

DOCUMENT OVERVIEW

This document contains the requirements for the standard EDI 850 document in ANSI version 4010 as used by ROCKWELL AUTOMATION POWER SYSTEMS. It describes the layout, syntax, and semantics for Rockwell Suppliers to use to prepare for and receive a purchase order document. ROCKWELL expects to receive a 997 as an acknowledgement of the receipt of this document from our Supplier within 24 hours.

EDI COMMUNICATIONS

ROCKWELL AUTOMATION POWER SYSTEMS prefers to use AS2 connections. If the Supplier is not AS2 capable, ROCKWELL AUTOMATION POWER SYSTEMS uses Sterling Commerce as a VAN. Sterling Commerce is capable of setting up Trading Supplier inter-connects to other VAN services as necessary.

ISA and Group Trading IDs are as follows:

Production:

ISA level qualifier:	01
ISA level sender Id:	144846607
Group level sender ID:	144846607

Test:

ISA level qualifier:	ZZ
ISA level sender Id:	144846607T
Group level sender ID:	144846607T

For EDI assistance or questions, please contact:

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SAMPLE EDI 850 DATA

ISA*00* *00* *01*144846607 *ZZ*TS ID *040209*0053*U*00400*00000001*0*P*^~ GS*PO*144846607001*TS ID*20040209*00533380*1*X*004010~ ST*850*1~ BEG*00*NE*963174S**20040209~ N1*BT*ROCKWELL AUTOMATION - DODGE*1*144846607001~ N2*ROCKWELL AUTOMATION~ N3*5024 PELHAM ROAD~ N4*GREENVILLE*SC*29615~ PO1*0001*999*EA*9.9999**IN*963174~ PID*F****BELTON HUB BLANK~ MSG*LIN: --- ENG. CHANGE NUMBER: NDR ---~ SCH*999*EA***002*20040220~ CTT*1*999~ SE*12*1~ GE*1*1~ IEA*1*00000001~

850

Purchase Order

Functional Group=**PO**

This document contains the format and establishes the data contents of the ROCKWELL AUTOMATION POWER SYSTEMS Purchase Order Transaction Set (850) for use within the context of an Electronic Data Interchange (EDI) environment. The transaction set will be used to provide for customary and established business and industry practice relative to the placement of purchase orders for goods and services. This transaction set will not be used to convey purchase order changes or purchase order acknowledgement information.

Segments:

<u>Pos</u>	Id	Segment Name	<u>Req</u>	<u>Max</u> <u>Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	ISA	Interchange Control Header	М	1			Must use
	GS	Functional Group Header	М	1			Must use

Heading:

<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	Max Use	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	ST	Transaction Set Header	М	1			Must use
020	BEG	Beginning Segment for Purchase Order	М	1			Must use
LOO	LOOP ID - N1				<u>200</u>		
310	N1	Name	0	1			Used
320	N2	Additional Name Information	0	2			Used
330	N3	Address Information	0	2			Used
340	N4	Geographic Location	0	1			Used

Detail:

<u>Pos</u>	<u>Id</u>	Segment Name	<u>Req</u>	<u>Max</u> <u>Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
LOO	LOOP ID – PO1				<u>100000</u>		
010	PO1	Baseline Item Data	М	1			Used
050	PID	Product/Item Description	0	1			Used
340	MSG	Message Text	0	1000			Used
415	SCH	Line Item Schedule	0	2			Used

Summary:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max</u> <u>Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
010	CTT	Transaction Totals	М	1			Used
030	SE	Transaction Set Trailer	М	1			Must use

Segments:

<u>Pos</u>	<u>Id</u>	<u>Segment Name</u>	<u>Req</u>	<u>Max</u> <u>Use</u>	<u>Repeat</u>	<u>Notes</u>	<u>Usage</u>
	GE	Functional Group Trailer	М	1			Must use
	IEA	Interchange Control Trailer	М	1			Must use

To start and identify an interchange of zero or more functional groups and interchange-related control segments.

Element Summary:

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage_
ISA01	I01	Authorization Information QualifierDescription: Code to identify the type of information in the AuthorizationInformation	М	ID	2/2	Must use
		CodeName00No Authorization Information Present (No Meaningful Information in I02)				
ISA02	102	Authorization Information Description: Information used for additional identification or authorization of the interchange sender or the data in the interchange; the type of information is set by the Authorization Information Qualifier (I01)	Μ	AN	10/10	Must use
ISA03	103	Security Information Qualifier Description: Code to identify the type of information in the Security Information Code Name 00 No Security Information Present (No Meaningful Information in I04)	М	ID	2/2	Must use
ISA04	104	Security Information Description: This is used for identifying the security information about the interchange sender or the data in the interchange; the type of information is set by the Security Information Qualifier (I03)	М	AN	10/10	Must use
ISA05	105	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified Code Name 01 Duns (Dun & Bradstreet)	М	ID	2/2	Must use
ISA06	106	Interchange Sender ID Description: Identification code published by the sender for other parties to use as the receiver ID to route data to them; the sender always codes this value in the sender ID element Code Name 144846607 Duns (Dun & Bradstreet)	Μ	AN	15/15	Must use
ISA07	105	Interchange ID Qualifier Description: Qualifier to designate the system/method of code structure used to designate the sender or receiver ID element being qualified	М	ID	2/2	Must use
ISA08	107	Interchange Receiver ID Description: Identification code published by the receiver of the data; When sending, it is used by the sender as their sending ID, thus other parties sending to them will use this as a receiving ID to route data to them Code Name 01 Duns (Dun & Bradstreet) 09 X.121 (CCITT) 12 Phone (Telephone Companies) ZZ Mutually Defined	Μ	AN	15/15	Must use
ISA09	108	Interchange Date Description: Date of the interchange	М	DT	6/6	Must use
ISA10	109	Interchange Time Description: Time of the interchange	М	TM	4/4	Must use

Ref _	Id_	Element Name	Req	Type	Min/Max	Usage_
ISA11	 I10	Interchange Control Standards Identifier	М	ID	1/1	Must
13411		Description: Code to identify the agency responsible for the control standard used by the message that is enclosed by the interchange header and trailer All valid standard codes are used.	IVI	ID	1/1	use
ISA12	II1	Interchange Control Version Number Description: This version number covers the interchange control segments Code Name 00400 Draft Standards for Trial Use Approved for Publication by ASC X12 Procedures Review Board through October 1997	М	ID	5/5	Must use
ISA13	I12	Interchange Control Number Description: A control number assigned by the interchange sender	М	N0	9/9	Must use
ISA14	I13	Acknowledgment Requested Description: Code sent by the sender to request an interchange acknowledgment (TA1) All valid standard codes are used.	М	ID	1/1	Must use
ISA15	I14	Usage Indicator Description: Code to indicate whether data enclosed by this interchange envelope is test, production or information All valid standard codes are used.	М	ID	1/1	Must use
ISA16	115	Component Element Separator Description: Type is not applicable; the component element separator is a delimiter and not a data element; this field provides the delimiter used to separate component data elements within a composite data structure; this value must be different than the data element separator and the segment terminator	М		1/1	Must use

Example:

ISA*00*

00 *01*144846607 *ZZ*TS ID *040209*0053*U*00400*00000001*0*P*^~

Functional Group Header

To indicate the beginning of a functional group and to provide control information.

Element Summary:

Ref_	Id	Element Name	<u>Req</u>	Type	Min/Max	Usage
GS01	479	Functional Identifier Code Description: Code identifying a group of application related transaction sets All valid standard codes are used.	Μ	ID	2/2	Must use
GS02	142	Application Sender's Code Description: Code identifying party sending transmission; codes agreed to by trading suppliers Code Name 144846607001 Greenville Plant DUNS 144846607003 Belton Plant DUNS 144846607004 Asheville Plant DUNS 144846607006 Marion Plant DUNS 144846607006 Clio Plant DUNS	М	AN	2/15	Must use
GS03	124	Application Receiver's Code Description: Code identifying party receiving transmission. Codes agreed to by trading suppliers	М	AN	2/15	Must use
GS04	373	Date Description: Date expressed as CCYYMMDD	М	DT	8/8	Must use
GS05	337	Time Description: Time expressed in 24-hour clock time as follows: HHMM, or HHMMSS, or HHMMSSD, or HHMMSSDD, where $H =$ hours (00-23), $M =$ minutes (00-59), $S =$ integer seconds (00-59) and DD = decimal seconds; decimal seconds are expressed as follows: D = tenths (0-9) and DD = hundredths (00-99)	М	ТМ	4/8	Must use
GS06	28	Group Control Number Description: Assigned number originated and maintained by the sender	М	NO	1/9	Must use
GS07	455	Responsible Agency Code Description: Code used in conjunction with Data Element 480 to identify the issuer of the standard All valid standard codes are used.	М	ID	1/2	Must use
GS08	480	Version / Release / Industry Identifier Code Description: Code indicating the version, release, subrelease, and industry identifier of the EDI standard being used, including the GS and GE segments; if code in DE455 in GS segment is X, then in DE 480 positions 1-3 are the version number; positions 4-6 are the release and subrelease, level of the version; and positions 7-12 are the industry or trade association identifiers (optionally assigned by user); if code in DE455 in GS segment is T, then other formats are allowed All valid standard codes are used.	М	AN	1/12	Must use

