





ASCO Power Control Systems

Features Comparison				
	336	4000	7000 (LV)	7000 (MV)
Primary Application	Commercial	Configured Critical Power	Engineered Mission Critical Power	Engineered Mission Critical Power
System Voltage	600V Max.	600V Max.	600V Max.	5KV/15kV (consult factory for higher)
Generators ¹	Up to 4	4 (up to 8) ⁵	32	32
Product Type				
Standby	Yes	Yes	Yes	Yes
Prime Power	Yes	Yes	Yes	Yes
Utility Parallel	N/A	N/A	Yes	Yes
Modes of Operation				
Generator Soft Load/Unload	Yes	Yes	Yes	Yes
Utility Tie (Momentary Closed Transition)	N/A	N/A	Yes	Yes
Utility Tie (Soft Load/Unload)	N/A	N/A	Yes	Yes
Construction				
Main Bus Amp size available	4000 A	Up to 10,000 A	Up to 10,000 A	Up to 3000 A
Switchgear Standard	UL 891	UL 1558	UL 1558	ANSI C37.20.2
Bus Bracing level, kA	100	Up to 200	Up to 200	Up to 50kA (5kV) / Up to 63kA (15 kV)
Arc Resistant/ Arc Protection Relaying	N/A	N/A	Optional	Optional
Enclosure	Type 1 / Type 3R	Type 1 / Type 3R ⁹	Type 1 / Type 3R ⁹	Indoor/Outdoor/ Outdoor Sheltered Aisle
Overhead Rail Mounted Lifting Device	N/A	Optional	Optional	N/A
Seismic Certification Option, S _{DS}	N/A (In Progress)	2.46	2.46	Depends on configuration
IBC	N/A	Yes	Yes	Yes
Generator/Main/Tie Circuit Switching Devices				
Switching Device Type	Dual contactor	Power circuit breaker	Power circuit breaker	Vacuum circuit breaker
Generator Paralleling Devices	2 per cubicle	1 or 2 per cubicle ⁶	1 or 2 per cubicle ⁶	1 per cubicle
Max. Generator FLA Per Unit	2000 A	3200 A (2) 5000 A (1)	3200 A (2) 5000 A (1)	up to 2000 A
Switching Device Manufacturer	ASCO	Square D	Any	Any
Tie Circuit Breaker Available	N/A	N/A	Optional	Optional
Utility Circuit Breaker	N/A	N/A	Optional	Optional

Master Controls				
Master Controls	Integrated	Integrated	Integrated Segregated	Integrated Segregated
Master Controls Touch Screen	3.5"	12"	24" Std. / up to 42"	24" Std. / up to 42"
Redundant Touch Screens	N/A	Optional ⁷	Optional	Optional
Engine-Generator Info Screen	N/A	N/A	Yes	Yes
NFPA 110 Generator Monitoring	Optional ³	Yes	Yes	Yes
Master PLC ²	Yes	Yes	Yes	Yes
Redundant Master PLC ²	N/A	Optional	Optional	Optional
Quad Redundant PLC ²	N/A	N/A	Optional	Optional
Redundant Master I/O ²	N/A	N/A	Optional	Optional
Manual Paralleling	Touch Screen	Hardwired	Hardwired	Hardwired
Bus Load Optimization	Standard	Standard	Standard Dynamic	Standard Dynamic
Generator Load Demand	Standard	Standard	Standard	Standard
Load Shed/Add	ASCO ATS	ATS or CB	Custom	Custom
Simulator for Testing and Training	N/A	Optional	Optional	Optional
Max Number of ATSs for Load Control (MO DCB)	4/8 Max. ¹⁰	32 Max. ⁵	32 Std. / up to 128	32 Std. / up to 128
Max Number of ATSs for Load Control (EO DCB)	N/A	16 Max. ⁵	32 Std. / up to 128	32 Std. / up to 128
Main Bus - Maximum Segments	1	1	8	8
Generator Controls Section				
Generator Controls	Integrated	Integrated	Integrated Segregated	Integrated Segregated
Generator Synchronizer Type	Digital	Digital	Digital	Digital
Generator PLC	N/A	Yes	Yes	Yes
Hardwired Controls	Primary	Backup	Backup	Backup
Generator Controls Touch Screen	N/A	Optional ⁷	Optional	Optional
Lug Types	Mechanical	Mechanical (Std)/Compression (Opt)	Mechanical (Std)/Compression (Opt)	Compression
Bus Duct Risers Available	N/A	N/A	Optional	Optional
System Metering				
Digital	Touch Screen	Touch Screen	Touch Screen Std. Additional Metering Opt.	Touch Screen Std. Additional Metering Opt.
Analog Instrumentation	N/A	N/A	Standard ⁸	Standard ⁸
Distribution Circuit Breakers				
Manually Operated Distribution Circuit Breakers	Optional	Optional	Optional	N/A
Electrically Operated Distribution Circuit Breakers	N/A	8 Max. ⁵	Optional	Standard
Monitoring				
Remote Annunciator Panel, LED Type	N/A	Optional	Optional	Optional
Remote Annunciator Panel, Touch Screen Type	N/A	Optional ⁷	Optional	Optional
42" Color Touch Screen	N/A	N/A	Optional	Optional
PowerQuest Remote Desktop Monitoring	N/A	N/A	Optional	Optional
NFPA Test Report Package ³	Optional	Optional	Optional	Optional
JC Reporting Package ³	Optional	Optional	Optional	Optional
Building Management System Interface ⁴				
Serial RS-485 Modbus [®] RTU	N/A	N/A	Custom	Custom
Ethernet, Modbus [®] TCP	Optional	Standard	Custom	Custom
Ethernet, Profinet, from PowerQuest	N/A	N/A	Custom	Custom
Ethernet, BACnet, from PowerQuest	N/A	N/A	Custom	Custom
Engine Generator Communication ⁴				
Modbus [®] Communication to Engine-Generator	Optional ³	Optional ³	Optional	Optional

¹ Depends on aggregate power and main bus rating

² 4000 and 7000: GE or optional Allen-Bradley except for quad redundancy (GE only)

³ Available only with select PowerQuest 5700 Series CPMS

⁴ Consult the factory for other communication requirements

⁵ The quantity of generators, transfer switches and electrically operated distribution breakers in the 336 and 4000 Series is codependent; consult the factory for specific configurations

⁶ Dual breaker sections restrict options; consult the factory for specific configurations

⁷ Total number of touch screens (master, generator, remote) in the 4000 Series cannot exceed 3

⁸ Can be removed on request; not available on dual CB cubicles

⁹ Type 3R enclosures up to 6000 A main bus; consult factory for higher amperages

¹⁰ Four (4) load control relays for 2 generator systems. Eight (8) load control relays for 3/4 generator systems. Each load control relay capable of driving up to 8 transfer switches maximum.

The Series 300 offers a compact, cost-efficient package to parallel generators and manage loads. A variety of distribution breakers and structures are available to meet site specific needs.

The 4000 Series provides the features most commonly required in high reliability systems for mission critical and healthcare facilities. Touchscreen based controls with industrial grade master PLC's are combined with a wide variety of structural and controls options to offer predictable reliability.

The 7000 Series provides custom systems designed per the customer's specifications. Common requirements include multiple utilities, complicated sequences, redundant processors and I/O, SCADA, utility paralleling, tie breakers, redundant communications, coordinated protective relay schemes, mimic bus, and other special hardware and control requirements.