

875 Series

Intelligent Electrochemical Analyzers

Model 875CR – for Contacting Conductivity/Resistivity Measurement

Model 875EC – for Electrodeless Conductivity Measurement

Model 875PH – for pH/ORP/ISE Measurement

Model	Styles (See Note below)
875CR	C and D
875EC	C and D
875PH	B and C

— NOTE

Refer to PL 611-158 for previous styles of the 875 Series Intelligent Electrochemical Analyzers.

Give instrument Model Code when ordering.

*Parts preceded by an asterisk are recommended spare parts.
See Recommended Spare Parts Summary section for quantities.

TO ORDER PARTS, CALL 1-866-746-6477.

MODEL CODE

875 Series Intelligent Electrochemical Analyzers

<u>Description</u>	<u>Model</u>
Model 875CR Intelligent Contacting Conductivity and Resistivity Analyzer	875CR
Model 875EC Intelligent Electrodeless Conductivity Analyzer	875EC
Model 875PH Intelligent pH/ORP/ISE Analyzer	875PH
<u>Supply Voltage and Frequency</u>	
120 V ac, 50 or 60 Hz (c)	-A
220 V ac, 50 or 60 Hz	-B
240 V ac, 50 or 60 Hz	-C
24 V ac, 50 or 60 Hz	-E
100 V ac, 50 or 60 Hz	-J
24 V dc (a)	-D
<u>Enclosure Mounting</u>	
Panel Mounting - Standard Construction (b)	1
Field Mounting to a DN50 or 2-in Pipe - Standard Construction	2
Field Mounting to a Surface, w/Standard Mounting Bracket - Standard Construction	3
Field Mounting to a Surface, w/Reinforced Mounting Bracket - Rugged Construction (c)	4
<u>Electrical Safety</u>	
ATEX Protection n for Zone 2; II 3 G; EEx nC[nL], IIC	N
CSA Ordinary and Division 2 Locations, NI (b)	C
FM Ordinary and Division 2 Locations, NI (b)	F
IECEX Protection n for Zone 2; Ex nA nL nC [nL] IIC	D
UL (Underwriter's Laboratory) Ordinary Locations	U
<u>Optional Selections</u>	
Storm Door	-A
Digital HART [®] Communication and 4 to 20 mA Output	-C
Configurator Utility (Windows-Based Software Package)	-F
Rugged Construction, Shock and Vibration, with 4 to 20 mA dc Analog Outputs (c)	-N
Rugged Construction, Shock and Vibration, with 0 to 10 V dc Analog Outputs (c)	-P
Examples:875CR-A2F-A 875PH-C2C-AF 875EC-A4F-FN	

(a) The 24 V dc selection provides a volts dc four-wire analyzer (it is not a loop powered 4 to 20 mA device).

(b) Panel mounted unit must be installed as follows:

- For Ordinary and Class I, Division 2 locations; install in a protective enclosure to prevent accessibility to live parts.
- For Class II, and Class III, Division 2 locations; install in a dusttight enclosure.

NOTE

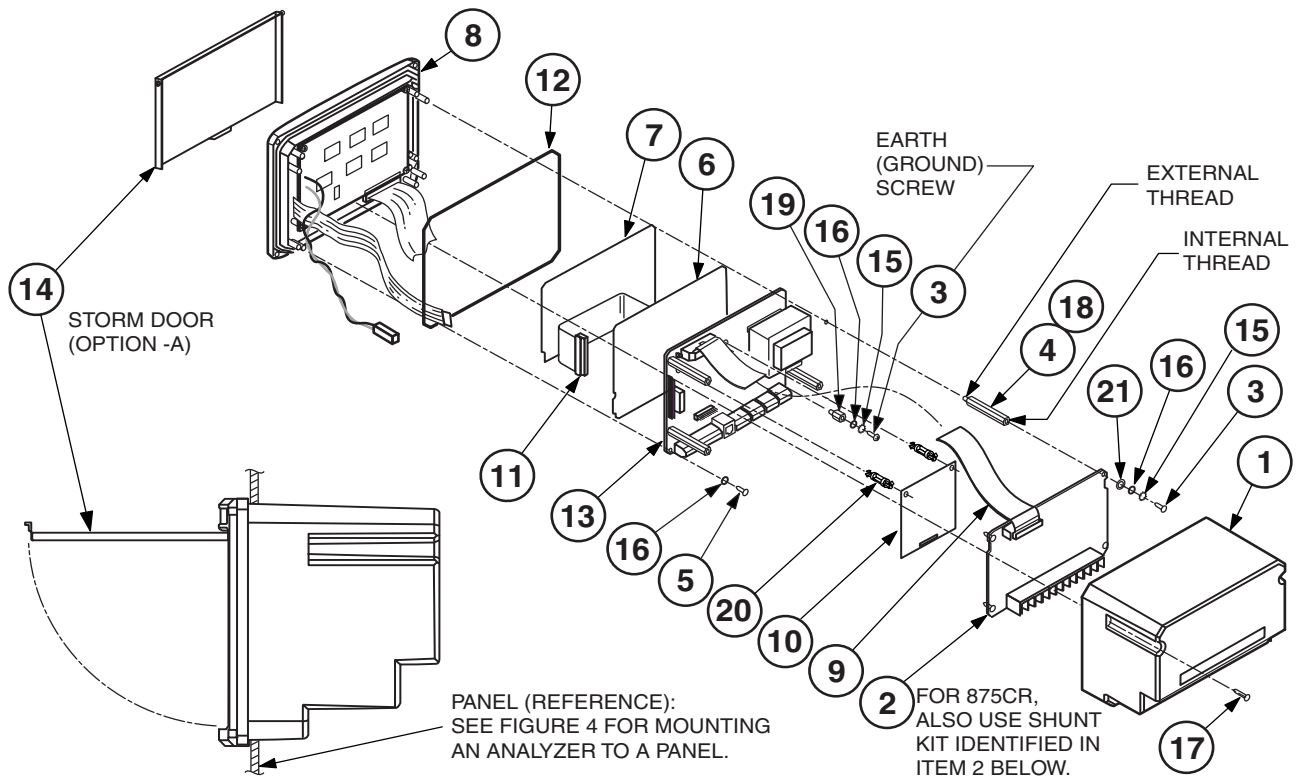
The protective and dusttight enclosures above must meet the ingress protection level required by the application, up to NEMA 4X or IP65.