Example:

GS*PO*144846607001*TS ID*20040209*00533380*1*X*004010~

Transaction Set Header

To indicate the start of a transaction set and to assign a control number.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	Usage_
ST01	143	Transaction Set Identifier Code Description: Code uniquely identifying a Transaction Set	М	ID	3/3	Must use
		All valid standard codes are used.				use
ST02	329	Transaction Set Control Number	Μ	AN	4/9	Must
		Description: Identifying control number that must be unique within the transaction set functional group assigned by the originator for a transaction set				use

Example:

ST*850*1~

BEG Beginning Segment for Purchase Order

To indicate the beginning of the purchase order transaction set and transmit identifying numbers and dates.

Element Summary:

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage_
BEG01	353	Transaction Set Purpose Code	Μ	ID	2/2	Must
		Description: Code identifying purpose of transaction set.				use
		<u>Code</u> <u>Name</u>				
		00 Original				
BEG02	92	Purchase Order Type Code	М	ID	2/2	Must
		Description: Code specifying the type of purchase order.				use
		<u>Code</u> <u>Name</u>				
		NE New Order				
BEG03	324	Purchase Order Number	Μ	AN	1/22	Must
		Description: Identifying number for Purchase Order assigned by the				use
		orderer/purchaser.				
BEG05	323	Purchase Order Date	М	DT	8/8	Must
		Description: Date assigned by the purchaser to Purchase Order.				use

Example:

BEG*00*NE*963174S**20040209~

N1	Name	Pos: 310	Max: 1
		Heading - M	landatory
		Loop: N1	Elements: 4

To identify a party by type or organization, name, and code.

Element Summary:

Ref	<u>Id</u>	Element Name	<u>Req</u>	Type	Min/Max	Usage_
N101	98	Entity Identifier Code	Μ	ID	2/2	Used
		Description: Code identifying an organizational entity, a physical				
		location, or an individual				
		<u>Code</u> <u>Name</u>				
		BT Bill-To Party				
N102	93	Name	Х	AN	1/35	Used
		Description: Purchaser Name				
		<u>Code</u> <u>Name</u>				
		ROCKWELL AUTOMATION - DODGE				
N103	66	Identification Code Qualifier	X	ID	2/2	Used
		Description: Code designating the system/method of code structure used				
		for Identification Code (67).				
		<u>Code</u> <u>Name</u>				
		1 DUNS (Dun & Bradstreet)				
N104	67	Identification Code	Х	AN	2/17	Used
		Description: Code identifying a party or other code.				
		<u>Code Name</u>				
		144846607001 Greenville Plant DUNS				
		144846607003 Belton Plant DUNS				
		144846607004 Asheville Plant DUNS				
		144846607006 Marion Plant DUNS				
		144846607043 Clio Plant DUNS				

Example:

N1*BT*ROCKWELL AUTOMATION - DODGE*1*144846607001~

N2

Additional Name Information

Pos: 320	Max: 1
Heading -	Mandatory
Loop: N1	Elements: 1

To specify additional names or those longer than 35 characters in length.

Element Summary:

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
N201	93	Name	М	AN	1/35	Used
		Description: Additional purchaser name.				
		<u>Code</u> <u>Name</u> ROCKWELL AUTOMATION				

Example:

N2*ROCKWELL AUTOMATION~

N3	
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To specify the location of the named party.

Element Summary:

Ref	<u>Id</u>	Element Name	<u>Req</u>	Type	Min/Max	Usage
N301	166	Address Information	Μ	AN	1/35	Used
		Description: Address of the purchaser.				

Example:

N3*5024 PELHAM ROAD~

Ν	4
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To specify the geographic place of the named party.

Element Summary:

Ref_	Id	Element Name	Req	Type	Min/Max	Usage_
N401	19	City Name	0	AN	2/30	Used
		Description: City of purchaser				
N402	156	State or Province Code	0	ID	2/2	Used
		Description: State of purchaser				
N403	116	Postal code	0	ID	3/9	Used
		Description: Zip code of purchaser				

Example:

N4*GREENVILLE*SC*29615~

To specify basic and most frequently used line item data.

