

DATASHEET

# 6300 Series High Power Programmable 3 Phase AC Power Source

New Generation, New Power

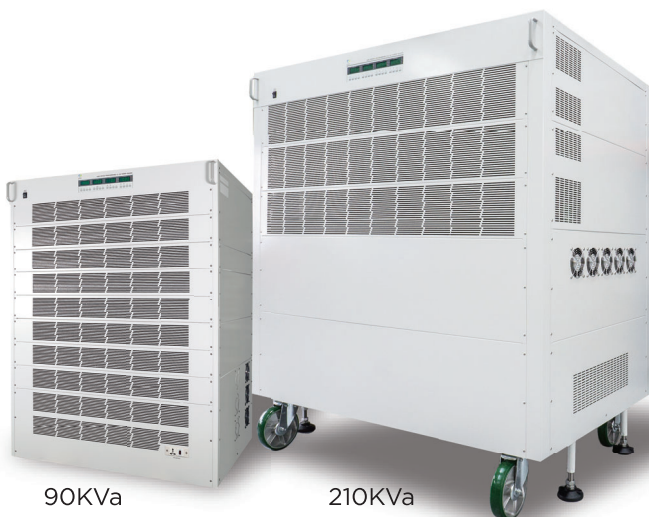


\*63210

The 6300 series high-power programmable tri-phase AC power source features up to 300 kVA output. Pulse-width-modulation switching design consumes less power and is optimized for space efficiency. The 6300 series is the best power solution for industrial high-power motors, air conditioning systems, and electrical charging stations.

## Features

- Ramp-up and ramp-down settings deliver added flexibility and control over power distribution timing.
- Optional 350V or 600V output assures compatibility with ultra-high demand products such as electrical motors.
- Optional 360-440Hz and 760 - 840 Hz fully adjustable frequencies allow broader control, suitable for aerospace industry.
- Built-in passive power factor correction (PF > 0.95) for energy saving.
- The rapid transient reaction allows the waveforms to be restored within 2ms
- EEC proprietary Over Current Fold (OCF) function automatically adjusts voltage, maintaining current for activating the device under test (DUT).
- Eight (8) built-in memory sets with five (5) testing steps individually simulate a full range of test conditions.
- Lower than 1% total harmonic distortion (THD).
- Adding BNC connection on-top of exiting USB, RS-232, and GPIB interfaces provides additional remote control options for connecting to a centralized computer.



90KVa

210KVa

Model	6309	6310	
<b>OUTPUT</b>			
Phase			
Power Rating	1 Ø	3 kVA	3.33 kVA
	Total	9 kVA	10 kVA
Power Rating (Option 1 Ø3W)	1 Ø	3 kVA	3.33 kVA
	Total	6 kVA	6.66 kVA
Voltage <sup>1</sup>	Range		
	Resolution		
	Accuracy		
Max. Current (r.m.s) <sup>2</sup> - 1 Ø	0 - 150 V	25.2 A	28.0 A
	0 - 300 V	12.6 A	14.0 A
Max. Current (r.m.s) <sup>3</sup> for option 0 - 350 V - 1 Ø	0 - 175 V	21.6 A	24.0 A
	0 - 350 V	10.8 A	12.0 A
Max. Current (r.m.s) <sup>4</sup> for option 0 - 600 V - 1 Ø	0 - 300 V	12.6 A	14.0 A
	0 - 600 V	6.3 A	7.0 A
Frequency <sup>5</sup>	Range		
	Resolution		
	Accuracy		
Total Harmonic Distortion (THD) <sup>6</sup>			
Inrush Current			
Crest Factor			
Line Regulation			
Load Regulation			
Deviation of phase angle			
Ramp up / Ramp down	Range		
	Resolution		
	Accuracy		
<b>INPUT</b>			
Phase			
Voltage			
Max. Current <sup>7</sup>	25 A	25 A	
Frequency			
Power Factor			
<b>MEASUREMENT</b>			
Voltage	L - N Range		
	L - L Range		
	Resolution		
	Accuracy		
Current	Range	L	0.000 - 3.500 A
		H	3.00 - 35.00 A
	Resolution <sup>8</sup>	L	0.001 A
		H	0.01 A
Current (Option 0 - 600 V)	Range	L	0.000 - 3.500 A
		H	3.00 - 35.00 A
	Resolution <sup>8</sup>	L	0.001 A
		H	0.01 A
Power	Range	L	0.0 - 350.0 W
		H	300 - 4000 W
	Resolution	L	0.1 W
		H	1 W
Accuracy	L		
	H		
Frequency	Range		
	Resolution		
	Accuracy		
<b>GENERAL</b>			
Remote Input Signal Interface			
Memory			
Sync Output Signal			
Display			
Efficiency	≥80%		
Protection			
Interface <sup>10</sup>			
Operation Environment			
Dimension (W x H x D), mm <sup>11</sup>	430 x 732 (839) x 650 (730)	-	
Dimension (PFC) (W x H x D), mm <sup>11,12</sup>	-	600 x 732(839) x 900(980)	
Weight	160 kg	-	
Weight (PFC)	-	299 kg	

6315	6330	6345	6360	6390	63120	63150	63180	63210	63240	63300
3 Ø										
5 kVA	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA	70 kVA	80 kVA	100 kVA
15 kVA	30 kVA	45 kVA	60 kVA	90 kVA	120 kVA	150 kVA	180 kVA	210 kVA	240 kVA	300 kVA
5 kVA	10 kVA	15 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA	70 kVA	80 kVA	100 kVA
15 kVA	20 kVA	30 kVA	40 kVA	60 kVA	80 kVA	100 kVA	120 kVA	140 kVA	160 kVA	200 kVA
0 - 150 V / 0 - 300 V or 0 - 175 V / 0 - 350 V Selectable (Option 0 - 350 V) or 0 - 300 V / 0 - 600 V Selectable (Option 0 - 600 V)										
0.1 V										
± (1% of setting + 2counts)										
42.0 A	84.0 A	126.0 A	168.0 A	252.0 A	336.0 A	420.0 A	504.0 A	588.0A	672.0 A	840.0 A
21.0 A	42.0 A	63.0 A	84.0 A	126.0 A	168.0 A	210.0 A	252.0 A	294.0 A	336.0 A	420.0 A
36.0 A	72.0 A	108.0 A	144.0 A	216.0 A	288.0 A	360.0 A	432.0 A	504.0 A	576.0 A	720.0 A
18.0 A	36.0 A	54.0 A	72.0 A	108.0 A	144.0 A	180.0 A	216.0 A	252.0 A	288.0 A	360.0 A
21.0 A	42.0 A	63.0 A	84.0 A	126.0 A	168.0 A	210.0 A	252.0 A	294.0 A	336.0 A	420.0 A
10.5 A	21.0 A	31.5 A	42.0 A	63.0 A	84.0 A	105.0 A	126.0 A	147.0 A	168.0 A	210.0 A
45.0 - 70.0Hz/45.0 - 500.0Hz (Optional 45 - 500Hz)/360 - 440 (Optional 400Hz)/760 - 840Hz (Optional 800Hz) Full Range Adjust										
0.1 Hz / 1Hz										
± 0.02% of setting										
< 1% for 110 / 220V, 50 / 60Hz for 300V and Option 350V at Resistive Load										
< 1.2% for 220 / 440V, 50 / 60Hz for Option 600V at Resistive Load										
3 times rated Current(r.m.s)										
3 times rated Current(r.m.s)										
± 0.1 V										
L - N : ± (0.5% of output + 0.5 V) / L - L : ± (1% of output + 1 V) at Resistive Load										
120° ≤ ± 1° at Load Balance, 120° ≤ ± 2.5° at 100% Load Unbalance										
0.1 - 999.9s										
0.1s										
± (0.1% of setting + 0.2s)										
3Ø4W										
220 (L - N) / 380 Vac (L - L) ±10%										
40 A	75 A	115 A	150 A	230 A	300 A	375 A	450 A	525 A	600 A	750 A
47 - 63 Hz										
0.8										
0.0 - 300.0 V / 0.0 - 600.0 V										
