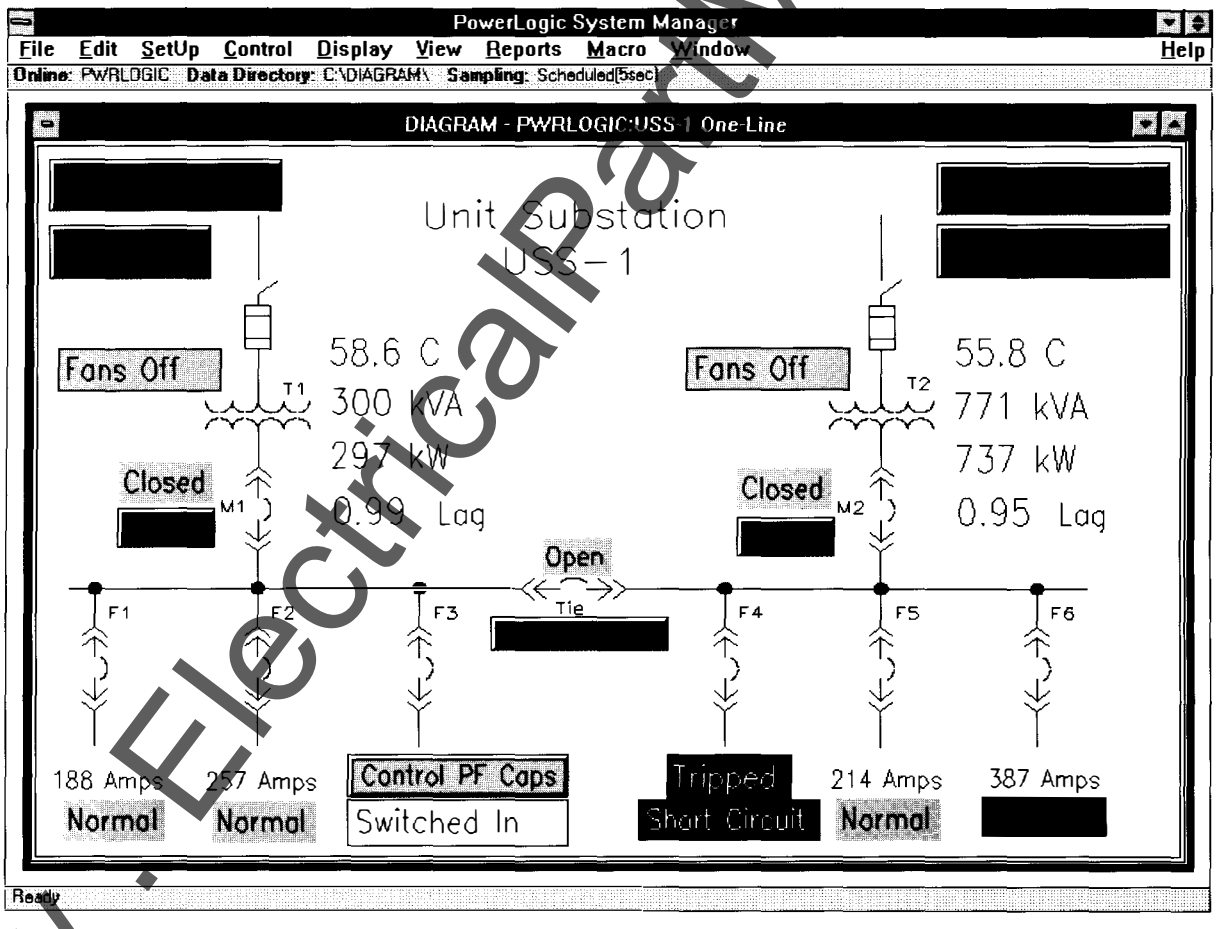
DESCRIPTIVE BULLETIN

Bulletin DB-109 May, 1991

PowerLogic®
Interactive Graphics Interface

for System Manager™ and System Manager Plus™ Software



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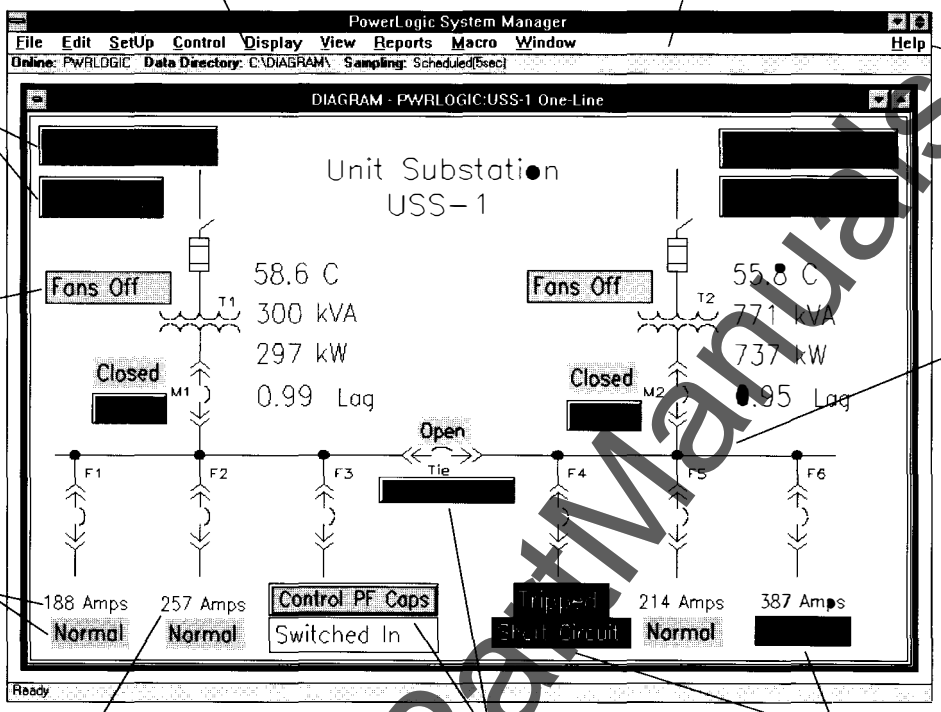
We Respond.®

Interactive Graphics Interface



System Manager provides displays of tables, bar charts, trends, meters, and more

Microsoft® Windows™ 3.0 application allows multi-tasking

Display related drawings at the click of a mouse

Complete on-line, context-sensitive help system

Status of transformer fan cooling and transformer data

Create your own drawings with easy-to-use drawing package (included)

Reports breaker status, currents, voltage, power and more

Click on displayed quantities for additional information

Control circuit breakers, power factor capacitors, and more

Immediate indication of abnormal levels throughout the system

What is the Interactive Graphics Interface?

The PowerLogic® Interactive Graphics Interface (GFX) is a color graphics software application which displays system-wide information on a personal computer. GFX is an Add-On program which works in conjunction with the PowerLogic System Manager™ or System Manager Plus™ software. (An Add-On provides additional capability to a larger program but cannot be run independently).

GFX displays real-time information directly on a drawing such as a complete system one-line diagram, switchgear elevation drawing, site plan, or plant or equipment room layout.

Like each of the System Manager programs, GFX utilizes the Microsoft® Windows™ 3.0 graphical environment. The Windows environment provides easy point-and-click operation and allows users to run other Windows applications while data logging and alarms continue in the background. The GFX package includes an easy-to-use Windows 3.0 compatible drawing package to allow the user to create and modify custom drawings as needed.

GFX can display real-time data from PowerLogic Circuit Monitors, SY/MAX® programmable controllers, Model 85 temperature controllers, Micrologic® Trip Units and other compatible devices. Single drawings can be displayed by simple menu selections, or nested within other drawings to provide hierarchical access.

When coupled with the System Manager Plus software, GFX can be used to perform interactive control operations such as breaker control, load shedding, and so on.

Flexible Display of System Data

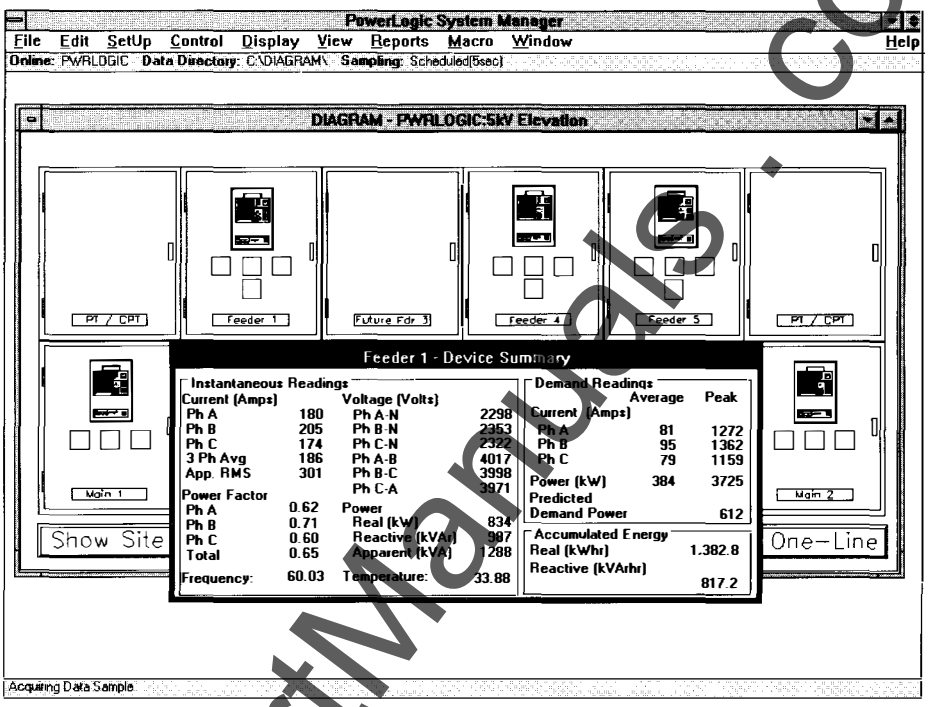
All types of real-time system data can be displayed on the drawings. Data displays are divided into several categories referred to as "Data Blocks." These include Value Blocks, Analog Function Blocks, Digital Function Blocks, Hyper Drawing Blocks, and Control Output Blocks. GFX provides you with complete flexibility to select the type, size, location, units, and color of each Data Block.

Value Blocks Display Real-Time Data

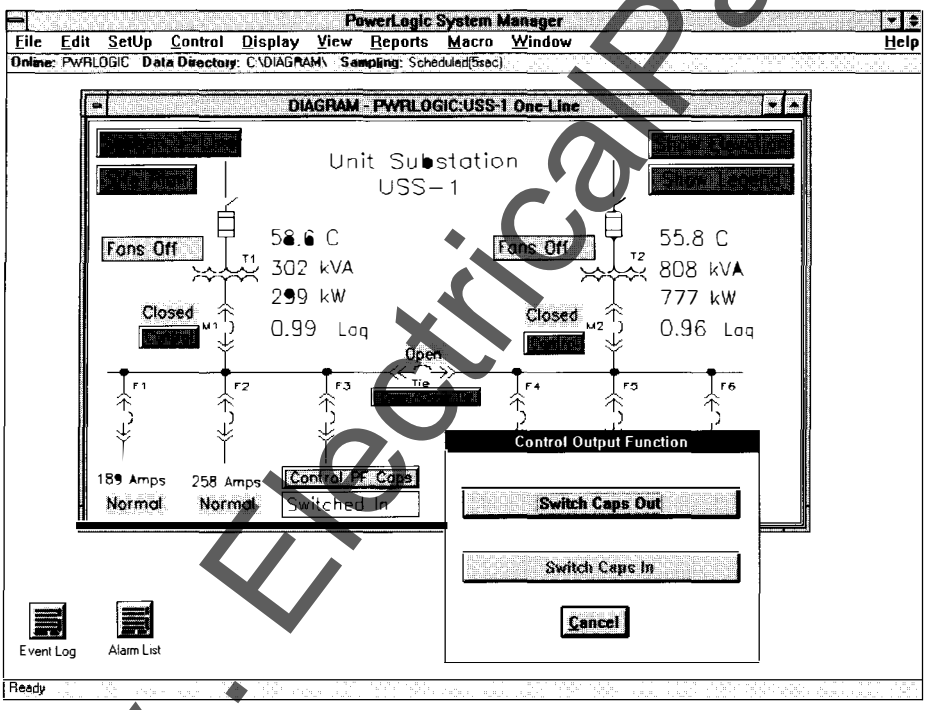
Value Blocks display real-time data for a single value. A Value Block can display any electrical quantity provided by PowerLogic Circuit Monitors such as instantaneous quantities, energy readings, and demand readings. A Value Block can also display the contents of a register in a SY/MAX controller or compatible device. In addition, each Value Block can be assigned a user-defined text string which identifies the value being displayed.

Device Summary Provides Comprehensive Information

Value Blocks provide additional information in the form of a "Device Summary". A Device Summary provides a concise listing of additional device-specific quantities. For example, double-clicking on a Value Block for a PowerLogic Circuit Monitor invokes a Device Summary containing instantaneous quantities, energy readings, and demand readings.



Double-click on a Value Block to invoke a device summary showing a complete set of instantaneous, demand, and accumulated energy values.



Control power factor capacitors, open and close breakers, turn fans on and off, and perform other control operations, directly from your diagram.

Control Output Relays Using Control Output Blocks

Control Output Blocks give you the capability to operate Circuit Monitor output relays or modify the contents of other compatible device registers. (System Manager Plus required for output control). To perform a control operation you simply double-click on a Control Output Block and enter the appropriate password. As added assurance, GFX issues a confirmation box (pop-up window) that states the action about to occur, and gives you the opportunity to cancel the operation.

Report Breaker Status Using Digital Function Blocks

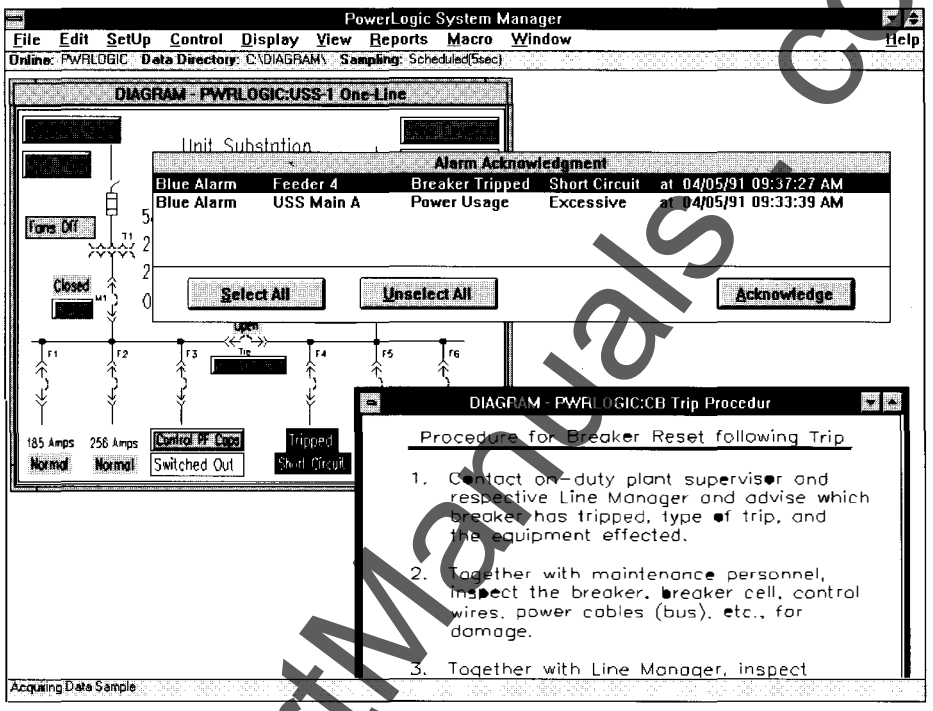
Digital Function Blocks display the real-time condition (state) of a discrete contact/relay in the system. For example, breaker status and transformer fan status can be displayed on the drawing. And GFX allows you to assign a specific color to a given condition. For example, the "Closed" condition of a circuit breaker could be color-coded as red, while an "Open" condition could be color-coded as green. This allows you to quickly determine the status of critical loads throughout the system based on the colors selected.