(c) The rugged construction Options -N and -P are available only with:

- Supply Voltage -A (120 V ac, 50 or 60 Hz)
- Enclosure Mounting Selection 4 (Field-mounted enclosure with reinforced mounting bracket)

PARTS

Figure 1. PANEL-MOUNTED ELECTROCHEMICAL ANALYZER



PANEL-MOUNTED ELECTROCHEMICAL ANALYZER

Item	Part No.	Qty.	Part Name
1	BS809VY	1	Housing, Panel Mount
*2	Below	1	Sensor Interface PWA, Calibrated, with Firmware
	BS811KX		PWA for 875CR Analyzer (Also see Shunt Kit below):
	BS811AP		Shunt Kit (two jumpers) for use with 875CR PWA only
	BS811KY		PWA for 875EC Analyzer
	BS811KZ		PWA for 875PH Analyzer
3	A2004EC	5	Screw, Pan Head; ss, 0.138-32 x 0.375
4	X0173ZA	4	Standoff, ss, 0.138 (Internal and External Thread)
5	X0170HX	1	Screw, Self-Tapping; Plated Steel, 0.138-32 x 0.375
6	BS809XE	1	Insulator, Plastic; 0.030 Thick
7	BS809XD	1	Insulator, Plastic; 0.020 Thick
*8	BS811LB	1	Display Assembly (includes Bezel, Keypad, and Display)
9	BS809WF	1	Cable, Interconnecting
*10	BS811LU	1	Interface PWA, HART - Option -C (See Note 1)
11	BS809WE	1	Cable, Display
*12	Below	1	Gasket, Bezel
	BS809XC		Gasket for 875CR and 875PH Analyzers
	BS810YQ		Gasket for 875EC Analyzer
*13	Below	1	Processor PWA, Calibrated, with Firmware
	Table 1		875CR, Styles C and D
	Table 2		875EC, Styles C and D
	Table 3		875PH, Styles B and C

Table 1. 875CR Analyzer - Item 13, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A	120 V ac, 50/60 Hz	N/A	BS811KH	BS811TY
-B	220 V ac, 50/60 Hz	N/A	BS811KJ	BS811UB
-C	240 V ac, 50/60 Hz	N/A	BS811KK	BS811UC
-E	24 V ac, 50/60 Hz	N/A	BS811KF	BS811TW
-J	100 V ac, 50/60 Hz	N/A	BS811KG	BS811TX
-D	24 V dc	N/A	BS811PN	BS811UD

(a) For vibration qualified PWAs, refer to Figure 3.

Table 2. 875EC Analyzer - Item 13, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A	120 V ac, 50/60 Hz	N/A	BS811KN	BS811UG
-B	220 V ac, 50/60 Hz	N/A	BS811KQ	BS811UK
-C	240 V ac, 50/60 Hz	N/A	BS811KR	BS811UL
-E	24 V ac, 50/60 Hz	N/A	BS811KL	BS811UE
-J	100 V ac, 50/60 Hz	N/A	BS811KM	BS811UF
-D	24 V dc	N/A	BS811PL	BS811UM

(a) For vibration qualified PWAs, refer to Figure 3.

Table 3. 875PH Analyzer - Item 13, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style B	Style C
-A	120 V ac, 50/60 Hz	N/A	BS811KU	BS811UQ
-B	220 V ac, 50/60 Hz	N/A	BS811KV	BS811UT
-C	240 V ac, 50/60 Hz	N/A	BS811KW	BS811UU
-E	24 V ac, 50/60 Hz	N/A	BS811KS	BS811UN
-J	100 V ac, 50/60 Hz	N/A	BS811KT	BS811UP
-D	24 V dc	N/A	BS811PQ	BS811UV

(a) For vibrations qualified PWAs, refer to Figure 3.

PANEL-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
14	BS809WB	1	Storm Door (Option -A)
15	X0143RK	5	Washer, Lock, Star, ss, 0.138
16	X0143EX	6	Washer, Plain, ss, 0.138
17	X0169RN	4	Screw, Self Tapping, Plated Steel, 0.112-40 x 0.625
18	S0106ML	A/R	Adhesive, Loctite
19	X0201JK	1	Standoff, ss, 0.138 (Internal and External Thread)
20	X0201JY	2	Spacer, Snap-in, Nylon (See Note 1)
21	U0120BP	5	Washer, Flat, Nylon, 0.138
Not Shown	BS811BV	Below	HART Kit - Option -C (See Note 1)
	BS811LU	1	Interface PWA, HART (See Note 1)
	BS811FN	1	Firmware Upgrade Kit - to add HART Communication
	X0201JY	2	Spacer, Snap-in, Nylon (See Note 1)
	MI 611-207	1	Instruction, Conversion Kit - to add HART Communication
	MI 611-227	1	Instruction, 875 Analyzers - Operation, Configuration, and Calibration using HART Communicator

PANEL-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
Not Shown	BS810NX	Below	Configurator Utility Kit - Option -F
	BS809WJ	1	CD-ROM, Configurator Utility
	BS809WH	1	Cable, Serial Communication; 10 ft (See Note 2)
	MI 611-226	1	Instruction; Remote Communications Program (RCOM) for 875 Electrochemical Analyzers
Not Shown	BS809WH	1	Cable, Serial Communications, 10 ft (See Note 2)

— NOTES —

- 1 1. When HART Communication (Option -C) is initially specified with the Sales Order, Item 10 (HART interface PWA) and Item 20 (two snap-in nylon spacers) are provided assembled in place. If HART Communication is specified as an add-on after the initial 875 Analyzer Sales Order, a HART Kit is provided, along with instructions for firmware upgrade, installation, configuration, and calibration. One set of instructions is necessary to convert one or more transmitters. However, a HART interface PWA (Item 10) and two snap-in nylon spacers (Item 20) are required with each conversion, and these can be ordered separately. For example:

HART Conversion Kit Ordering Instructions - Examples

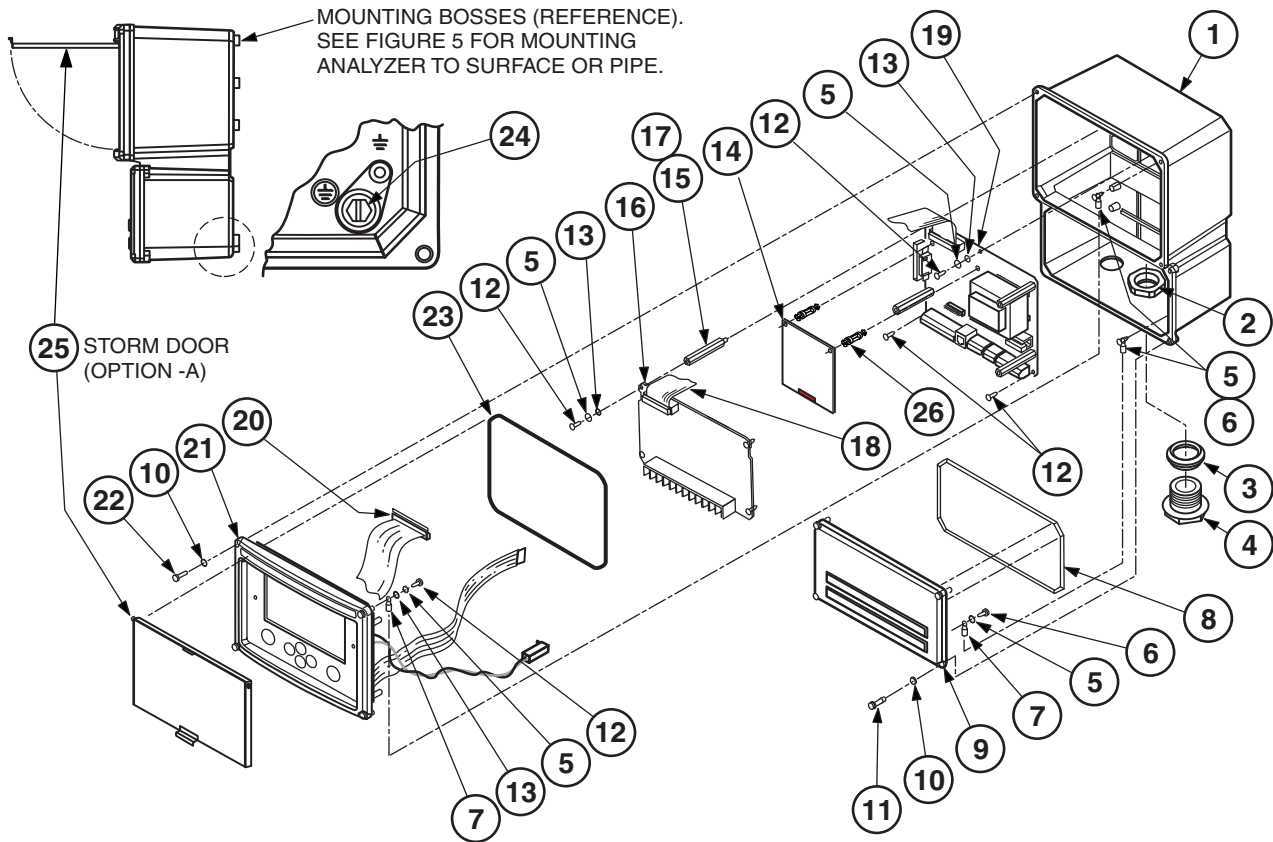
Quantity of Analyzers to be Converted	Quantity of HART Kits, Item 10, and Item 20, to be ordered:		
	HART Kit Option C P. N. BS811BV	HART Interface PWA - Item 10 P. N. BS811LU	Snap-in Nylon Spacer - Item 20 P. N. X0201JY
To Convert One Analyzer	Order One Kit	Do not order PWA (One PWA included in Kit)	Do not order spacer (Two spacers included in Kit)
To Convert Two Analyzers	Order One Kit only (a)	Order One PWA (One PWA already included in Kit)	Order Two Spacers (b) (Two spacers already included in Kit)
To Convert Six Analyzers	Order One Kit only (a)	Order Five PWAs (One PWA already included in Kit)	Order Ten Spacers (b) (Two spacers already included in Kit)
To Convert "X" Analyzers	Order One Kit only (a)	Order "X" minus One PWA	Order "2X" minus two spacers (b)

(a) Only one kit is required. If additional instructions or firmware upgrade kits are required, these, in addition to PWAs and spacers, can be ordered separately.

(b) Two spacers are required with each PWA installation.

- 2 The Serial Communications Cable is provided with the Configurator Utility Kit (Option -F), but can also be provided separately. One end of the cable connects to the RS-232-C connection on the Analyzer. The other end connects to either COM1 or COM2 on the PC. If COM1 or COM2 has a 25-pin connector, use a 25-to-9-pin adapter to make the connection.

Figure 2. FIELD-MOUNTED ELECTROCHEMICAL ANALYZER
(Except for Options -N and -P; see Figure 3 for Analyzer with Options -N and -P)



FIELD-MOUNTED ELECTROCHEMICAL ANALYZER

Item	Part No.	Qty.	Part Name
1	BS810AT	1	Housing, Field Mount
2	X0173UP	1	Locknut, 1/2 NPT, Nylon, Black
*3	X0201ED	1	Gasket, Sealing, Buna-N with ss Retainer
4	L0123CA	1	Plug, NEMA, 1/2 NPT, Ryton™, Black
5	X0143RK	8	Washer, Lock, Star, ss, 0.138
6	X0170HX	3	Screw, Self Tapping, Plated Steel, 0.138-32 x 0.375
7	BS807DP	2	Cable, Earth (Ground)
*8	Below	1	Gasket, Wiring Compartment
	BS807DS		Gasket for 875CR and 875PH Analyzers
	BS810YP		Gasket for 875EC Analyzer
9	BS810AV	1	Cover, Wiring Compartment
*10	X0173ZL	8	Washer, Nylon, Black, 0.164
11	X0173YZ	4	Screw, Captive, ss, 0.164-32 x 0.62
12	A2004EC	4	Screw, Pan Head, ss, 0.138-32 x 0.375
13	X0143EX	6	Washer, Plain, ss, 0.138
*14	BS811LU	1	Interface PWA, HART; Option -C (see Note 1)
15	X0173ZA	4	Standoff, ss, 0.138-32 (Internal and External Thread)

FIELD-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
*16	Below	1	Sensor Interface PWA, Calibrated, with Firmware
	BS811KX		875CR Analyzer (Also see Shunt Kit below):
	BS811AP		Shunt Kit (two jumpers) for use with 875CR PWA only
	BS811KY		875EC Analyzer
	BS811KZ		875PH Analyzer
17	S0106ML	A/R	Adhesive, Loctite
18	BS809WF	1	Cable, Interconnecting
*19	Below	1	Processor PWA, Calibrated, with Firmware
	Table 4		875CR, Styles C and D
	Table 5		875EC, Styles C and D
	Table 6		875PH, Styles B and C

Table 4. 875CR Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A	120 V ac, 50/60 Hz	N/A	BS811KH	BS811TY
-B	220 V ac, 50/60 Hz	N/A	BS811KJ	BS811UB
-C	240 V ac, 50/60 Hz	N/A	BS811KK	BS811UC
-E	24 V ac, 50/60 Hz	N/A	BS811KF	BS811TW
-J	100 V ac, 50/60 Hz	N/A	BS811KG	BS811TX
-D	24 V dc	N/A	BS811PN	BS811UD

(a) For vibrations qualified PWAs, refer to Figure 3.

Table 5. 875EC Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A	120 V ac, 50/60 Hz	N/A	BS811KN	BS811UG
-B	220 V ac, 50/60 Hz	N/A	BS811KQ	BS811UK
-C	240 V ac, 50/60 Hz	N/A	BS811KR	BS811UL
-E	24 V ac, 50/60 Hz	N/A	BS811KL	BS811UE
-J	100 V ac, 50/60 Hz	N/A	BS811KM	BS811UF
-D	24 V dc	N/A	BS811PL	BS811UM

(a) For vibrations qualified PWAs, refer to Figure 3.