0.0 - 520.0 V / 0.0 - 1040 V										
0.1 V / 0.2 V										
± (1% of reading + 2counts) at Voltage > 5 V										
0.00 - 35.00 A					0.0 - 350.0 A					
30.0 - 350.0 A					300 - 504 A			300 - 840 A		
0.01 A					0.1 A					
0.1 A					1 A					
± (1% of reading + 5counts) <sup>9</sup>										
± (1% of reading + 1counts) <sup>9</sup>										
0.00 - 35.00 A					0.0 - 350.0 A					
30.0 - 350.0 A					300 - 504 A			300 - 840 A		
0.01 A					0.1 A					
0.1 A					1 A					
± (1% of reading + 5 counts) <sup>9</sup>										
± (1% of reading + 1 count) <sup>9</sup>										
45.0 - 850.0 Hz										
0.1 Hz										
± 0.1 Hz										
0.000 - 3.500 kW					0.00 - 35.00 kW					
3.00 - 40.00 kW					30.0 - 60.0 kW			30.0 - 100.0 kW		
0.001 kW					0.01 kW					
0.01 kW					0.1 kW					
± (1.5% of reading + 5 counts) at Voltage > 5 V										
± (1.5% of reading + 1 count) at Voltage > 5 V										
ON / OFF, P1, P2, P3										
8 Memories, 5 steps per memory for Voltage, Frequency, Test Time, Delay time and Current, Power, Hi, Lo Limit setting										
Yes										
4 group pf digital LED displays										
≥85%										
OCP, OVP, OPP, OTP, LVP, Short Circuit ; Alarm and shutdown										
Standard USB & RS232, Option GPIB & Analog card										
0 - 40°C / 20 - 80% RH										
430 x 732(839) x 650(730)	600 x 842(949) x 900(980)	-	800 x 1557(1662) x 900(980)	1200 x 1557(1805) x 900(980)	1200 x 1557(1805) x 900(980)	1600 x 1557(1808) x 1106(1186)	1600 x 1557(1808) x 1106(1186)	1600 x 1557(1808) x 1106(1186)	1600 x 1808 x 1206	1600 x 1808 x 1206
600 x 732(839) x 900(980)	600 x 842(949) x 900(980)	800 x 1557(1662) x 900(980)	1000 x 1557(1662) x 900(980)	1200 x 1557(1805) x 900(980)	1200 x 1557(1805) x 1100(1180)	1000 x 1808 x 1186	1000 x 1808 x 1186	1000 x 1808 x 1186	1000 x 1808 x 1206	1000 x 1808 x 1206
199 kg	373 kg	-	645 kg	1139 kg	1659 kg	1800 kg	2100 kg	2400 kg	2600 kg	2850 Kg
362 kg	547 kg	774 kg	909 kg	1505 kg	2139 kg	1100 kg	1250 kg	1300 kg	1400 kg	1500 Kg

