relays Utilized*	HD4890	HD4890	HD48125	HD48125
Operating Voltage (Vrms; 47-440Hz)	48-530	48-530	48-530	48-530
Load Current Range (Amps RMS)	.15 - 80	.15 - 80	.15 - 100	.15 - 100
Transient Overvoltage (Vpk)	1200	1200	1200	1200
Max. Surge Current (Apk; 50/60Hz)	1145/1200	1145/1200	1670/1750	1670/1750
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)	6560/5976	6560/5976	13950/12709	13950/12709
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 Component – E116949 or E116950



F Series TPLP Three-Phase 100 Amp Burst Fire Power Controller

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 - +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)

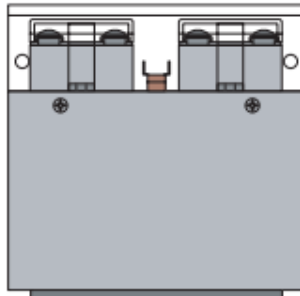
Available Options (Suffix at end of part number)

- 10 Random/Instantaneous turn-on (inductive load applications)
- M MOV (metal oxide varistor) overvoltage protection
- P Internal TVS overvoltage protection
- FD Front DIN mounting
- D DIN clip
- CT Current transducer

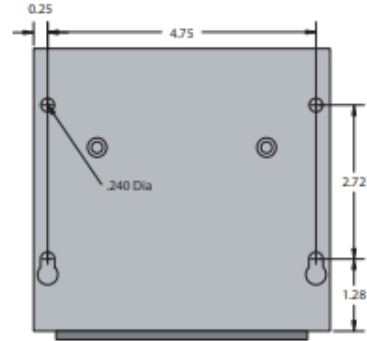
Input Options (Change TPLP- prefix to TP or LPC prefix)

- 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 HBCcontrols 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 HBCcontrols PS series if 24Vac supply is not available).

F Series TPLP Three-Phase 100 Amp Burst Fire Power Controller

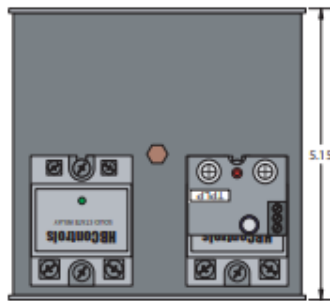


FRONT

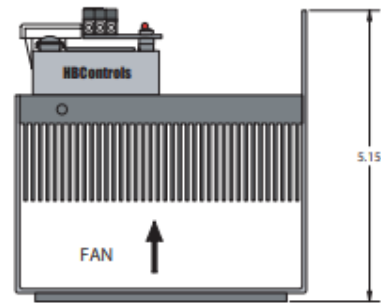


REAR

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

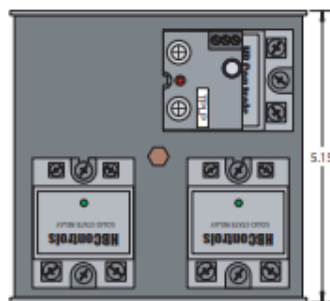


TOP

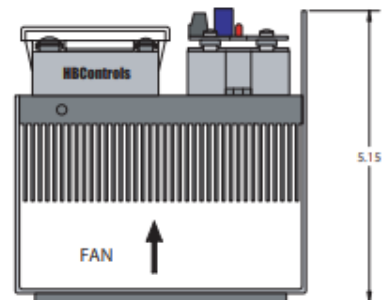


SIDE

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



TOP



SIDE