Table 6. 875PH Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style B	Style C
-A	120 V ac, 50/60 Hz	N/A	BS811KU	BS811UQ
-B	220 V ac, 50/60 Hz	N/A	BS811KV	BS811UT
-C	240 V ac, 50/60 Hz	N/A	BS811KW	BS811UU
-E	24 V ac, 50/60 Hz	N/A	BS811KS	BS811UN
-J	100 V ac, 50/60 Hz	N/A	BS811KT	BS811UP
-D	24 V dc	N/A	BS811PQ	BS811UV

(a) For vibrations qualified PWAs, refer to Figure 3.

FIELD-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
20	BS809WE	1	Cable, Display
*21	BS811LB	1	Display Assembly (includes Bezel, Keypad, and Display)
22	X0173YY	4	Screw, Filhd, Cross Recessed, ss, 0.164-32 x 0.500
*23	Below	1	Gasket, Bezel
	BS807PG		Gasket for 875CR and 875PH Analyzers
	BS810YN		Gasket for 875EC Analyzers
24	X0173ZU	1	Screw, Gnd, Slotted Hex Head, ss, 0.164-32 x 0.375
25	BS809WB	1	Storm Door (Option -A)
26	X0201JY	2	Spacer, Snap-in, Nylon (See Note 1)
Not Shown	BS811BV	1	HART Kit - Option -C (See Note 1)
	BS811LU	1	Interface PWA, HART (See Note 1)
	BS811FN	1	Firmware Upgrade Kit - to add HART Communication
	X0201JY	2	Spacer, Snap-in, Nylon (See Note 1)
	MI 611-207	1	Instruction, Conversion Kit - to add HART Communication
	MI 611-227	1	Instruction, 875 Analyzers - Operation, Configuration, and Calibration using HART Communicator
Not Shown	BS810NX	Below	Configurator Utility Kit - Option -F
	BS809WJ	1	Diskette, Configurator Utility
	BS809WH	1	Cable, Serial Communication; 10 ft (See Note 2)
	MI 611-226	1	Instruction; Remote Communications Program (RCOM) for 875 Electrochemical Analyzers
Not Shown	BS809WH	1	Cable, Serial Communications, 10 ft (See Note 2)

SEE NEXT PAGE FOR NOTES 1 AND 2

PARTS

— NOTES —

- 1 When HART Communication (Option -C) is initially specified with the Sales Order, Item 10 (HART interface PWA) and Item 20 (two snap-in nylon spacers) are provided assembled in place. If HART Communication is specified as an add-on after the initial 875 Analyzer Sales Order, a HART Kit is provided, along with instructions for firmware upgrade, installation, configuration, and calibration. One set of instructions is necessary to convert one or more transmitters. However, a HART interface PWA (Item 10) and two snap-in nylon spacers (Item 20) are required with each conversion, and these can be ordered separately. For example:

HART Conversion Kit Ordering Instructions - Examples

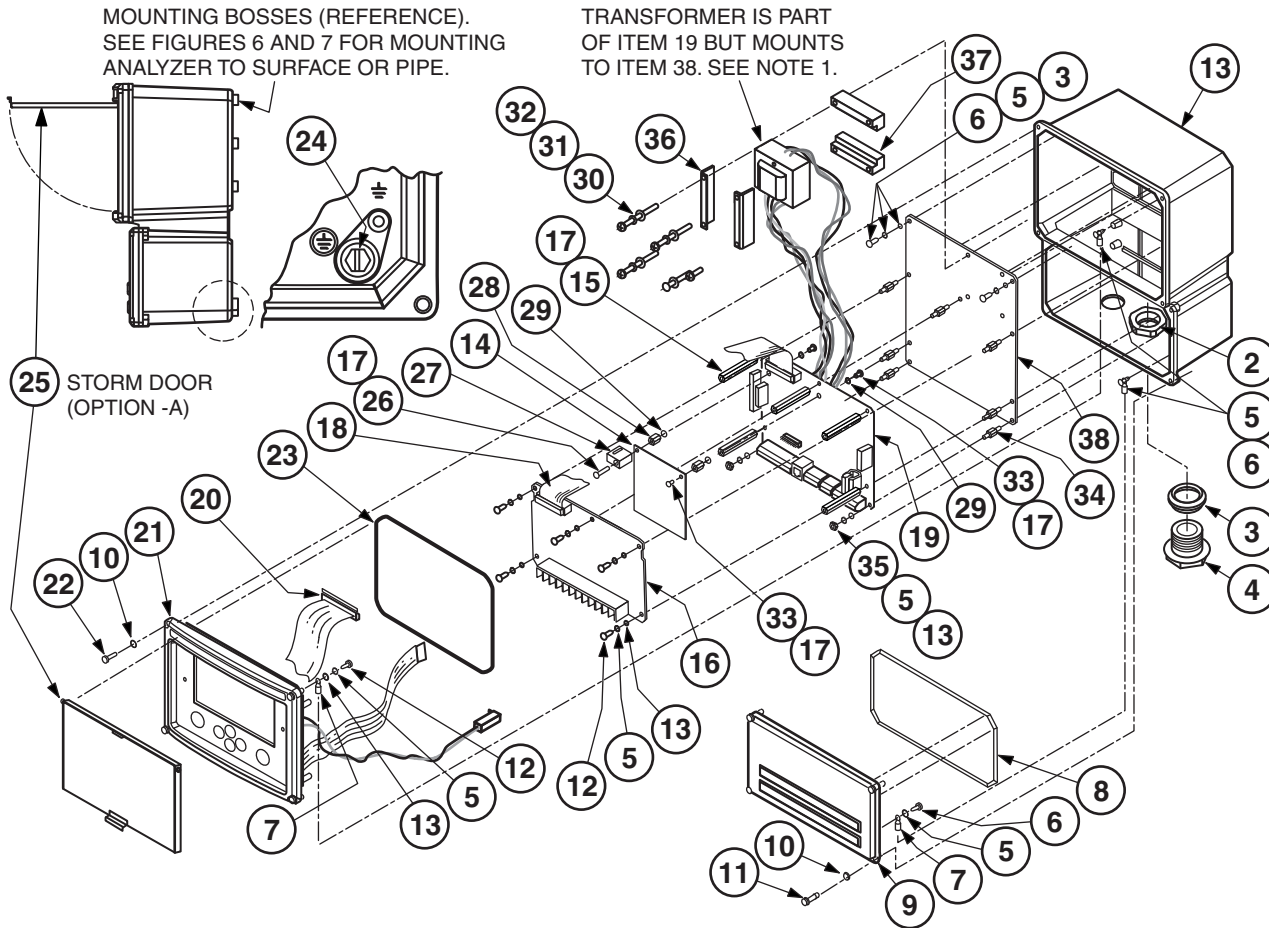
Quantity of Analyzers to be Converted	Quantity of HART Kits, Item 10, and Item 20, to be ordered:		
	HART Kit Option C P. N. BS811BV	HART Interface PWA - Item 10 P. N. BS811LU	Snap-in Nylon Spacer - Item 20 P. N. X0201JY
To Convert One Analyzer	Order One Kit	Do not order PWA (One PWA included in Kit)	Do not order spacer (Two spacers included in Kit)
To Convert Two Analyzers	Order One Kit only (a)	Order One PWA (One PWA already included in Kit)	Order Two Spacers (b) (Two spacers already included in Kit)
To Convert Six Analyzers	Order One Kit only (a)	Order Five PWAs (One PWA already included in Kit)	Order Ten Spacers (b) (Two spacers already included in Kit)
To Convert "X" Analyzers	Order One Kit only (a)	Order "X" minus One PWA	Order "2X" minus two spacers (b)

