

PDU1109 POWER DISTRIBUTION UNIT

STANDARD 20KVA/50KVA/100KVA SCALABLE AC-AC ISOLATION

Astrodyne TDI's new power distribution series is a standard AC-AC scalable PDU platform solution with isolated secondary outputs to meet stringent requirements including IEC60601 and SEMI S22. This cabinet-type PDU product platform offers considerable flexibility, providing three power ranges: 20KVA, 50KVA, and 100KVA. Integral features include EMO, EMI filtering, voltage surge protection, and overcurrent protection on the input and individual outputs.

MAIN CHARACTERISTICS:

- ✓ IEC60601 and SEMI S22
- ✓ Cabinet Style Modular Design
- ✓ On/Off Switch
- ✓ Input EMI/EMC Filter
- ✓ Emergency Off (EMO)
- ✓ Necessary Circuit Protections

BENEFITS

ISOLATION TRANSFORMER

The standard scalable PDU product platform consists of an AC input connected to a multitap isolation transformer to reduce transients and harmonics.

UNIVERSAL INPUT

The multitap primary allows this unit to work with most global electrical utilities. The input is connected through a terminal block, and the outputs are provided through terminal blocks, NEMA sockets, and IEC receptacles.



FEATURES

AC INPUT VOLTAGE RANGE

Step Up: 200/208/230/240 VAC
Step Down: 380/415/460/480 VAC

OUTPUT POWER

20KVA, 50KVA, and 100KVA

AGENCY/COMPLIANCE:

IEC/UL/CSA 60601-1

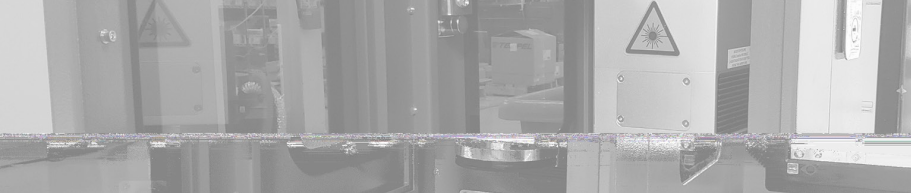
IEC/UL/CSA 61010-1

SEMI S22 Conducted and Radiated Emissions

CISPR 11, CISPR 22 Surge Immunity

IEC61000-4-5 Level 3

PRELIMINARY - SPECIFICATIONS ARE SUBJECT TO CHANGE



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PARAMETERS

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AC Input Voltage Range	Step Up: 200/208/230/240 VAC Step Down: 380/415/460/480 VAC
AC Frequency	50Hz - 60Hz (+/-3Hz)
Input Current	50A – 160A depending on power level
Input Over-Current Pr.	Via Circuit Breaker (CB)
Power Factor	>90%
Input Circuit Breaker	Variable
Operating Temperature	10° to +40°C
Storage Temperature*	Convection / Forced Air
Operating Humidity*	-20°C to +80°C
Available Output Voltages	See Table 1
Maximum Output Current	See Table 1
Output Power	See Table 1
Load Regulation	2% Typical
Efficiency	95% Typical
No. of Outputs	Configurable
Input to Output	10 kVDC
Input to Earth (Class I)	3000 VDC
Output to Earth (Class I)	2600 VDC
2 x MOPP	
Over Current/Short Circuit*	Circuit breaker rating
Voltage Surge Protection*	Replaceable MOVs
Over Temperature *	Thermostat 130C (20/50KVA), 140C (100KVA)
On/Off Indicator	Output voltage present

Emergency Machine Off (EMO)

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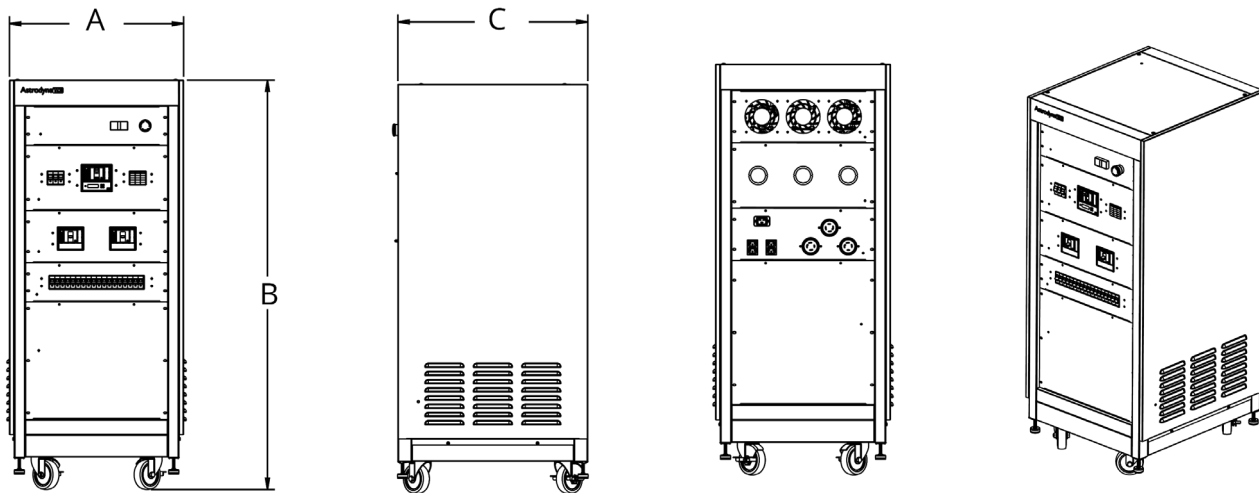
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TABLE 1