1. When output voltage < 30V, ADJ = ON can meet this spec.
2. Maximum current when output voltage at 120/240V.
3. Maximum current when output voltage at 140/280 V.
4. Maximum current when output voltage at 240/480V.
5. Only one Option can be selected among optional output frequency 45-500Hz, 400Hz and 400/800Hz.
6. < 1.2% for < 47Hz at output voltage within the 110 - 140V at Low Range or the 220 - 280V at High Range (incl. 45 - 500Hz).  
< 1% for ≥ 47Hz at output voltage within the 110 - 140V at Low Range or the 220 - 280V at High Range (incl. 45 - 500Hz).  
< 1.2% for output voltage within the 220 - 280V at Low Range or the 440 - 560V at High Range (option 0 - 600V).  
< 1.5% for < 47Hz at output voltage within the 220 - 280V at Low Range or the 440 - 560V at High Range (option 0 - 600V & 45 - 500Hz).  
< 1.2% for ≥ 47Hz at output voltage within the 220 - 280V at Low Range or the 440 -

- 560V at High Range (option 0 - 600V & 45 - 500Hz).
7. Max. Current without PFC Function.
8. a. When output frequency ≥ 100Hz & ≤ 500Hz & N-G short, the current meter guarantee minimum current from 0.01A.  
b. When output frequency ≥ 500Hz & N-G short, the current meter guarantee minimum current from 0.02A.  
c. When output frequency ≥ 100Hz & ≤ 500Hz & N-G short, the current meter guarantee minimum current from 0.02A at 600V models.  
d. When output frequency ≥ 500Hz & N-G short, the current meter guarantee minimum current from 0.03A at 600V models.
9. At Voltage > 5V for 0 - 300V; At Voltage > 10V for 0 - 600V (Optional).
10. Only one interface can be selected among RS232 & USB, Analog & GPIB interface card.
11. Figure in parentheses are maximum values with fixture stand.
12. >150kVA, PFC will come in a separate case.

## Models

- 6309 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (9kVA)
- 6310P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (10kVA) with PFC
- 6315 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (15kVA)
- 6315P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (15kVA) with PFC
- 6330 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (30kVA)
- 6330P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (30kVA) with PFC
- 6345P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (45kVA) with PFC
- 6360 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (60kVA)
- 6360P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (60kVA) with PFC
- 6390 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (90kVA)
- 6390P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (90kVA) with PFC
- 63120 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (120kVA)
- 63120P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (120kVA) with PFC
- 63150 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (150kVA)
- 63150P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (150kVA) with PFC (2 cases)
- 63180 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (180kVA)
- 63180P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (180kVA) with PFC (2 cases)
- 63210 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (210kVA)
- 63210P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (210kVA) with PFC (2 cases)
- 63240 High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (240kVA)
- 63240P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (240kVA) with PFC (2 cases)
- 63300P High Power Programmable 3 Phase AC Power Source 0 - 300V/45 - 70Hz (300kVA) with PFC (2 cases)

## Options

- OPT.109 Replace RS232 Interface by GPIB Interface
- OPT.608 Output Voltage 600V for 6309, 6310, 6315 & Models with PFC
- OPT.609 Output Voltage 600V for 6330, 6345, 6360 & Models with PFC
- OPT.610 Output Voltage 600V for 6390, 63120 & Models with PFC
- OPT.615 Output Frequency 45 - 500Hz for 6309, 6310 & Model with PFC
- OPT.616 Output Frequency 45 - 500Hz for 6315 & Model with PFC
- OPT.617 Output Frequency 45 - 500Hz for 6330 & Model with PFC
- OPT.637 Single Phase 3 Wire Output (L1/L2/N) for 6300
- OPT.649 Output Voltage 600V for 63150, 63180 & Models with PFC
- OPT.650 Remote Sensing
- OPT.656 Output Frequency 400Hz (360 - 440Hz) for Models without PFC
- OPT.657 Output Frequency 800Hz (760 - 840Hz) for Models without PFC
- OPT.668 Suppression Input Voltage
- OPT.671 RCP Function for 6309, 6310, 6315, 6330 & Models with PFC
- OPT.672 RCP Function for 6345, 6360, 6390, 63120, 63150, 63180, 63210, 63240, Models with PFC & 63300P
- OPT.673 Earthquake Proof for 6309, 6310, 6315, 6330, 6345, 6360 & Models with PFC
- OPT.674 Output Voltage 350V
- OPT.676 600V Output for 63210, 63240, Models with PFC & 63300P

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<https://www.eecextech.com>

### For general inquiries

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### About Extech Electronics Co.

For 40 years, Extech Electronics Co. (EEC) has been producing cutting-edge electrical safety testers and AC power sources for a variety of industries. We strive to earn our customers' trust by consistently offering dependable products, services, and reliable support for all testing applications.

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