(a) Only one kit is required. If additional instructions or firmware upgrade kits are required, these, in addition to PWAs and spacers, can be ordered separately.

(b) Two spacers are required with each PWA installation.

- 2 The Serial Communications Cable is provided with the Configurator Utility Kit (Option -F), but can also be provided separately. One end of the cable connects to the RS-232-C connection on the Analyzer. The other end connects to either COM1 or COM2 on the PC. If COM1 or COM2 has a 25-pin connector, use a 25-to-9-pin adapter to make the connection.

Figure 3. FIELD-MOUNTED ELECTROCHEMICAL ANALYZER
(Vibration Qualified - For Analyzer with Options -N and -P only)



FIELD-MOUNTED ELECTROCHEMICAL ANALYZER

Item	Part No.	Qty.	Part Name
1	BS810AT	1	Housing, Field Mount
2	X0173UP	1	Locknut, 1/2 NPT, Nylon, Black
*3	X0201ED	1	Gasket, Sealing, Buna-N with ss Retainer
4	L0123CA	1	Plug, NEMA, 1/2 NPT, Ryton™, Black
5	X0143RK	8	Washer, Lock, Star, ss, 0.138
6	X0170HX	3	Screw, Self Tapping, Plated Steel, 0.138-32 x 0.375
7	BS807DP	2	Cable, Earth (Ground)
*8	Below	1	Gasket, Wiring Compartment
	BS807DS		Gasket for 875CR and 875PH Analyzers
	BS810YP		Gasket for 875EC Analyzer
9	BS810AV	1	Cover, Wiring Compartment
*10	X0173ZL	8	Washer, Nylon, Black, 0.164
11	X0173YZ	4	Screw, Captive, ss, 0.164-32 x 0.62
12	A2004EC	4	Screw, Pan Head, ss, 0.138-32 x 0.375
13	X0143EX	6	Washer, Plain, ss, 0.138
*14	BS811LU	1	Interface PWA, HART; Option -C
15	X0201JD	5	Standoff, ss, 0.138-32 (Internal and External Thread)

PARTS

FIELD-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
*16	Below	1	Sensor Interface PWA, Calibrated, with Firmware
	BS811KX		875CR Analyzer (Also see Shunt Kit below):
	BS811AP		Shunt Kit (two jumpers) for use with 875CR PWA only
	BS811KY		875EC Analyzer
	BS811KZ		875PH Analyzer
17	S0106ML	A/R	Adhesive, Loctite
18	BS809WF	1	Cable, Interconnecting
*19	Below	1	Processor PWA, Calibrated, with Firmware
	Table 7		875CR, Styles C and D
	Table 8		875EC, Styles C and D
	Table 9		875PH, Styles B and C

Table 7. 875CR Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A (a)	120 V ac, 50/60 Hz	Yes (a)	BS811PC (a)	BS811TZ (a)
-A (b)	120 V ac, 50/60 Hz (b)	Yes (b)	BS811PD (b)	BS811UA (b)

(a) This vibration qualified version has a 4 to 20 mA dc analog output and is available with rugged construction Option -N only.

(b) This vibration qualified version has a 0 to 10 V dc analog output and is available with rugged construction Option -P only.

Table 8. 875EC Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style C	Style D
-A (a)	120 V ac, 50/60 Hz	Yes (a)	BS811KP (a)	BS811UH (a)
-A (b)	120 V ac, 50/60 Hz	Yes (b)	BS811NH (b)	BS811UJ (b)

(a) This vibration qualified version has a 4 to 20 mA dc analog output and is available with rugged construction Option -N only.

(b) This vibration qualified version has a 0 to 10 V dc analog output and is available with rugged construction Option -P only.

Table 9. 875PH Analyzer - Item 19, Processor PWAs - Part Numbers

Voltage Code	Code Description	Vibration Qualified (a)	Processor PWA Part No. - Calibrated, with Firmware	
			Style B	Style C
-A (a)	120 V ac, 50/60 Hz	Yes (a)	BS811NK (a)	BS811UR (a)
-A (b)	120 V ac, 50/60 Hz	Yes (b)	BS811NX (b)	BS811US (b)

(a) This vibration qualified version has a 4 to 20 mA dc analog output and is available with rugged construction Option -N only.

(b) This vibration qualified version has a 0 to 10 V dc analog output and is available with rugged construction Option -P only.

FIELD-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
20	BS809WE	1	Cable, Display
*21	BS811LB	1	Display Assembly (includes Bezel, Keypad, and Display)
22	X0173YY	4	Screw, Filhd, Cross Recessed, ss, 0.164-32 x 0.500
*23	Below	1	Gasket, Bezel
	BS807PG		Gasket for 875CR and 875PH Analyzers
	BS810YN		Gasket for 875EC Analyzers
24	X0173ZU	1	Screw, Gnd, Slotted Hex Head, ss, 0.164-32 x 0.375

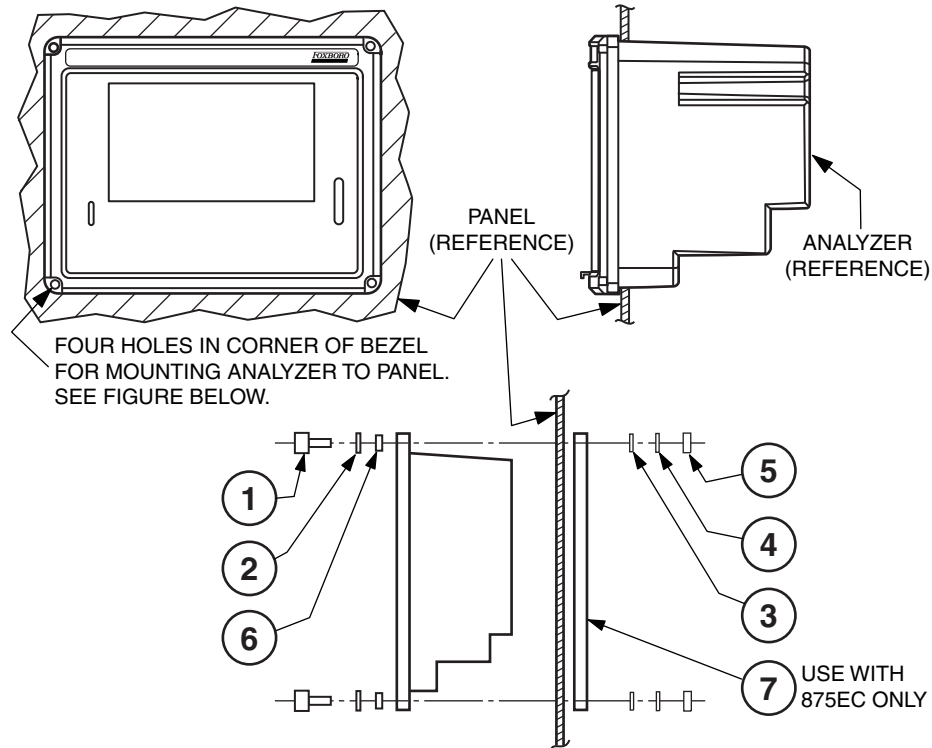
FIELD-MOUNTED ELECTROCHEMICAL ANALYZER (Continued)

Item	Part No.	Qty.	Part Name
25	BS809WB	1	Storm Door (Option -A)
26	A2004EK	1	Screw, Pan Head, ss, 0.138-32 x 0.750
27	BS811NN	1	Clamp, Battery
28	X0170MG	2	Support, PWA
29	U0120BP	4	Washer, Flat, Nylon, 0.138
30	X0124FR	4	Screw, Pan Head, ss, 0.164-32 x 2.0
31	X0143SB	4	Lockwasher, External Tooth, ss, 0.164
32	X0143EK	4	Washer, Plain, Flat, ss, 0.164
33	X0166HU	3	Screw, Pan Head, ss, 0.138-32 x 0.250
34	BS805EV	7	Standoff, ss, 0.138-32, External Threads
35	2800108	5	Nut, Hex Head, ss, 0.138-32
36	BS811EK	2	Retainer, Transformer
37	BS811EJ	2	Spacer between Baseplate and Transformer
38	BS811EL	1	Baseplate
Not Shown	BS810NX	Below	Configurator Utility Kit - Option -F
	BS809WJ	1	Diskette, Configurator Utility
	BS809WH	1	Cable, Serial Communication; 10 ft (See Note 2)
	MI 611-226	1	Instruction; Remote Communications Program (RCOM) for 875 Electrochemical Analyzers
Not Shown	BS809WH	1	Cable, Serial Communications, 10 ft (See Note 2)

— NOTES —

- 1 Referring to Figure 3, note that the transformer shown is part of (and wired to) the processor PWA (Item 19), although it is physically mounted to the baseplate (Item 38) and secured with retainers, spacer supports, and hardware. Should the processor PWA require replacement, carefully observe the assembly relationship between the PWA (with attached transformer) and the baseplate.
- 2 The Serial Communications Cable is provided with the Configurator Utility Kit (Option -F), but can also be provided separately. One end of the cable connects to the RS-232-C connection on the Analyzer. The other end connects to either COM1 or COM2 on the PC. If COM1 or COM2 has a 25-pin connector, use a 25-to-9-pin adapter to make the connection.
- 3 A HART Conversion Kit is generally offered for users who did not select HART Communications (Option -C) with the initial sales order, but now wish to add HART Communications in the field. This Conversion Kit is offered with panel-mounted analyzers not having the -N or -P (rugged construction) options. For users who initially ordered analyzers with the -N or -P options, but without HART, either return the analyzer for factory conversion to HART, or contact Global Customer Support for further information.

Figure 4. MOUNTING KITS FOR PANEL-MOUNTED ELECTROCHEMICAL ANALYZERS
(ENCLOSURE MOUNTING SELECTION 1)



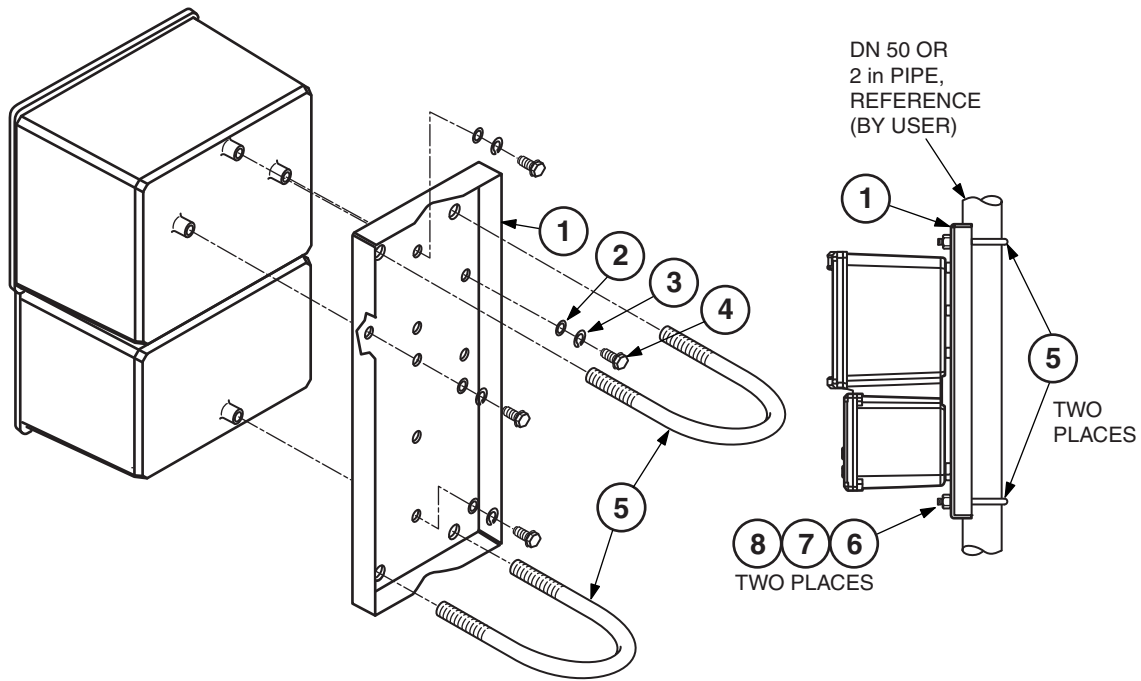
PANEL MOUNTING KIT FOR MODELS 875CR AND 875PH

Item	Part No.	Qty.	Part Name
–	BS810NG	Below	Kit, Panel Mount for Models 875CR and 875PH
1	X0174AQ	4	Screw, Filhd, Cross Recessed, Black, ss, 0.164-32 x 0.875
2	X0173ZL	4	Washer, Plain, Nylon, Black, 0.164
3	X0146RK	4	Washer, Plain, ss, 0.164
4	X0143SB	4	Washer, Lock, External Tooth, ss, 0.164
5	0028902	4	Nut, Hex Head, ss, 0.164
6	2800001	4	O-Ring, Buna-N, 0.114 I.D.

