

Output Type:
PWM

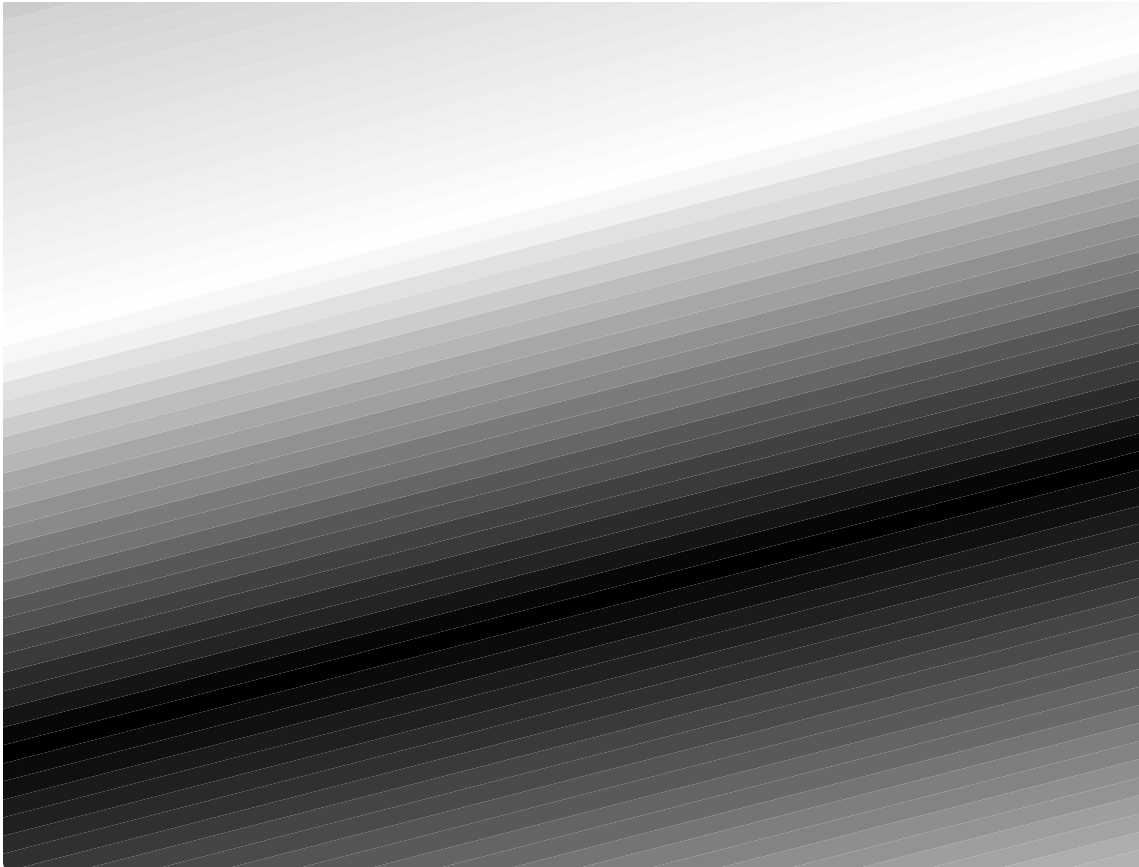
Voltage:
Up to 320 VDC

Amperage:
Up to 30 A Peak

Mounting:
6U Eurocard

Modes:
Torque

Commutation:
PWM Drive



BPU-P2

High-Power PMAC II Digital Servo Amplifier

Designed to interface directly with the Delta Tau PMAC II Motion Controller, the BPU-P2 is a high power brushless PWM servo amplifier in a Eurocard 6U form factor. This unit utilizes state of the art advancements in servo control technology.

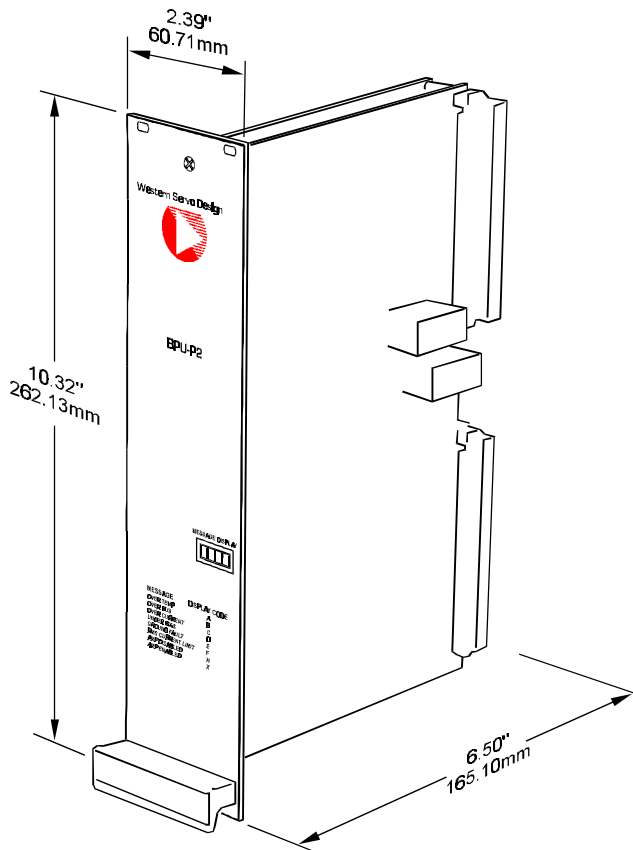
The BPU-P2 output power transistors are directly controlled by PWM signals from the Motion Controller. The Motion Controller then receives motor phase current feedback from the amplifier digitally via the serial A/D converters. This allows the PMAC II to close the current loop itself for exceptional servo performance and reduced system cost. An optional backplane accepts connections from the PMAC II and allows quick and easy hookup of motor, power, control and other I/O signals. This greatly simplifies implementing the BPU-P2 in a motion control system.