Configuration		Power Rating			
		20kVA (Single Phase)	20kVA (Three Phase)	50kVA	100kVA
Step Up	Output voltage (V)	480	277	277	N/A
	Output current (A)	42	24	60	N/A
Step Down	Output voltage (V)	120	120	120	120/243
	Output current (A)	166	55	138	69/110

**These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long-term reliability. Operation under conditions other than standard operating conditions is neither warranted nor implied. Unless specified otherwise, all specifications are typical at nominal input, full load, 25°C.*

MECHANICAL OUTLINE

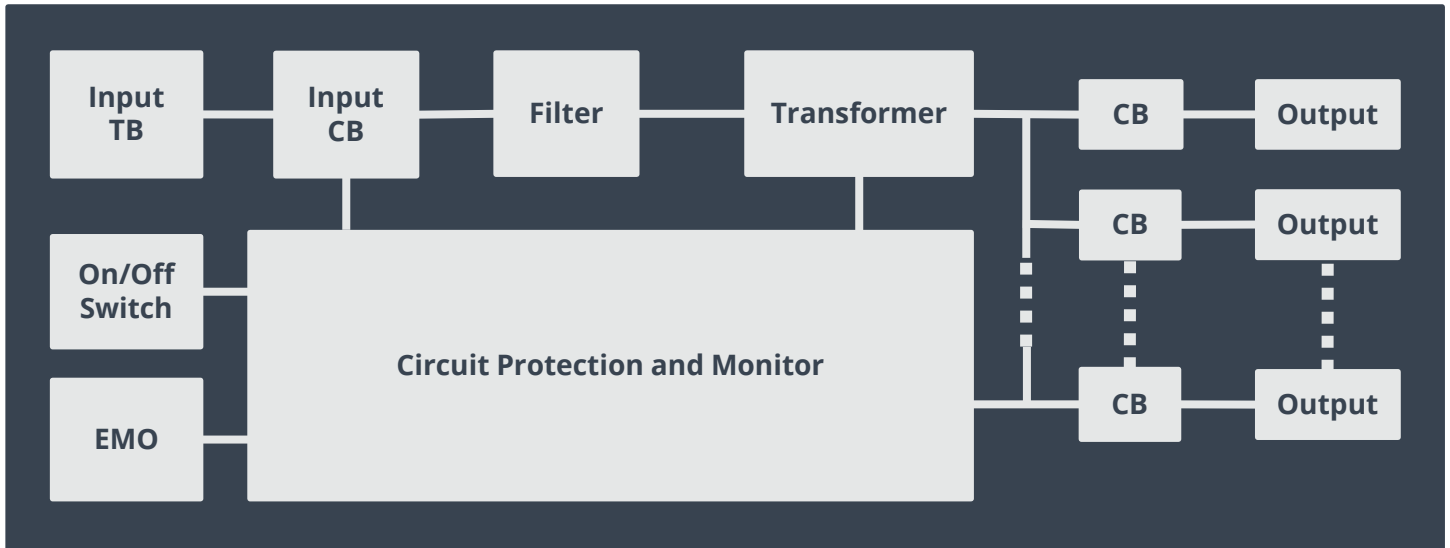


PDU	A	B	C
PDU1109	23.3" (592)	54.9" (1395)	25.5" (648)

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PDU BLOCK DIAGRAM



PART NUMBER	DESCRIPTION
PDU1109-020-00	PDU, 20KVA SINGLE PHASE, AC-AC, PDU1109-020-00
PDU1109-020-01	PDU, 20KVA THREE PHASE, AC-AC, PDU1109-020-01
PDU1109-050-00	PDU, 50KVA THREE PHASE, AC-AC, PDU1109-050-00
PDU1109-100-00	PDU, 100KVA THREE PHASE, AC-AC, PDU1109-100-00

HOW TO ORDER

PDU1109-020-00



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