PANEL MOUNTING KIT FOR MODEL 875EC

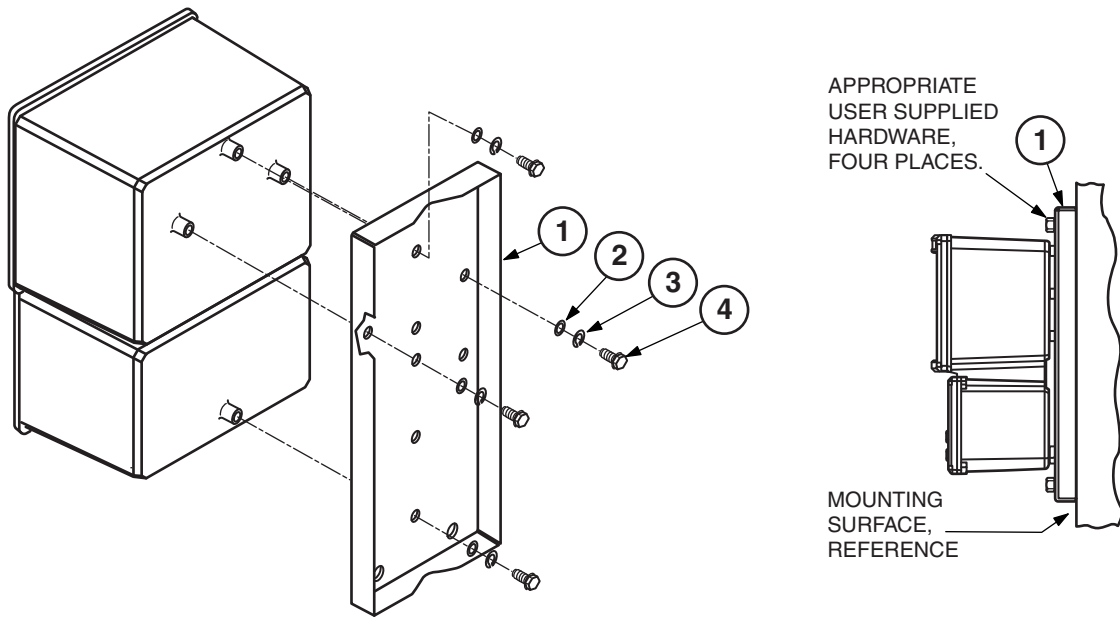
Item	Part No.	Qty.	Part Name
–	BS811BH	Below	Kit, Panel Mount for Model 875EC
1	X0174AQ	4	Screw, Filhd, Cross Recessed, Black, ss, 0.164-32 x 0.875
2	X0173ZL	4	Washer, Plain, Nylon, Black, 0.164
3	X0146RK	4	Washer, Plain, ss, 0.164
4	X0143SB	4	Washer, Lock, External Tooth, ss, 0.164
5	0028902	4	Nut, Hex Head, ss, 0.164
6	2800001	4	O-Ring, Buna-N, 0.114 I.D.
7	BS811AR	1	Plate, Backup, Steel

Figure 5. MOUNTING KIT FOR PIPE-MOUNTED ELECTROCHEMICAL ANALYZERS
WITH STANDARD MOUNTING BRACKET
(ENCLOSURE MOUNTING SELECTION 2)



Item	Part No.	Qty.	Part Name
-	BS809XG	Below	Kit, Pipe Mount, Standard Installation
1	BS809XB	1	Mounting Bracket, Standard; Painted Steel
2	X0143AX	4	Washer, Plain; ss, 0.250
3	K0123ME	4	Washer, Lock; ss, 0.250
4	X0174AH	4	Screw, Cap, Hex Head; ss, 0.250-20 x 0.625
5	N0126KC	2	Clamp, U-Bolt; Cad. Plated Steel, 0.312-18
6	X0143AY	4	Washer, Plain; ss, 0.312
7	A2015AB	4	Washer, Lock; ss, 0.312
8	X0142BW	4	Nut, Hex Head; ss, 0.312-18

Figure 6. MOUNTING KIT FOR SURFACE-MOUNTED ELECTROCHEMICAL ANALYZERS WITH STANDARD MOUNTING BRACKET (ENCLOSURE MOUNTING SELECTION 3)

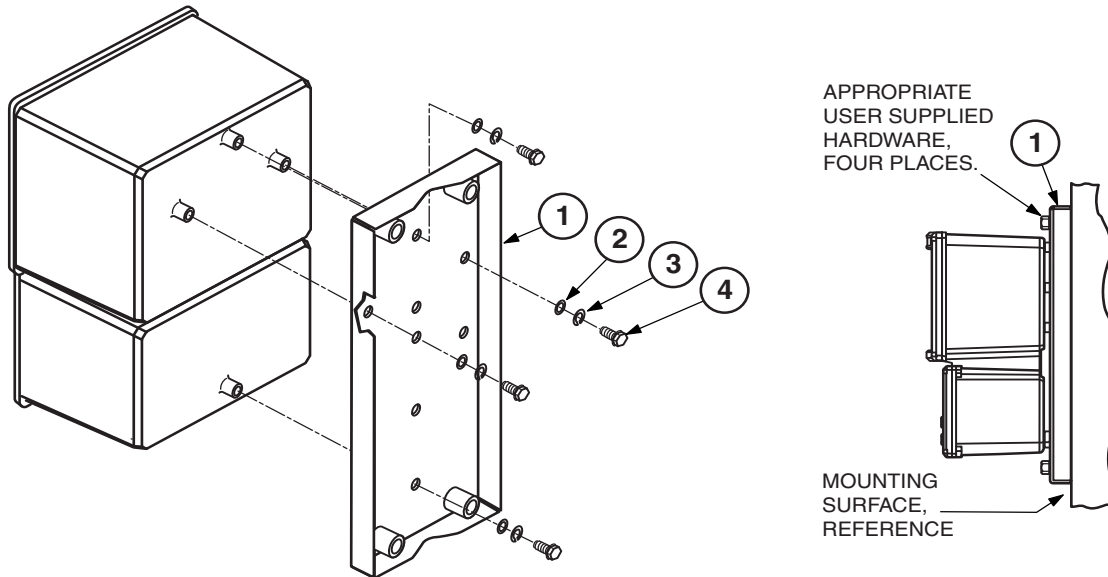


Item	Part No.	Qty.	Part Name
-	BS809XF	Below	Kit, Surface Mount; Standard Installation (see Note)
1	BS809XB	1	Mounting Bracket, Standard; Painted Steel
2	X0143AX	4	Washer, Plain; ss, 0.250
3	K0123ME	4	Washer, Lock; ss, 0.250
4	X0174AH	4	Screw, Cap, Hex Head; ss, 0.250-20 x 0.625

— NOTE —

For surface-mounted analyzer with a reinforced mounting bracket, refer to Figure 7.