- ◉ Eurocard 6U Form Factor
- ◉ Designed for PMAC II Motion Controller
- ◉ External Sinusoidal Commutation
- ◉ 4 Digital Status Outputs plus Global Fault
- ◉ Amp Enable Input
- ◉ Protected from Over Current, Over Voltage, and Under Bias Conditions
- ◉ Two Phase Current Monitor Outputs
- ◉ Front Panel Alphanumeric Display for Amplifier Status
- ◉ PWM Frequency: Up to 20 kHz
- ◉ Bus Voltage: 30 - 320 VDC
- ◉ Continuous Current: 5, 12 or 22 Amperes
- ◉ Full Isolation between Input and Output Circuits
- ◉ Designed for Three-Phase Wye or Delta Wound Motors
- ◉ Advanced Design, Superior Quality and High Reliability
- ◉ One Year Parts and Labor Warranty

SPECIFICATIONS

Standard Models:	32/15	32/30	32/50
Max Bus Voltage	320 VDC	320 VDC	320 VDC
Peak Output Current*	15 A for .5 Sec	30 A for .5 Sec	50 A for .5 Sec
Continuous Output*	5 A	12 A	22 A
Command Input Voltage:	Digital PWM	Digital PWM	Digital PWM
PWM Command Voltage	5 V p - p	5 V p - p	5 V p - p
Switching Frequency	Up to 20 kHz	Up to 20 kHz	Up to 20 kHz
Min Load Inductance	2 mH	2 mH	2 mH
Bandwidth	2 kHz	2 kHz	2 kHz
Weight	2.50 Lb (1.14 Kg)		
Recommended Chassis	CHU-S6 Eurocard		
Available Accessories	ACC-V1D Backplane, PSU-S1 Power Supply		

*All ratings with forced air cooling to maintain 40°C heat sink temperature. Failure to keep constant air flow to the heat sink will reduce the output current capacity and may result in damage to the unit.



PINOUTS

J1: SIGNALS & POWER

ROW A		ROW B	
Pin	Function	Pin	Function
1	+12 V In	1	Temp Switch
2	+12 V In	2	NC
3	Ref Temp	3	NC
4	Ground	4	NC
5	Ground Temp	5	Ground
6	FC0	6	Ph A Current Command
7	FC2	7	Ph B Current Command
8	ADC CLK 1+	8	Signal In Return
9	ADC STB 1+	9	Signal In Command
10	ADC DAA 1+	10	NC
11	ADC DAB 1+	11	NC
12	AENA 1+	12	Amp Enable A
13	FAULT 1+	13	Amp Fault
14	PWMATOP 1+	14	Hall Effect D +V In
15	PWMABOT 1+	15	Hall Sensor A
16	PWMBTOP 1+	16	Hall Sensor B
17	PWMBBOT 1+	17	Hall Sensor C
18	PWMCOTOP 1+	18	Hall Power Return
19	PWMCBOT 1+	19	Hall Effect L +V In
20	Ground	20	Hall Sensor A L
21	+5 V In	21	Hall Sensor B L
22	+5 V In	22	Hall Sensor C L
23	Ground	23	Hall L Power Return
24	Ground	24	Resolver Ref Return
25	Current A+	25	Resolver Reference
26	Current B+	26	Resolver Sine In
27	Encoder C/ In	27	Resolver Sine Return
28	Encoder C In	28	Resolver Cos In
29	Encoder B/ In	29	Resolver Cos Return
30	Encoder B In	30	Resolver Shield
31	Encoder A/ In	31	+ Limit In
32	Encoder A In	32	- Limit In

ROW C

Pin	Function
1	+5 V In
2	-12 V In
3	NC
4	Ground
5	NC
6	FC1
7	FC3
8	ADC CLK 1-
9	ADC STB 1-
10	ADC DAA 1-
11	ADC DAB 1-
12	AENA 1-
13	FAULT 1-
14	PWMATOP 1-
15	PWMABOT 1-
16	PWMBTOP 1-
17	PWMBBOT 1-
18	PWMCOTOP 1-
19	PWMCBOT 1-
20	Ground
21	+5 V In
22	+5 V In
23	Ground
24	Ground
25	CURRENT A-
26	CURRENT B-
27	Encoder C/ Out
28	Encoder C Out
29	Encoder B/ Out
30	Encoder B Out
31	Encoder A/ Out
32	Encoder A Out

J2: MOTOR & BUS POWER

Pin	Function	Pin	Function
1	Bus +V	9	Bus +V In
2	Bus +V	10	Bus Ground
3	Bus Ground	11	Bus Ground
4	Motor Phase 1	12	Motor Phase 1
5	Motor Phase 1	13	Motor Phase 2
6	Motor Phase 2	14	Motor Phase 2
7	Motor Phase 3	15	Motor Phase 3
8	Motor Phase 3		

See User's Manual for jumper settings and

Ordering Information:

Product	Order Number
BPU-P2-32/15 Amp 320 VDC/15A Peak	WS-007-0016
BPU-P2-32/30 Amp 320 VDC/30A Peak	WS-007-0017
BPU-P2-32/50 Amp 320 VDC/50A Peak	WS-007-0018
ACC-V1D Backplane	WS-011-0015

Represented By:

