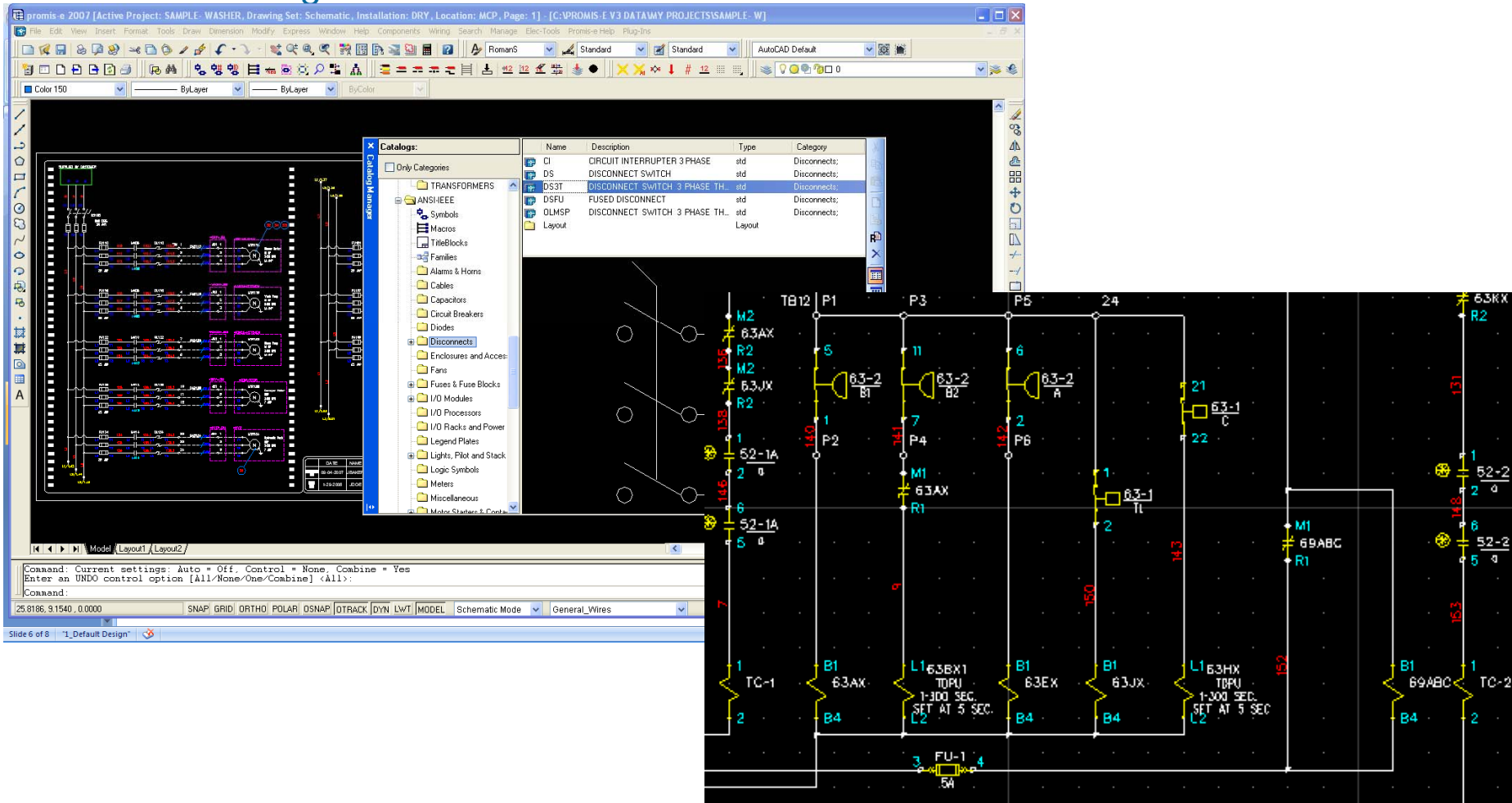




What is promis•e electrical



- **promis•e** is an intelligent MicroStation based program that enables you to create " *intelligent* " electrical controls schematics, Wiring Diagrams, Single Line Diagrams, PLC-I/O, Panel Layouts, 3D Machine Layouts and Fluid Power designs.





What is promis•e Software?



- **Computer-Aided “*Design*” software**
 - Combines engineering and design with documentation
 - Reduces time to create schematics and documentation

- **Creates engineering standards and consistency**
 - Flexible for multiple standards
 - Built in User level Security

- **Prevents errors**
 - Automatically updates all drawing sheets across electrical, pneumatic, and hydraulic drawings

- **Introduces electrical intelligence into drawings**
 - Alarms engineer trying to use 5th pole on a 4 pole relay
 - Auto size & import wiring duct, abrasion protection, terminals, lugs, cable ties and enclosures, PLCs, terminal blocks, etc.
 - Intelligent schematics provide detailed component specifications



What is promis•e Software?



- **Introduces database integration within company business systems**
 - Automatically export & print wire labels and legend plate engravings
 - Eliminates error and redundant data entry, providing cost savings
 - Automatically prepare purchase orders based on schematics sorted by supplier

- **Use macros to automate drawing processes**
 - Saves time on repetitive tasks
 - Create drawings from I/O spreadsheet
 - Fills in drawing for common tasks such as 3-phase connections

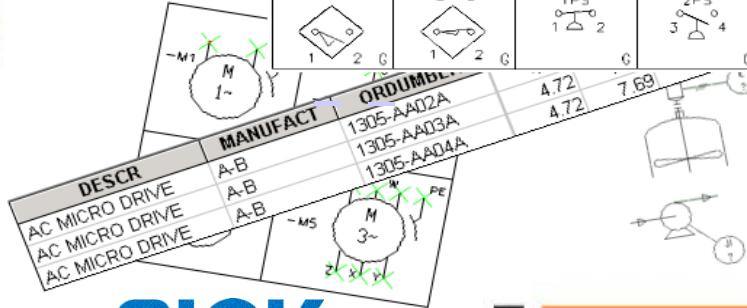
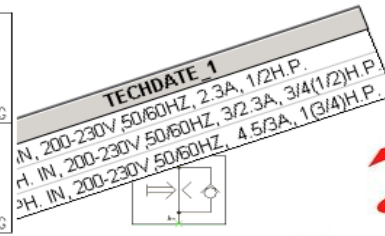
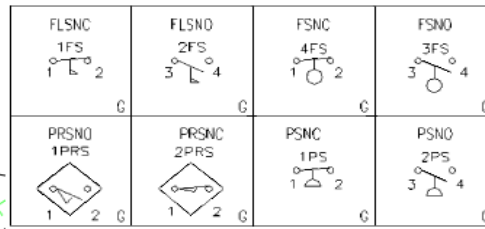
- **Select partnered products from extensive part databases**
 - Eliminate paging through multiple catalogs
 - Millions of components are available
 - Sorted by product, group or manufacturer



Symbol and Databases



A Pentair Company



With the above libraries, you'll have thousands of industry-standard symbols and over a million part numbers available to get your design process up and running fast.



The following CAD platforms are supported:

- **MicroStation V. 8.5**
- **MicroStation XM**
- **Standalone - PowerDraft XM**
- **AutoCAD 2004 – 2009**



SQL or Oracle Database



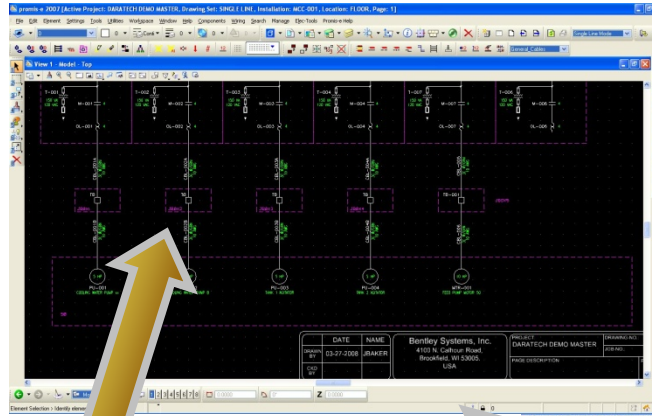
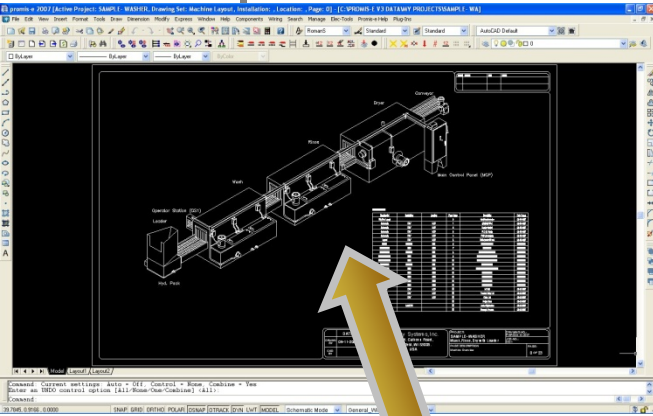
- The project database supports the following database management systems:



- SQL Server 2000
 - SQL Server 2005 (Including Express Edition)
 - Oracle 9i / 10g
-
- By default the software installs SQL Server 2005 Express. You can use SQL Server Management Studio Express to perform administrative tasks.
 - All projects are stored in one SQL / Oracle Database so users do not need administrative rights to create new projects.

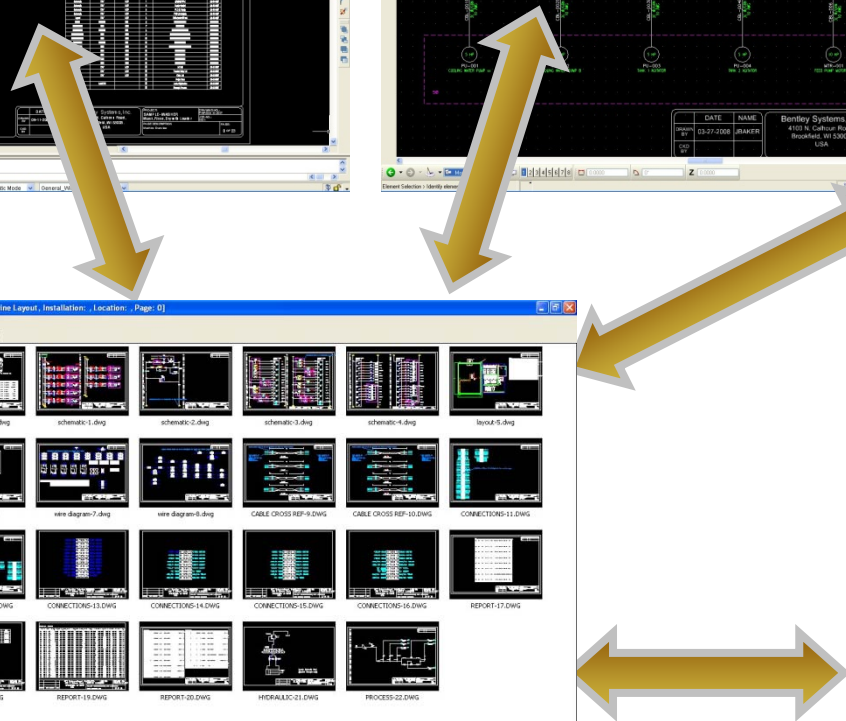
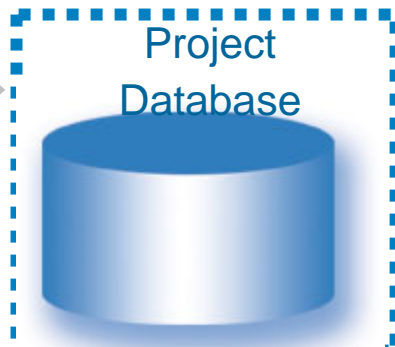
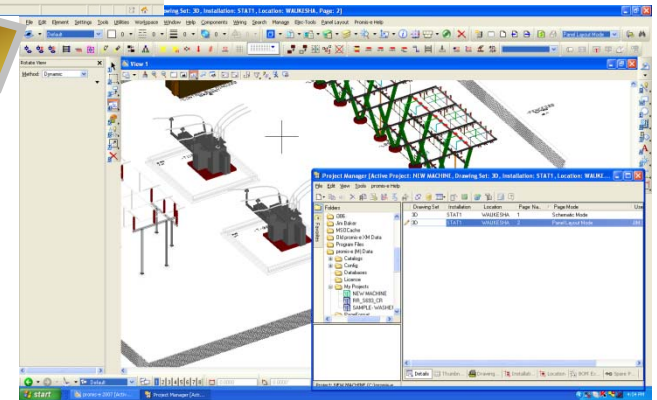
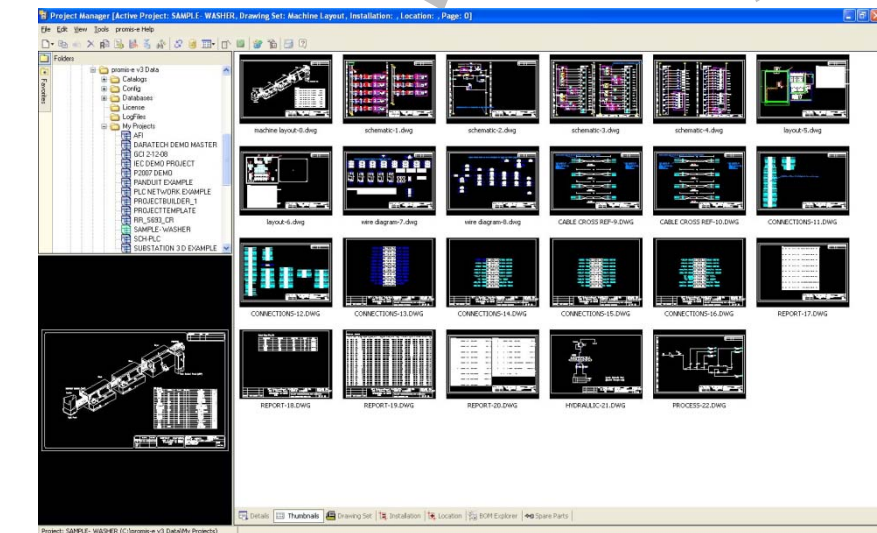


Different Modes within project



Plant Design

- Single Line
- Motor Control
- Raceways / Conduit Pulls
- 3D/2D Layouts





Integrated Design



04/28/2008

Wire List

Project Name: SAMPLE_WASHER
 Description: Wash/Store Dry with Loader
 Job Number: 0001
 Drawing Number: PWD-09-10-2007

Wire No.	Gauge	Color	Voltage	From Target Installation	Location	Device Tag	To Target Installation	Location	Device Tag
1010	14	RED	120 VAC	LOADER	OE1	S5305	LOADER	OE1	
1010	14	RED	120 VAC	LOADER	OE1	TB1-4 E	DRY	MCP	
1010	14	RED	120 VAC	DRY	MCP	TB1-32 E	DRY	MCP	
1011	14	RED	120 VAC	LOADER	OE1	S5305	LOADER	OE1	
1011	14	RED	120 VAC	LOADER	OE1	TB1-5 E	DRY	MCP	
1011	14	RED	120 VAC	DRY	MCP	TB1-33 E	DRY	MCP	
1012	14	RED	120 VAC	LOADER	OE1	P8309.4	LOADER	OE1	
1012	14	RED	120 VAC	LOADER	OE1	TB1-8 E	DRY	MCP	
1012	14	RED	120 VAC	DRY	MCP	TB1-34 E	DRY	MCP	
1013	14	RED	120 VAC	LOADER	OE1	P8111.2	LOADER	OE1	
1013	14	RED	120 VAC	LOADER	OE1	TB1-7 E	DRY	MCP	
1013	14	RED	120 VAC	DRY	MCP	TB1-35 E	DRY	MCP	
1014	14	RED	120 VAC	LOADER	OE1	S5313.4	LOADER	OE1	
1014	14	RED	120 VAC	LOADER	OE1	TB1-8 E	DRY	MCP	
1014	14	RED	120 VAC	DRY	MCP	TB1-36 E	DRY	MCP	

Page 1/23

04/28/2008

Bill of Materials (Quantified)

Project Name: SAMPLE_WASHER
 Description: Wash/Store Dry with Loader
 Job Number: 0001
 Drawing Number: PWD-09-10-2007

Item	Quantity	Part Number	Manufacturer	Category	Detailed Description
1	1	1481-RT21	A-B	FUSE BLOCK	FUSE SIZE:30A, 2RDV1 POLE,CLASS H
2	8	1481-RT26	A-B	FUSE BLOCK	FUSE SIZE:30A, 6RDV2 POLE,CLASS J
3	1	1481-RH22	A-B	FUSE BLOCK	FUSE SIZE:30A, 6RDV2 POLE,CLASS OC
4	188	1482-CAT	A-B	DR WTD. TERMINALS	55 AMP/UL504 RATING, WIRE RANGE 22-8
5	1	1488-04	A-B	SHAFT KIT	1/2" SHAFT LENGTH FOR DEEP ENCLOSURES
6	1	1489-01B1-A-D-E	A-B	DISCONNECT SWITCH	1489V Disconnect Switch, 30 AMP, 120V, 150A Fuse Cap., 6RDV, 150A
7	1	1761-A7	A-B	CHASSIS	7-SLOT CHASSIS MODULE
8	2	1761-A16	A-B	AC INPUT MODULE (16)	AC INPUT MODULE (16)
9	2	1761-A18	A-B	AC OUTPUT MODULE (16)	AC OUTPUT MODULE (16)
10	1	1761-P1	A-B	POWER SUPPLY	POWER SUPPLY - RACK MOUNT
11	3	808-B0000	A-B	NEMA CONTACTOR	NEMA 1, 3PHASE WITH
12	5	808-B00	A-B	MOTOR STARTER MPV	NEMA 1, NON-REV FV-5
13	1	750-CF4002B	A-B	CONTROL RELAY	4NO CONTACTS
14	5	808T-LA101	A-B	PUSHBUTTON	1/4", GREEN, FLUSH H
15	2	808T-B101	A-B	PUSHBUTTON	1/4", GREEN
16	5	808T-B202	A-B	PUSHBUTTON	1/4", BLACK

Page 1/3

04/28/2008

Cable List

Project Name: SAMPLE_WASHER
 Description: Wash/Store Dry with Loader
 Job Number: 0001
 Drawing Number: PWD-09-10-2007

Cable Size	From				To							
	Installation	Location	Device Tag	Cable Type	Length	Part Number	Used	Installation	Location	Device Tag		
DRY	MCP	CAB110	3" 22	15	8443	3	DRY	MCP	TB1-1	DRY	.801	.801-1
DRY	MCP	CAB116	3" 22	15	8443	3	DRY	MCP	TB1-4	WASH	.802	.802-1
DRY	MCP	CAB122	3" 22	15	8443	3	DRY	MCP	TB1-7	FRNGE	.803	.803-1
DRY	MCP	CAB126	3" 22	15	8443	3	DRY	MCP	TB1-10	DRY	.804	.804-1
DRY	MCP	CAB134	3" 22	15	8443	3	DRY	MCP	TB1-22	HYD	.804	.804-1
DRY	MCP	CAB151	3" 22	15	8443	3	DRY	MCP	TB1-13	DRY	.801	.801-7
DRY	MCP	CAB157	3" 22	15	8443	3	DRY	MCP	TB1-16	WASH	.802	.802-4
DRY	MCP	CAB163	3" 22	15	8443	3	DRY	MCP	TB1-19	FRNGE	.803	.803-10

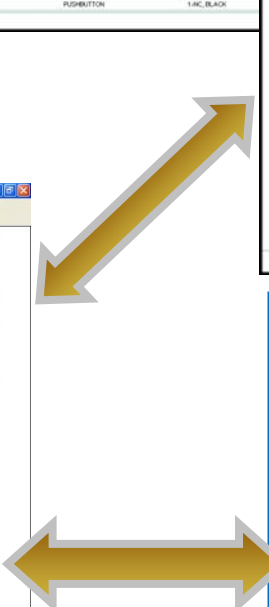
Page 1/1

Project Manager (Active Project: SAMPLE_WASHER, Drawing Set: Machine Layout, Installation, Location, Page: 0)

machine layout-0.dwg schematic-1.dwg schematic-2.dwg schematic-3.dwg schematic-4.dwg layout-5.dwg
 layout-6.dwg wire diagram-7.dwg wire diagram-8.dwg CABLE CROSS REF-9.dwg CABLE CROSS REF-10.dwg CONNECTIONS-11.dwg
 CONNECTIONS-12.dwg CONNECTIONS-13.dwg CONNECTIONS-14.dwg CONNECTIONS-15.dwg CONNECTIONS-16.dwg REPORT-17.dwg
 REPORT-18.dwg REPORT-19.dwg REPORT-20.dwg HIERARCHY-21.dwg PROCESS-22.dwg

SQL/Oracle Project Database

Parts Database





Modes - Intuitive Mode interface for multiple views



Emergency Stop button example:

Physical Device

Panel Layout Mode

Schematic Mode

Wiring Diagram Mode

Terminal Block example:

Physical Device

Schematic Mode

Panel Layout / Graphical Plan Mode

Relay Example:

Physical Device

Panel Layout Mode

Wire Diagram (Chart View) Mode

CP	Master Control Relay Connection
A1	(210) L1212
A2	(210) TB1-30
13	(21) L1212
14	(2) TB1-08
23	(2) PB210
24	(2) TB1-05
	(210) TB1-35

Schematic Mode

Hydraulic (Fluid Power) Example:

Physical Device

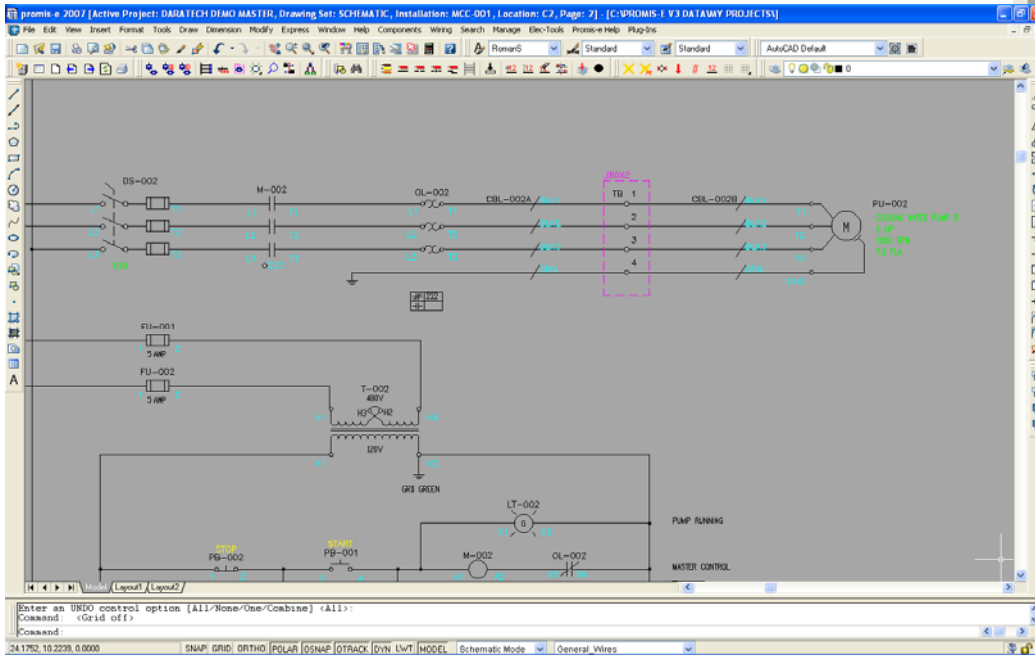
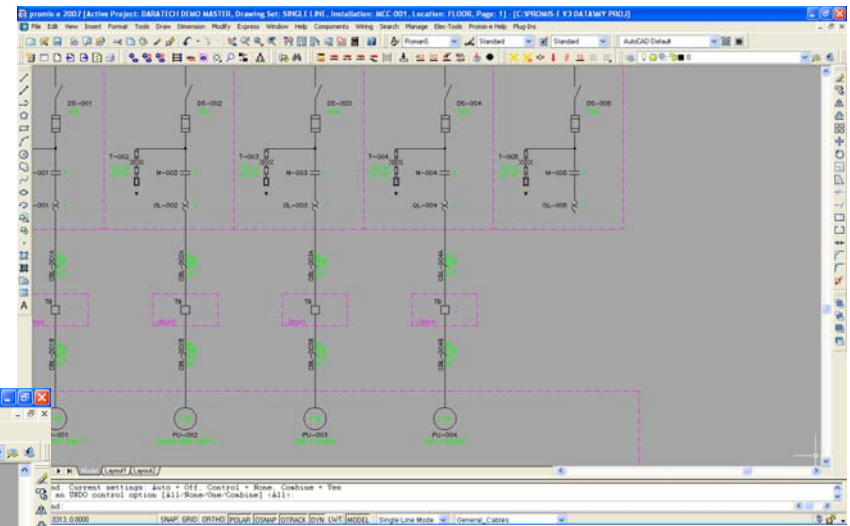
Schematic Mode

Hydraulic Mode



Motor control system design

Motor Control



Single Line



Report Formats



Run Reports

Configuration: (None) [Delete] Sorting

Language: English [Save] Filters

Options

Output

Preview... Text On Drawing...

Print

Output To File

Save As: [...]

CSV Text Delimiter: [...]

HTML MHT

TXT RTF

XLS PDF

- Bill of Materials (Itemized)
- Bill of Materials (Quantified)
 - BOM_Qty (With IDs) - A4
 - BOM_Qty (With IDs) - Letter
 - BOM_Qty - A4
 - BOM_Qty - Drawing (inch)
 - BOM_Qty - Drawing (metric)
 - BOM_Qty - Letter
- Cable List
- Dimension List
- Family
- Field Wire List
- Foreign Languages
- Installations
- Job Costing

Description

Help

Bill of Materials

03/03/2008

Project Name: SAMPLE-WASHER
Description: Wash, Rinse, Dry with Loader
Job Number: 0001
Drawing Number: PWRD-09-10-2007

Item	Quantity	Part Number	Manufacturer	Category	Detailed Description
1	1	1491-N121	A-B	FUSE BLOCK	FUSE SIZE:0-30A, 250V, 1 POLE, CLASS H
2	8	1491-N126	A-B	FUSE BLOCK	FUSE SIZE:0-30A, 600V, 3 POLES, CLASS J

Field Cable List

03/03/2008

Project Name: SAMPLE-WASHER
Description: Wash, Rinse, Dry with Loader
Job Number: 0001
Drawing Number: PWRD-09-10-2007

Cable ID: DRY MCP CAB110 Cable Type: 3 * 22 Family: 8443 Length:

Part Number	From Target	To Target
2443	Installation	Location

Manufacturer	Installation	Location	Device Tag	CP	Cable Core	Installation	Location	Device Tag	CP	
DRY	MCP	TB12	E	---	RED	---	DRY	JB1	JB12	I

Total Selling Price: \$13673.00 Total Assembly Time (min): 1346

Wiring Cost: \$408.83 Total Wiring Time (min): 1434

Assembly Cost: \$407.92

Total Job Cost: \$14499.75 Total Time (min): 2780

Wire list

03/03/2008

Wire No.	Gauge	Color	Voltage	From Target	To Target
10101	14	RED	120 VAC	LOADER OS1	TB118E DRY MCP TB118I
10101	14	RED	120 VAC	DRY MCP	TB1138E DRY MCP PLC30501
10102	14	RED	120 VAC	LOADER OS1	P80094 LOADER OS1 TB118I
10102	14	RED	120 VAC	LOADER OS1	TB118E DRY MCP TB118I
10102	14	RED	120 VAC	DRY MCP	T01124E DRY MCP PLC30502
10103	14	RED	120 VAC	LOADER OS1	F89112 LOADER OS1 TB117J
10103	14	RED	120 VAC	LOADER OS1	TB117E DRY MCP TB118I
10103	14	RED	120 VAC	DRY MCP	TB1138E DRY MCP PLC30503
10104	14	RED	120 VAC	LOADER OS1	S53134 LOADER OS1 TB118I
10104	14	RED	120 VAC	LOADER OS1	TB118E DRY MCP TB118I
10104	14	RED	120 VAC	DRY MCP	TB1138E DRY MCP PLC30504
10105	14	RED	120 VAC	LOADER OS1	P80154 LOADER OS1 TB119I
10105	14	RED	120 VAC	LOADER OS1	TB119E DRY MCP TB1137I
10105	14	RED	120 VAC	DRY MCP	TB1137E DRY MCP PLC30505
10106	14	RED	120 VAC	LOADER OS1	P80172 LOADER OS1 TB1110I
10106	14	RED	120 VAC	LOADER OS1	TB1110E DRY MCP TB118I
10106	14	RED	120 VAC	DRY MCP	TB1138E DRY MCP PLC30506
10107	14	RED	120 VAC	DRY MCP	M40674 DRY MCP TB118I
10107	14	RED	120 VAC	DRY MCP	TB1138E DRY MCP PLC30507

Page 3/52

PLC I/O List

03/03/2008

Project Name: SAMPLE-WASHER
Description: Wash, Rinse, Dry with Loader
Job Number: 0001
Drawing Number: PWRD-09-10-2007

Installation: DRY
Location: MCP
Device Tag: PLC005

Address	CP	Page / Line #	Function Text	Target
I:000	00	22 20	Power Switch Auto	BEN
I:001	01	22 20	Flow Rate Low	TEMP LOW
I:002	02	22 20	Pressure Indicator	PRESS HIGH
I:004	04	22 20	Pressure Indicator	ISA21204
I:005	04	22 28	Fail to Vent Position	P91
I:008	03	22 21	Stop Valve #1	P82

Installation: DRY
Location: MCP
Device Tag: PLC005

Address	CP	Page / Line #	Function Text	Target
O:010	00	3 05	Hand	DRY MCP TB1132 E
O:011	01	3 07	Auto	DRY MCP TB1133 E
O:010	01	3 25	Wash Heater On	DRY MCP TB1142 E
O:011	11	3 27	Wash Pump Start	DRY MCP TB1142 E

Page 16

Job Cost

03/03/2008

Total Selling Price: \$13673.00 Total Assembly Time (min): 1346

Wiring Cost: \$408.83 Total Wiring Time (min): 1434

Assembly Cost: \$407.92

Total Job Cost: \$14499.75 Total Time (min): 2780

Bentley promiscue

PLC I/O



Catalogue Manager



Insert Symbol(s)

By Name By Part Number By Device ID

Name: 1

Description: Search

Display project catalog

Database:

Catalog	Name	Type	Description
ANSI-HEEE	10_CABLE	cablexref	CABLE CROSS REFERENCE: 10 CONDI
ANSI-HEEE	10_CABLESH	cablexref	CABLE CROSS REFERENCE: 10 CONI
ANSI-HEEE	11_CABLE	cablexref	CABLE CROSS REFERENCE: 11 CONDI
ANSI-HEEE	11_CABLESH	cablexref	CABLE CROSS REFERENCE: 11 CONI
ANSI-HEEE	12_CABLE	cablexref	CABLE CROSS REFERENCE: 12 CO
ANSI-HEEE	12_CABLESH	cablexref	CABLE CROSS REFERENCE: 12 C
ANSI-HEEE	14_CABLE	cablexref	CABLE CROSS REFERENCE: 14 CO
ANSI-HEEE	14_CABLESH	cablexref	CABLE CROSS REFERENCE: 14 O
ANSI-HEEE	15_CABLE	cablexref	CABLE CROSS REFERENCE: 15 CO
ANSI-HEEE	15_CABLESH	cablexref	CABLE CROSS REFERENCE: 15 O
ANSI-HEEE	15PINCONN	plug	15 PIN-PLUG CONNECTOR
ANSI-HEEE	16_CABLE	cablexref	CABLE CROSS REFERENCE: 16 CO
ANSI-HEEE	16_CABLESH	cablexref	CABLE CROSS REFERENCE: 16 O
ANSI-HEEE	16INPUT	plc	16 POINT INPUT PLC "REFERENCE
ANSI-HEEE	16OUTPUT	plc	16 POINT OUTPUT PLC "REFERENCE
ANSI-HEEE	18_CABLE	cablexref	CABLE CROSS REFERENCE: 18 CO
ANSI-HEEE	18_CABLESH	cablexref	CABLE CROSS REFERENCE: 18 O
ANSI-HEEE	120VPOWER	std	GENERIC 120V POWER CONNECTIO
ANSI-HEEE	127	std	Dual Sol. Op. Valve Vert. 4/3 Way
ANSI-HEEE	1746-IA16	plc	AC INPUT MODULE (16) INPUT - 100
ANSI-HEEE	1746-IB16	plc	DC INPUT MODULE (16) INPUT - 5VDC

[Symbol Settings...](#) [Group Settings...](#)



Catalogs:

- Catalogs
 - JIC-3
 - Symbols
 - Macros
 - TitleBlocks
 - Families
 - Disconnects
 - Sensors
 - Photo-Eye
 - Prox

Thumbnail :

PE3-NPN.Dwg PE3-PNP.Dwg

PE3-R-NPN.Dwg PE3-R-PNP.Dwg

PE3P-NPN.Dwg PE3P-PNP.Dwg



User customizable, project specific setup and file naming conventions



Options [New Project]

System options

- Command Protection
- Symbol Texts

Project options

- Address File
- Balloon
- Default Grid & Snap Settings
- Default Project Properties
- Display Formats
- Display Languages
- Drawing Standards
- PLC
- Region Settings
- Revision Control
- Text Settings
- Wiring Diagram Settings
- Wire Options

User options

- Language On Dialogs
- Startup Interface
- User Name
- Validation Prompts
- View Options

Default Project Properties: Allows you to make global settings that determine what will appear automatically on newly created pages.

Page Macro: [Dropdown]

Title Block: D-SIZE REV MODERN

Scale: 1

Default Parts Database: [Dropdown]

Page Format Options

Page Format: D-2CDL

of Digits in Line Number: 2

Include Page Number as a Line Number Prefix

Continuous Line Numbers

Project Descriptions:

Name
Project Description
Job Number
Drawing Number
Description 4
Description 5
Description 6
Description 7
Description 8

Page Descriptions:

Name
Description
Date Drawn
Date Checked
Drawn By
Checked By
Date Revised
Revised By

OK Cancel Apply Help

Drawing Naming Convention

Profile Name: Default

Save Profile... Load Profile...

Available Variables:

- Drawing Set
- Installation
- Location
- Page Number
- Project
- Project.Description_001
- Project.Description_002
- Project.Description_003
- Project.Description_004
- Project.Description_005
- Project.Description_006
- Project.Description_007
- Project.Description_008

Format Expression:

Add to expression

Reset Clear

[Project]-[Project.Description_001]-[Page Number]

Example Result:

ds-3

Note: A filename cannot contain any of the following characters:
\\/: *?\"' < > |

Help OK Cancel



User customizable, project and page setup



Project Description [X]

Enter Project descriptions here...

Name	Entry
Project Description	
Job Number	
Drawing Number	
Description 4	
Description 5	
Description 6	
Description 7	
Description 8	
Description 9	
Description 10	
Description 11	
Description 12	
Description 13	

Buttons: Help, OK, Cancel

User definable dialog prompts

New Page [X]

Create a new drawing page.

Project: SAMPLE - WASHER [v] [...]
Drawing Set: Schematic [v]
Installation: DRY [v]
Location: MCP [v]
Page Name: 5
Initial Mode: Schematic Mode [v]
Title Block: D-SIZE REV MODERN [v] [...]
Page Format: D-2COL [v] [...]
Page Macro: [v] [...]
Scale Factor: 1

Set page online

Page Descriptions:

Name	Entry
Description	3/60/480 VAC
Date Drawn	03-03-2008
Date Checked	
Drawn By	JBAKER
Checked By	
Date Revised	
Revised By	

Buttons: Help, OK, Cancel



Extensive use of project standards to reduce design time



Options [C:\PROMIS-E V3 DATA\MY PROJECTS\SAMPLE- WASHER]

System options
 Command Protection
 Symbol Texts

Project options

- Address File
- Balloon
- Default Grid & Snap Settings
- Default Project Properties
- Display Formats
- Display Languages
- Drawing Standards
- PLC
- Region Settings
- Revision Control
- Text Settings
- Wiring Diagram Settings
- Wire Options

Profile: C:\promis-e v3 Data\Conf\Options\ANSI-IEEE.ProjectOptions.xml

[Save Options Profile...](#)

Address File
 Create and edit a text file that can be included in reports, title blocks, etc.

Balloon
 Allows you to set some rules for balloon.

Default Grid Snap Settings
 Allows you to set the grid and snap spacing for various types of drawings.

Display Formats
 Allows you to set the format of device IDs, wire numbers and cross references.

Display Languages

Drawing Standards

Options [C:\PROMIS-E V3 DATA\MY PROJECTS\SAMPLE- WASHER]

Display Formats: Allows you to set the format of device IDs, wire numbers and cross references.

ID & Cross Reference Part Number

Adjust device ID when symbol(s) is moved. **Nested Device ID**
 Make Device ID Uniqueness Case Sensitive Enable Device ID Nesting
 Convert lowercase to uppercase Show on drawings: Partial Tag Complete Tag
 Convert uppercase to lowercase

Device ID Formats	Device Tag	Page	Line	No	Edit...
Schematic (General)					Edit...
Schematic (PLC wired device ID)					Edit...
Schematic (PLC wired Terminal ID)					Edit...
Panel Layout Mode	Device Tag	Page	Line	No	Edit...
Wiring Diagram Mode	Device Tag	Page	Line	No	Edit...
Hydraulic Mode	Device Tag	Page	Line	No	Edit...
Pneumatic Mode	Device Tag	Page	Line	No	Edit...
Single Line Mode	Device Tag	Page	Line	No	Edit...
Wire Link	Device Tag	Page	Line	No	Edit...
Device Cross Reference	ANSI/IEEE Standard				Edit...
Wire Link Cross Reference	ANSI/IEEE Standard				Edit...

OK Cancel Apply Help

Options [C:\PROMIS-E V3 DATA\MY PROJECTS\SAMPLE- WASHER]

System options
 Command Protection
 Symbol Texts

Project options

- Address File
- Balloon
- Default Grid & Snap Settings
- Default Project Properties
- Display Formats
- Display Languages
- Drawing Standards
- PLC
- Region Settings
- Revision Control
- Text Settings
- Wiring Diagram Settings
- Wire Options

User options

- Language On Dialogs
- Startup Interface
- User Name
- Validation Prompts
- View Options

Default Project Properties: Allows you to make global settings that determine what will appear automatically on newly created pages.

Page Macro: [Dropdown] [Reset]

Title Block:
 D-SIZE REV MODERN [Dropdown]

Scale: 1

Default Parts Database
 ansi-ieee_parts_database [Dropdown] [Edit Filter...]

Page Format Options
 Page Format: D-2CDL [Dropdown]

of Digits in Line Number:
 0
 Include Page Number as a Line Number Prefix
 Continuous Line Numbers

Project Descriptions:

Name	Project Description
Job Number	
Drawing Number	
Description 4	
Description 5	
Description 6	
Description 7	
Description 8	

Page Descriptions:

Name	Description
Date Drawn	
Date Checked	
Drawn By	
Checked By	
Date Revised	
Revised By	

Options [C:\PROMIS-E V3 DATA\MY PROJECTS\SAMPLE- WASHER]

System options
 Command Protection
 Symbol Texts

Project options

- Address File
- Balloon
- Default Grid & Snap Settings
- Default Project Properties
- Display Formats
- Display Languages
- Drawing Standards
- PLC
- Region Settings
- Revision Control
- Text Settings
- Wiring Diagram Settings
- Wire Options

User options

- Language On Dialogs
- Startup Interface
- User Name
- Validation Prompts
- View Options

Wire Options: Allows you to make settings that affect the appearance of wires in drawings.

Wire Crossing Preference: Loop-Over [Dropdown]

Loop Over Radius: 0.12

Wire Connector Type: Node [Dropdown]

Wire Property Display: Wire Tag (only) [Edit...]

Wire Layer Configuration...

Wire Layer Configuration

You can draw different types of wires on different layers. To each layer you can assign different wire properties such as gauge, color and voltage. Create or delete layers and import them from an existing DWG or DXF file.

Allow Multiple Layers Per Mode On Off

Use	Layer Name	Drawing Mode	Gauge	Color
General_Wires	ECT_CONN_GENERAL_WI...	Schematic Mode		BLK
3Phase	ECT_CONN_3PHASE	Schematic Mode		
Control_LV	ECT_CONN_CONTROL_LV	Schematic Mode		RED
Control_ELV	ECT_CONN_CONTROL_ELV	Schematic Mode		BLU
InterLock	ECT_CONN_INTERLOCK	Schematic Mode		YEL/G

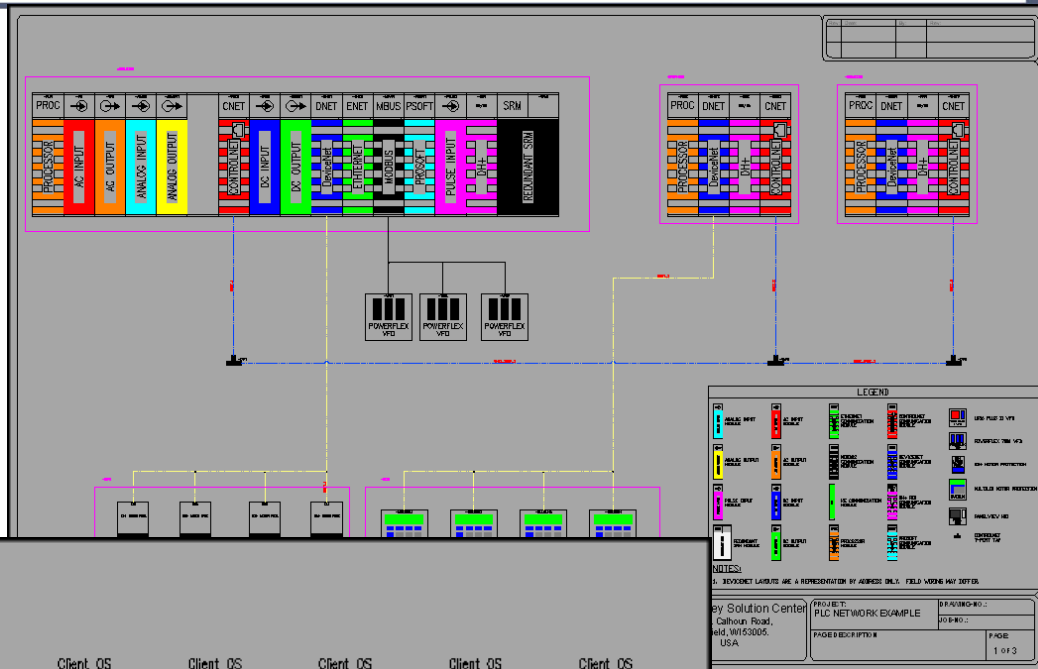
Import Layers New Layer Delete Layer

Help OK Cancel

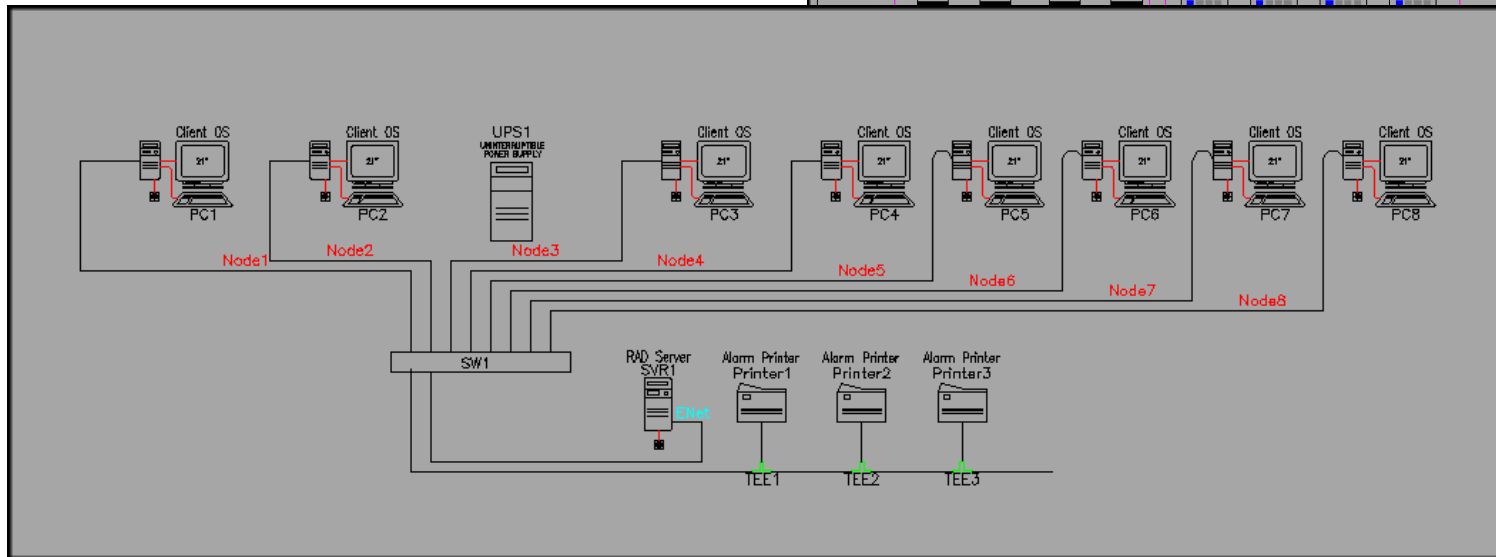
Bentley promis●e



Network designs



Ethernet Network





Programmable Logic Controller Import



PLC Generator

I/O Import

PLC Generator - PLCfile.xls

File View Tools Generate Help

IO Data

- Net1
 - Node 2
 - 0
 - 2
 - 3
 - 4
 - 5
 - 6

	C	D	E	F	G	H	I	J	K	L
1	PLC Module									
2	Macro	Part #	Network	Node	Rack	Group	Module	Point	Address	Line 1
3		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	00	I:02/001	ALARM RESET
4		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	01	I:02/002	MANUAL MODE
5		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	02	I:02/003	MANUAL ADVA
6		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	03	I:02/004	MANUAL RETR
7		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	04	I:02/005	MASTER
8	PLCINWIRE1FIELD	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	05	I:02/006	ACCESS DOOF
9		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	06	I:02/007	E-STOP
10		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	07	I:02/008	STATION 1
11		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	08	I:02/009	STATION 1
12		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	09	I:02/010	STATION 1
13	PLCINWIRE1SPARE	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	10	I:02/011	SPARE
14		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	11	I:02/012	STATION 2
15		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	12	I:02/013	STATION 2
16		XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	13	I:02/014	STATION 2
17	PLCINWIRE1SPARE	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	14	I:02/015	SPARE
18	PLCINWIRE1SPARE	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	15	I:02/016	SPARE
19	PLCINCOMWIRE	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	CA		
20	PLCINCOMWIRE	XYZ16IDA_PLCDEMO	Net1	Node 2	0		2	CB		
21		XYZ16ODA_PLCDEMC	Net1	Node 2	0		3	00	O:03/001	STATION 1

Sheet1 Sheet2 Sheet3

File Import

Begin

Import Configuration

Field Mapping

Finish

Import File

Import File: C:\Program Files\ECT\PLC Generator\bin\demo\PLCfile.xls [Browse...]

Sheet Name: Sheet1

File Setting

The first row contains column headers.

Line number of the first row: 1

Delimiter: ,

Text qualifier: "

Cancel Back Next Finish



Smart drawings tied to parts database



Part Database Editor

Select Part Database: ansi-ieee_parts_database > >> of 1284 (Filtered)

Additional Parts

Part Number	CM103-FC0103
Category	MOTDR
Manufacturer	A-B
Catalog Number	CM103-FC0103&ANHHA-116
Supplier	
Part Type	MTR
Additional Part	CMKIT-K21S34,CMKIT-K21G2
Percent Spare	
URL	www.rockwellautomation.com

URL to Cut Sheets

Weight	78
Power Consumption	14
Location	
Time	
Date	
Symbol Data	

Dynamic Attributes

Device Family	
Attribute Text	Current:14 AMP;Horsepower:10 HP;Rev...
Single Wire Connection	Current:14 AMP;Horsepower:10 HP;RevolutionsPerMinute:3450 RPM;
Schematic Symbol	M2
Layout Symbol	
Wire Diagram Symbol	
Hydraulic Symbol	
Pneumatic Symbol	
Single Line Symbol	
Graphical Plan Symbol	

Modes of view

Quantity Per Unit	1
Use Unit	
Order Unit	
Selling Price	1841
Buying Price	1500
Discount	0

Detailed Description

Detailed_Description1	Enclosed SE/EE/PE/NP AC Motors, 10 H...
Detailed_Description2	
Detailed_Description3	
Detailed_Description4	
Detailed_Description5	

Dimensions

X	0
Y	0
Z	0

Buttons: Help, Apply, OK

Diagram: PU-002 COOLING WATER PUMP B 5 HP 1800 RPM 7.6 FLA

Bentley promise



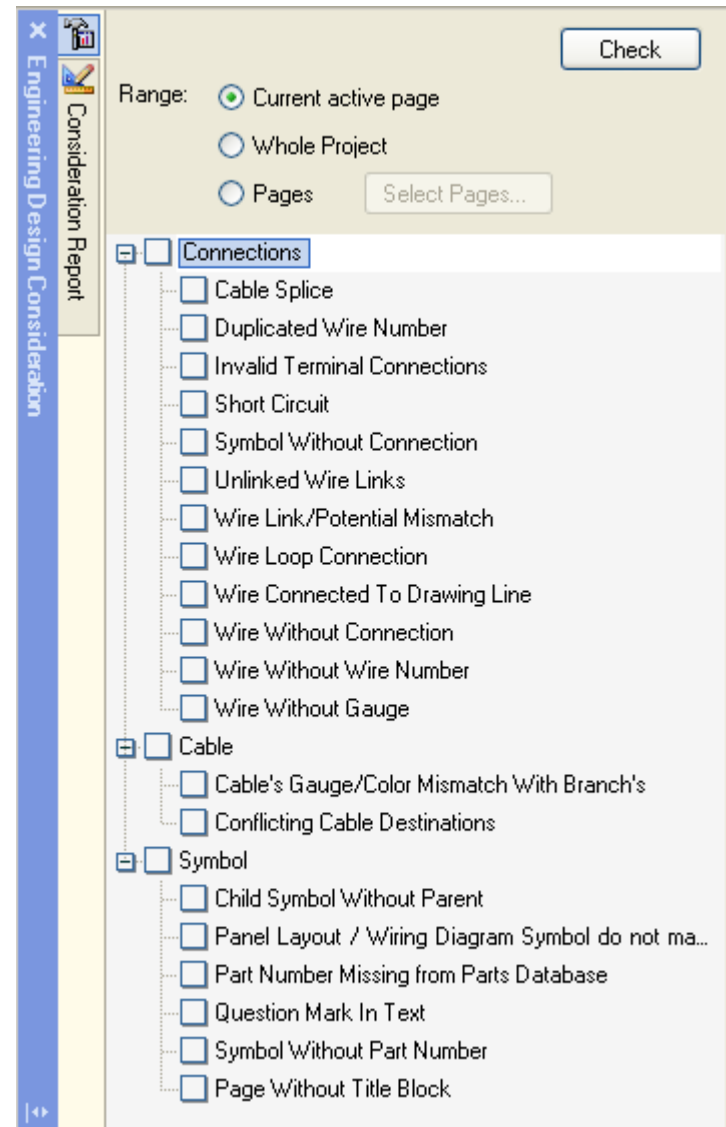
Error Checking



- **Solution**

- **Real-time and batch error checking**

- Errors such as trying to duplicate a device ID, over-assigning contacts on a relay or connecting wires of different voltages are given to a user in real time even with multiple users.





Central Data Editing



Edit one – Edit all functionality

- Edit a symbol, cable or wire and the change is automatically made on all of the related symbols throughout the project.
- The data editor allows edits to be made globally without even opening a drawing.

Attribute	Text	Installation	Location	Device Tag	Page	Line No.
Function Text:	?	LINE1	EN1	M267	2	68
Function Text:	RUN RELAY	LINE1	EN1	CR235	2	35
Function Text:	RUN RELAY	LINE1	EN1	CR235	2	37
Function Text:	START	LINE1	EN1	PB235	2	35
FunctionText	CONVEYOR MO...	LINE1	BAY1	MTR110	1	10
FunctionText	PUMP MOTOR	LINE1	BAY2	MTR117	1	17
FunctionText	PRESS MOTOR	LINE1	BAY3	MTR124	1	24
FunctionText	EMERGENCY S...	LINE1	EN1	PB151	1	51
FunctionText	POWER ON	LINE1	EN1	LT156	1	56
FunctionText	CONVEYOR RUN	LINE1	DOOR	SS220	2	20
FunctionText	PUMP RUN	LINE1	DOOR	SS225	2	25
FunctionText	PRESS RUN	LINE1	DOOR	SS230	2	30
FunctionText	START^PERMIS...	LINE1	EN1	LT213	2	13
FunctionText	CONVEYOR^RU...	LINE1	EN1	LT222	2	22
FunctionText	PUMP^RUNNING	LINE1	EN1	LT227	2	27
FunctionText	PRESS^PUMP^...	LINE1	EN1	LT232	2	32
Horsepower	5 HP	LINE1	BAY1	MTR110	1	10
Horsepower	3 HP	LINE1	BAY2	MTR117	1	17
Horsepower	5 HP	LINE1	BAY3	MTR124	1	24



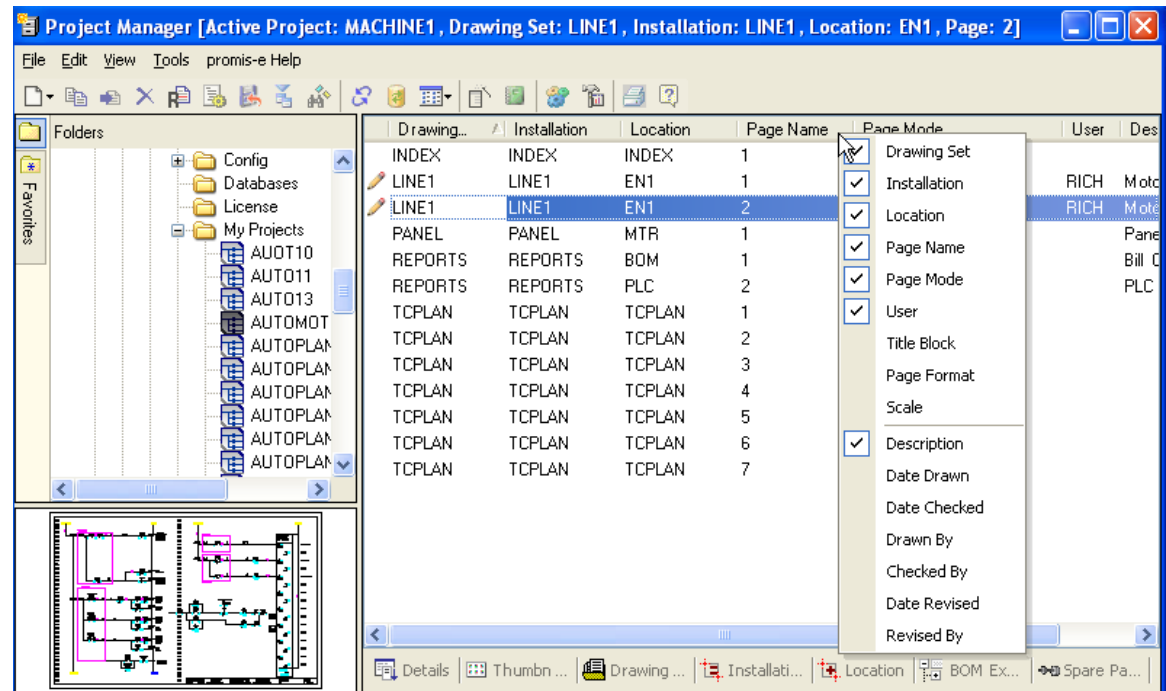
Project Structure



Projects can end up being thousands of separate DGN/DWG's files scattered across a network with cryptic file names.

A well defined project structure

- Files are kept together and all page information and logical data is maintained in a shared database.
- Thumbnails and page descriptions are easily accessed thru the project manager.
- Pages (and devices) can use a two level IEC structure to logically divide up portions of a project.
- Drawings can be assigned to "modes" to segregate single line, schematic, panel layout and other types of drawings, but still keep all of the related device data linked. If a device is placed in the schematic a list is available to place that device in any of the other modes.
- Microsoft intuitive interface





promis•e users



- Machine Building
- Engineering and Consulting Firms
- Original Equipment Manufacturer
- System Integrator
- End User
 - Process and Power
 - Shipbuilding
 - Oil and Gas
 - Automotive
 - Utilities
 - Aerospace
 - Chemical
 - Rail





Typical Promis•e Users





Promis•e key features



- Ease of use – intuitive interface
- Powerful functionality
- Standard database support SQL, Oracle
- International Standards – IEC, DIN, JIC
- Global Support