Element Summary:

Ref _	<u>Id</u>	Element Name	<u>Req</u>	Type	Min/Max	Usage_
PO101	350	Assigned Identification Description: Alphanumeric characters assigned for differentiation within a transaction set.	0	AN	1/11	Used
PO102	330	Quantity Ordered Description: Quantity ordered.	X	R	1/9	Must Use
PO103	355	Unit or Basis for Measurement Code Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken.	0	ID	2/2	Must Use
PO104	212	Unit Price Description: Price per unit of product, service, commodity, etc.	X	R	1/14	Used
PO106	235	Product/Service ID Qualifier Description: Code identifying the type/source of the descriptive number used in Product/Service ID (234). <u>Code</u> Name IN Buyer's Item Number	0	ID	2/2	Must Use
PO107	234	Product/Service ID Description: Buyer's item number.	X	AN	1/30	Must Use

Example:

PO1*0001*999*EA*9.9999**IN*963174~

Product/Item Description

Pos: 050	Max: 1				
Detail - Optional					
Loop: PO1	Elements: 2				

To describe a product or process in coded or free-form format.

Element Summary:

Ref	Id	Element Name	Req	Type	Min/Max	<u>Usage</u>
PID01	349	Item Description Type	Μ	ID	2/2	Must
		Description: Code indicating the format of a description.				use
		<u>Code</u> <u>Name</u>				
		F Free-form				
PID05	352	Description	X	AN	1/80	Used
		Description: Product description				

Example:

PID*F****BELTON HUB BLANK~

MSG Message Text Detail - Optional Loop: PO1 Elements: 1			Pos: 340	Max: 1000
Loop: PO1 Elements: 1	MSG	Message Text	Detail -	Optional
		moosago i okt	Loop: PO1	Elements: 1

To provide a free form format that would allow the transmission of text information.

Element Summary:

Ref _	<u>Id</u>	Element Name	<u>Req</u>	<u>Type</u>	Min/Max	Usage
MSG01	933	Free-Form Message Text	Μ	AN	1/264	Used
		Description: Additional description on the product.				

Example:

MSG*LIN: --- ENG. CHANGE NUMBER: NDR ---~

		Pos: 415	Max: 2
CH	Line Item Schedule	Detail - C	•
•••		Loop: PO1	Elements: 4

To specify the data for scheduling a specific line item.

Element Summary:

S

Ref _	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage_
SCH01	380	Quantity	М	R	1/15	Used
		Description: Numeric value of quantity.				
SCH02	355	Unit or Basis for Measurement Code	Μ	ID	2/2	Used
		Description: Code specifying the units in which a value is being expressed, or manner in which a measurement has been taken.				
SCH05	374	Date/Time Qualifier	Μ	ID	3/3	Used
		Description: Code specifying type of date or time, or both date and time.				
		Code <u>Name</u>				
		002 Delivery Requested				
SCH06	373	Date	Μ	DT	8/8	Used
		Description: Delivery requested date CCYYMMDD.				

Example:

SCH*999*EA***002*20040220~

СТТ	Transaction Totals	Pos: 010 Summary -	Max: 1 Optional
		Loop: N/A	Elements: 2

To transmit a hash total for a specific element in the transaction set.

Element Summary:

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage_
CTT01	354	Number of Line Items	Μ	N0	1/6	Used
		Description: Total number of line items in the transaction set.				
CTT02	347	Hash Total	0	R	1/10	Used
		Description: Sum of values of the specified data element.				

Example:

CTT*1*999~

SE Transaction Set Trailer Pos: 030 Max: Summary - Mandatory Loop: N/A Elements:
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To indicate the end of the transaction set and provide the count of the transmitted segments (including the beginning (ST) and ending (SE) segments)

Element Summary:

Ref	<u>Id</u>	Element Name	Req	Type	Min/Max	Usage_
SE01	96	Number of Included Segments	М	N0	1/10	Must
		Description: Total number of segments included in a transaction set				use
		including ST and SE segments				
SE02	329	Transaction Set Control Number	Μ	AN	4/9	Must
		Description: Identifying control number that must be unique within the				use
		transaction set functional group assigned by the originator for a transaction				
		set				

Example:

SE*12*1~

Functional Group Trailer

To indicate the end of a functional group and to provide control information

Element Summary:

Ref_	<u>Id</u>	Element Name	Req	Type	Min/Max	<u>Usage</u>
GE01	97	Number of Transaction Sets Included	Μ	N0	1/6	Must
		Description: Total number of transaction sets included in the functional group or interchange (transmission) group terminated by the trailer containing this data element				use
GE02	28	Group Control Number	Μ	N0	1/9	Must
		Description: Assigned number originated and maintained by the sender				use

Example:

GE*1*1~

IEA

Interchange Control Trailer

To define the end of an interchange of zero or more functional groups and interchange-related control segments

Element Summary:

Ref _	Id	Element Name	Req	Type	Min/Max	Usage_
IEA01	I16	Number of Included Functional Groups Description: A count of the number of functional groups included in an interchange	М	NO	1/5	Must use
IEA02	I12	Interchange Control Number Description: A control number assigned by the interchange sender	М	N0	9/9	Must use

Example:

IEA*1*00000001~