Figure 7. WITH REINFORCED MOUNTING BRACKET
(ENCLOSURE MOUNTING SELECTION 4)



WITH REINFORCED MOUNTING BRACKET

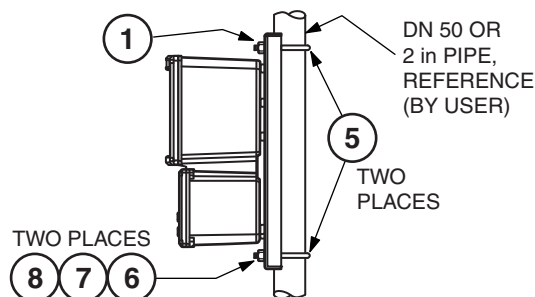
Item	Part No.	Qty.	Part Name
-	BS811FL	Below	Kit, Mounting, Ruggedized Installation (see Note 1)
1	BS811FB	1	Mounting Bracket, Reinforced; Painted Steel
2	X0143AX	4	Washer, Plain; ss, 0.250
3	K0123ME	4	Washer, Lock; ss, 0.250
4	X0174AH	4	Screw, Cap, Hex Head; ss, 0.250-20 x 0.625

NOTES

- 1 The reinforced mounting bracket (Item 1) is required with the rugged construction Options -N and -P. Refer to Model Code.
- 2 Although this kit has been designed for ruggedized surface mounting, it may also be used for pipe mounting. In this case, Items 5, 6, 7, and 8 are required. See Figure and parts below.

WITH REINFORCED MOUNTING BRACKET (Continued)

Item	Part No.	Qty.	Part Name
5	N0126KC	2	Clamp, U-Bolt; Plated Steel, 0.312-18 (see Note 2)
6	X0143AY	4	Washer, Plain; ss, 0.312 (see Note 2)
7	A2015AB	4	Washer, Lock; ss, 0.312 (see Note 2)
8	X0142BW	4	Nut, Hex Head; ss, 0.312-18 (see Note 2)



**RECOMMENDED SPARE PARTS SUMMARY
FOR PANEL-MOUNTED ANALYZERS**

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
1	2	Below BS811KX BS811KY BS811KZ	Sensor Interface PWA, Calibrated 875CR Analyzer 875EC Analyzer 875PH Analyzer	1	2	5
	8	BS811LB	Display Assembly	1	2	5
	10 (Optional) (Note a)	BS811LU (Note a)	Interface PWA, HART - Option -C	1	2	5
	12	Below BS809XC BS810YQ	Gasket, Bezel, Tapered For 875CR and 875PH Analyzers For 875EC Analyzers	1	3	10
	13	Below Table 1 Table 2 Table 3	Processor PWA, Calibrated, with Firmware 875CR, Styles C and D 875EC, Styles C and D 875PH, Styles B and C	1	2	5
	20 (Optional) (Note a)	X0201JY (Note a)	Spacer, Snap-in, Nylon Two required with Item 10	2	4	10

(a) When HART Communications is selected with the initial sales order for factory installation, the HART Interface PWA part number BS811LU and two snap-in spacers (part number X0201JY) are recommended spares. When Item 10 is replaced, the 875's unique HART identifier will also change.

RECOMMENDED SPARE PARTS SUMMARY

**FOR FIELD-MOUNTED ANALYZERS
(EXCEPT FOR Analyzers having Option -N or -P)**

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
2	3	X0201ED	Gasket, Sealing, Buna-N w/ss Retainer	1	3	10
	8	Below BS807DS BS810YP	Gasket, Wiring Compartment For 875CR and 875PH Analyzers For 875EC Analyzers	1	3	10
	10	X0173ZL	Nylon Washer, Black, 0.164	4	8	20
	14 (Optional) (Note a)	BS811LU (Note a)	Interface PWA, HART - Option -C	1	2	5
	16	Below BS811KX BS811KY BS811KZ	Sensor Interface PWA, Calibrated 875CR Analyzer 875EC Analyzer 875PH Analyzer	1	2	5
	19	Below Table 4 Table 5 Table 6	Processor PWA, Calibrated, with Firmware 875CR, Styles C and D 875EC, Styles C and D 875PH, Styles B and C	1	2	5
	21	BS811LB	Display Assembly	1	2	5
	23	Below BS807PG BS810YN	Gasket, Bezel For 875CR and 875PH Analyzers For 875EC Analyzers	1	3	10
	26 (Optional) (Note a)	X0201JY (Note a)	Spacer, Snap-in, Nylon Two required with Item 10	2	4	10

(a) When HART Communications is selected with the initial sales order for factory installation, the HART Interface PWA part number BS811LU and two snap-in spacers (part number X0201JY) are recommended spares. When Item 10 is replaced, the 875's unique HART identifier will also change.

RECOMMENDED SPARE PARTS SUMMARY

RECOMMENDED SPARE PARTS SUMMARY

**FOR VIBRATION QUALIFIED, RUGGED CONSTRUCTION, FIELD-MOUNTED ANALYZERS
(FOR Analyzers having Option -N or -P only)**

Figure Number	Item Number	Part Number	Part Name	Number of Parts Recommended for		
				1 Inst.	5 Inst.	20 Inst.
3	3	X0201ED	Gasket, Sealing, Buna-N w/ss Retainer	1	3	10
	8	Below BS807DS BS810YP	Gasket, Wiring Compartment For 875CR and 875PH Analyzers For 875EC Analyzers	1	3	10
	10	X0173ZL	Nylon Washer, Black, 0.164	4	8	20
	14	BS811LU	Interface PWA, HART - Option -C	1	2	5
	16	Below BS811KX BS811KY BS811KZ	Sensor Interface PWA, Calibrated 875CR Analyzer 875EC Analyzer 875PH Analyzer	1	2	5
	19	Below Table 7 Table 8 Table 9	Processor PWA, Calibrated, with Firmware 875CR, Styles C and D 875EC, Styles C and D 875PH, Styles B and C	1	2	5
	21	BS811LB	Display Assembly	1	2	5
	23	Below BS807PG BS810YN	Gasket, Bezel For 875CR and 875PH Analyzers For 875EC Analyzers	1	3	10