View Equipment Usage Levels Using Analog Function Blocks

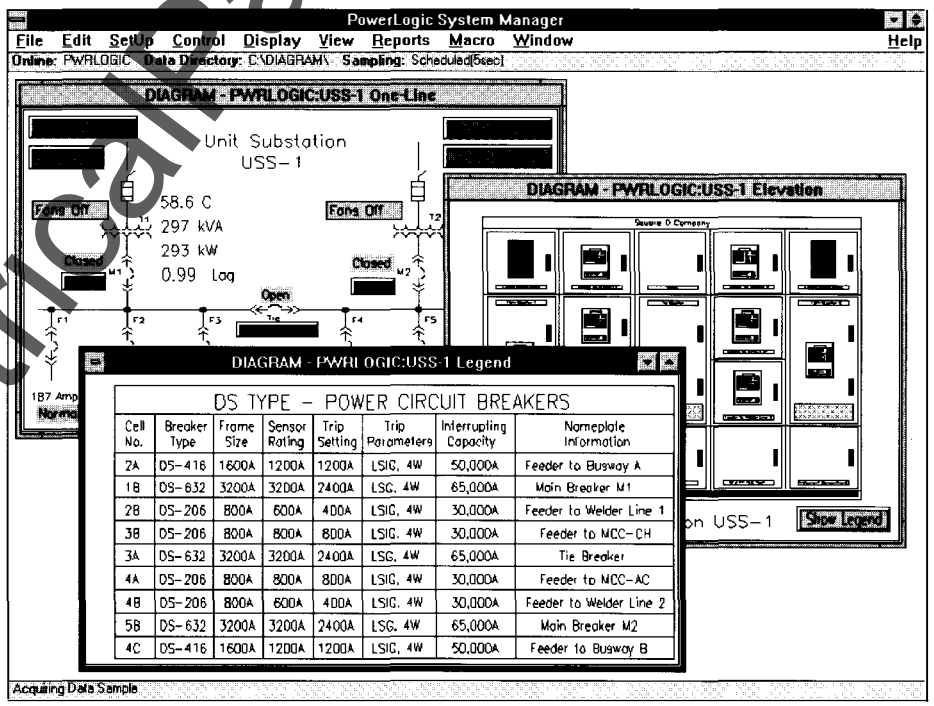
Analog Function Blocks display the real-time condition (state) of an analog quantity, such as load current, demand power, etc. GFX allows you to assign specific colors to a given condition. For example, an "Overload Pending" condition of a feeder breaker could be color-coded as yellow, and a "Normal" condition could be color-coded as blue. This allows you to quickly determine the status of critical loads throughout the system based on the colors selected.

Display Related Drawings Using Hyper Drawing Blocks

Hyper Drawing Blocks provide hierarchical access to related drawings. Simply double-click on the Hyper Drawing Block and the linked drawing appears. For example, a drawing containing a campus of buildings might contain a Hyper Drawing Block for each building. You could then double-click on a Hyper Drawing Block causing a window to appear showing a one-line diagram for that building. Each drawing can contain as many Hyper Drawing Blocks as necessary.



The powerful combination of System Manager and GFX provides multi-level alarms and the ability to develop custom follow-up procedures for system events.



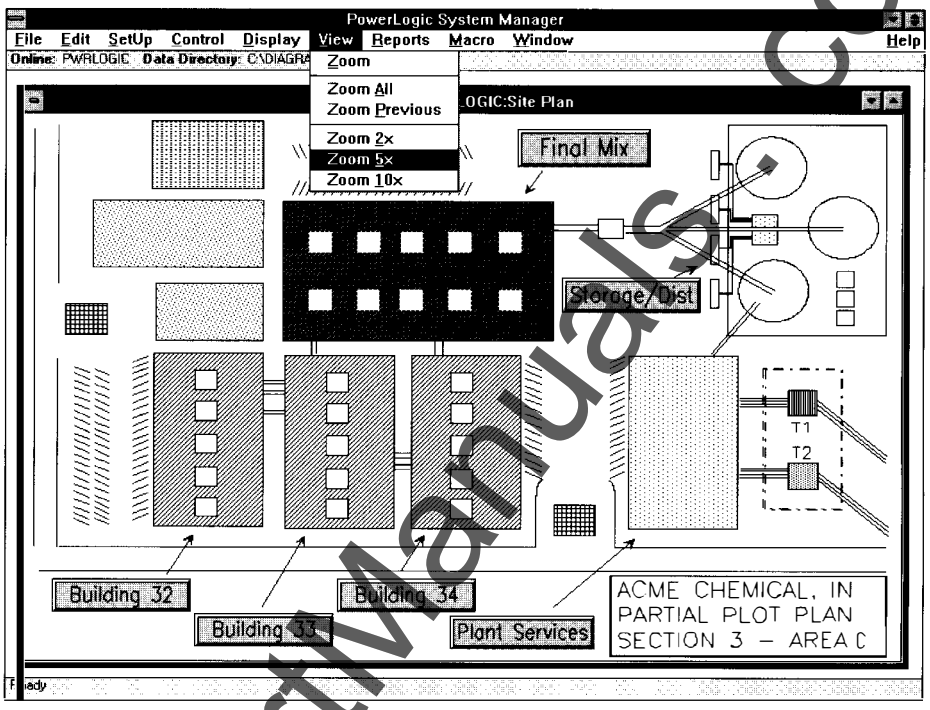
Display one-line diagrams, elevations, legends, or other system information, and tie them together using hyper drawing blocks.

Zoom, Scale and Scroll

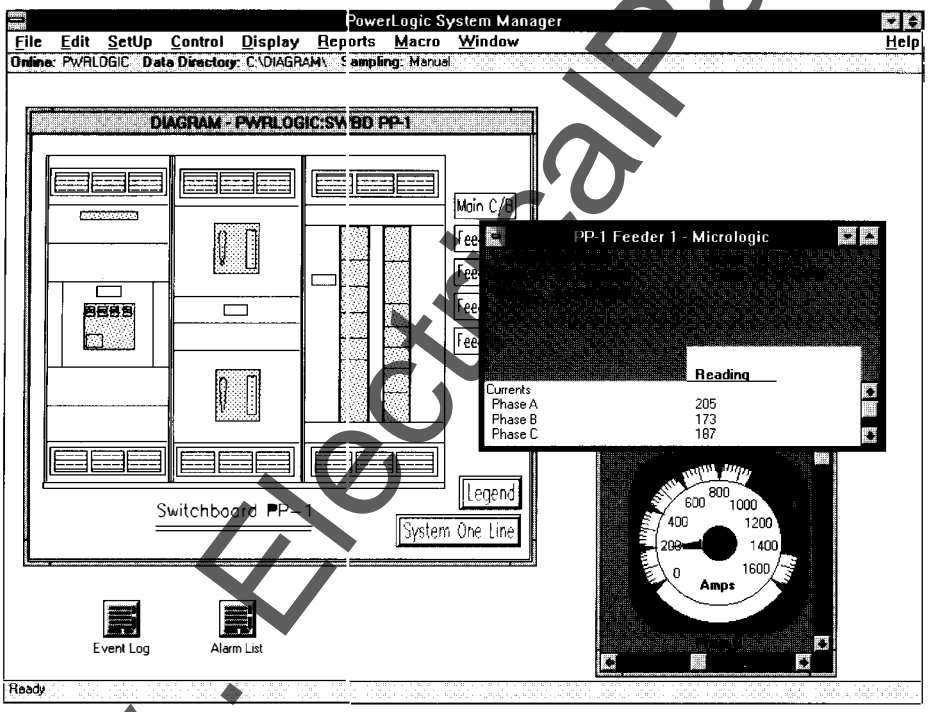
Each drawing can be scaled and viewed at varying degrees of magnification. You can Zoom in on a specific area, return to the previous level of magnification, or view the entire drawing. Magnified drawings include vertical and horizontal scroll bars which allow you to pan throughout the drawing to reach a desired location.

A Variety of Electrical Symbols Included

A variety of electrical symbols is included with GFX to reduce drawing development and maintenance. Symbols provided include transformers, circuit breakers, switches, and many others. Additional symbols may be created by the user and stored in a library.



Display entire plant layouts, site plans, or campus arrangements to allow quick access to any location in the system.



Data from compatible devices, such as Micrologic® circuit breakers, can be displayed in a variety of formats.

On-line Help System and User's Manual

GFX provides easy-to-follow help through its On-Line Help System and User's Manual. During setup or program operation, you can select help on specific topics from the help index and receive context-sensitive help on the present command via special function-key operations. A printed User's Manual is also provided. The On-Line Help System and the User's Manual work together to provide comprehensive information on program operation.

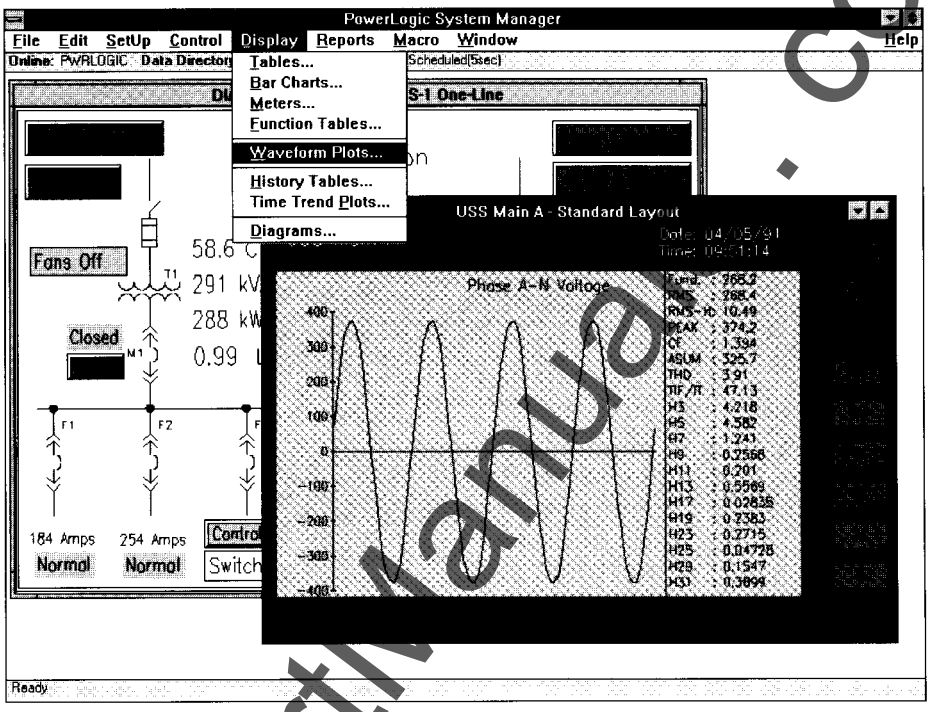
Interactive Graphics Interface

Create and Maintain Drawings

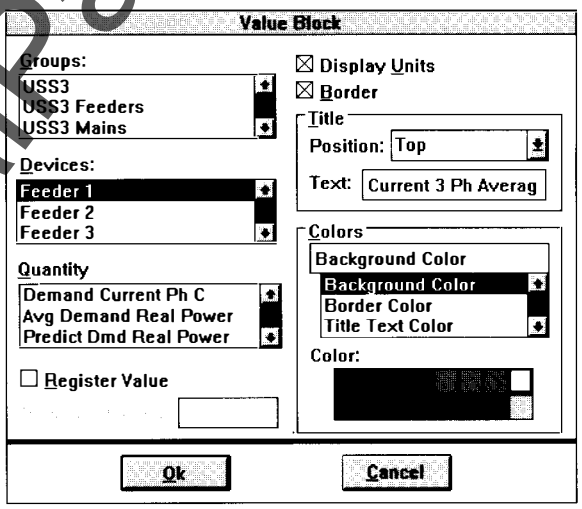
The PowerLogic® Interactive Graphics Interface comes with a vector-based Windows 3.0 drawing package for creating and maintaining drawings. Each drawing forms a background on which data is displayed. GFX allows you to position and size the data anywhere on the drawing using the mouse. Also, colors can be specified for each data item, allowing you to establish your own color code legend. Modification of the drawing is conditional on proper password entry. In this manner, drawings can be easily modified to reflect system changes, additional equipment, etc., without the need for programming or extensive software training.

PowerLogic Application Engineering Services

For new or retrofit power monitoring and control applications, PowerLogic Application Engineering can provide extensive customer assistance. Installation and start-up of PowerLogic Systems including PowerLogic Workstations, Circuit Monitors, software, hardware, and training can be tailored to meet individual requirements.



Data can be displayed on a GFX diagram or in other display formats including bar charts, time trend plots, tables, meters, and waveform plots for harmonic monitoring.



Dialog boxes, such as this one, allow you to customize each data block.

Ordering Information

Class 3080	Type GFX-700	Interactive Graphics Interface

For Further Information - Contact your nearby Square D sales office or call or write to:
Square D Company • PowerLogic • 330 Weakley Rd • Smyrna, TN 37167 • Ph (615) 459-8500

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