CONTROLS

Standard or customized HMI's to meet your power requirements

Whether you need standard controls to supplement an existing proprietary system or customized controls for complex synchronization and load sharing, we have you covered.

COMPATIBILITY

Toromont Power Systems controls are vendor-neutral (compatible with all power envelope manufacturers) and suitable for all applications, including data centers, hospitals, airports, communications, retrofits, microgrids and CHP.

Our controls can also be retrofit to older systems, or installed as tap boxes for quick-connect integration.

COMBINED HEAT & POWER (CHP) CONTROLS

Toromont Power Systems has standardized and custom controls to manage your combined heat and power applications. Features include heat recover skids, MCC control and balance of plants.

SCALABILITY

The modular design allows you to grow and scale your power systems requirements with the needs of your business operations.

DEAD FIELD PARALLELING

For applications where it is critical to expedite the paralleling of multiple generators onto a common bus, dead field paralleling can bring multiple generators online within 10 seconds.

HMI CUSTOMIZATION

Toromont Power Systems controls can provide a variety of HMI experiences, including:

- View data from the various components (UPS, ATS, generator set, load banks, etc.) located throughout the facility
- Integrate with building management system (BMS)
- System level logging, trending and reporting with built-in state-of-the-art fault alerts

CONTROLS FEATURES	Standard	Optional
Control Platform Architecture:		
PLC Based modular design with separate modular Woodward & Cat speed and voltage control. Control architecture provides superior robust design should certain components fail to keep the power on	●	
True manual control and synchronization capable	●	
Human machine interface (HMI) 15"	●	
Auto synchronization, dead bus arbitration and load share modules	●	
Circuit breaker manual closing switch	on HMI	●
Circuit breaker closed/open position lights	on HMI	●
Frequency raise/lower	●	
Automatic voltage raise/lower	●	
Synchronization check lights and synchro scope	on HMI	●
Automatic load and VAR sharing	●	
Automatic generator demand load priority control	●	
Auto load add/ shed - steps and priority level	●	
Modbus TCP/IP communication: Data table interface for remote monitoring	●	
Power supply – 24VDC best source	●	
Generator electrical single line	●	
Display provides full visibility of electrical, engine and balance of plant status parameters	●	
Alarms (alarms and events)	●	
Alarm history (base size of 100)	●	
Generator maintenance reports: - Oil life, air filter, fuel filter, coolant check - JCAHO (CSA C282) report	● ●	
Real time trending, historical trending and load charts		●
Generator no load and load start/stop control		●
Utility active synchronization		●
Load transfer between multiple generators		●
Auto load add / shed 8 or more steps with multiple priority level. Can include dynamic load shedding based on actual metered loads		●
Additional remote monitoring capacity to LAN, cellular or satellite		●
Dead field paralleling: multiple generators online within 10 seconds		●
Redundancy PLC control platform architecture: Dual redundant primary and secondary hot standby processors		●
Redundant communications networks		●
Redundant human machine interface (HMI) 15" / 17"/ 19" (Multiple HMI's can be added)		●
ATS and UPS communication displayed on HMI		●
Utility grade protection relays		●
Ground fault		●
Alarm annunciation with audible horn		●
Tie breaker control and synchronization		●
Utility transfer schemes include: Open, close transition 100ms and/or base load control		●
Utility transfer trip integration to meet all connection agreement requirements		●
Load bank breaker control and/or make-up load bank integration		●

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