

# MFC 4150 SERIES HART COMMUNICATOR

REVISIONS HISTORY				
REV.	ECO #	DESCRIPTION	DATE	BY
IR	EO - 6398	INITIAL RELEASE	12-20-07	TL
A	EO - 6443	CORRECT ATEX STRING AND "IS" MARK	2-13-08	TL

## NON-HAZARDOUS LOCATION

MFC 4150  
MFC 4150X

- 1 Batteries:(6) AA Alkaline battery replacement,(removal/installation), shall only be performed in a non-hazardous area. Do not mix new with used batteries or of different type or manufacture.
- 2 Dongle Connector may be used, (Meriam P/N Z4150-10A)
- 3 AC/DC adapter may be used, (Meriam P/N 9B000007) Input 110-240 VAC / Output 9VDC 1A.
- 4 RS232 port may be used.
5. 0.7W MAX. normal use with back light on.  
MFC Input Voltage 9VDC

### Hart Terminals:

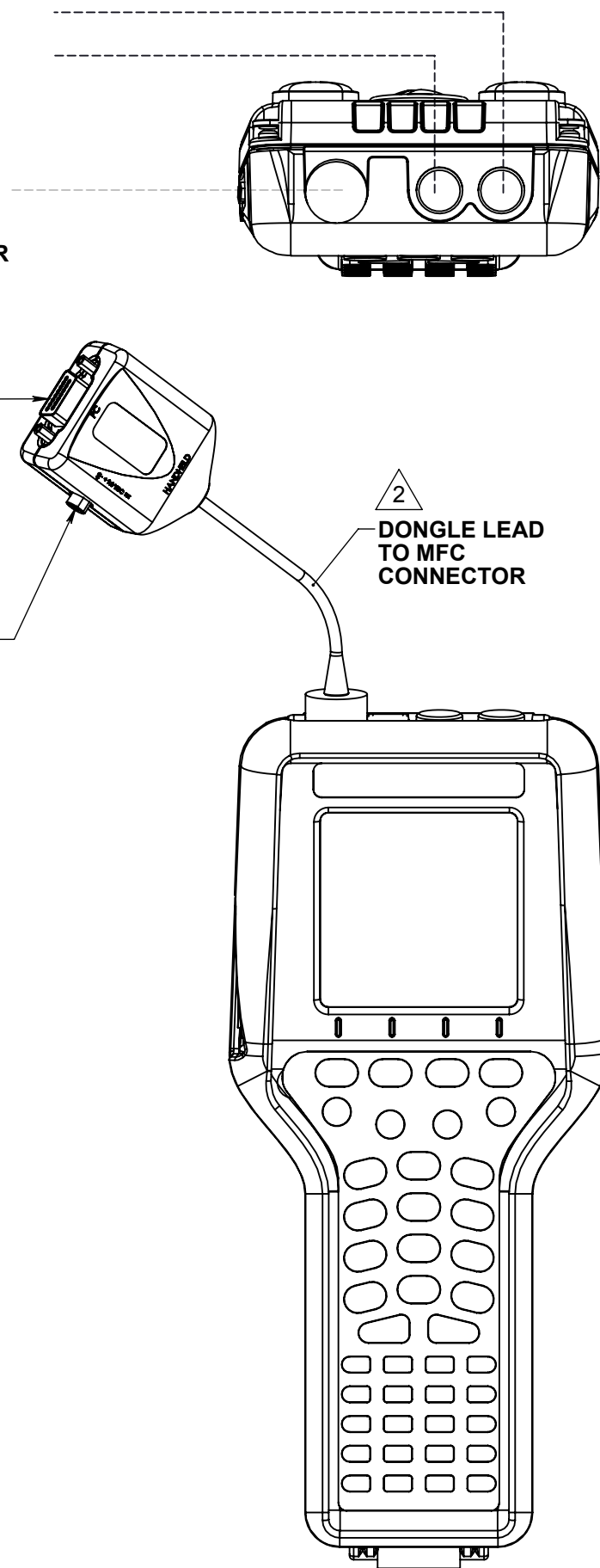
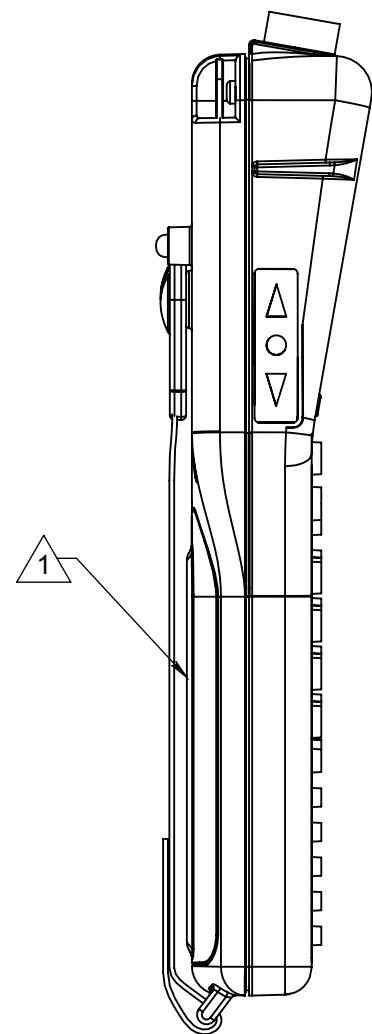
30 VDC Max.  
Hart Comm.

DONGLE CONNECTOR

RS232 Comm. to PC

AC/DC Connector

DONGLE LEAD TO MFC CONNECTOR



## HAZARDOUS LOCATION

MFC 4150X

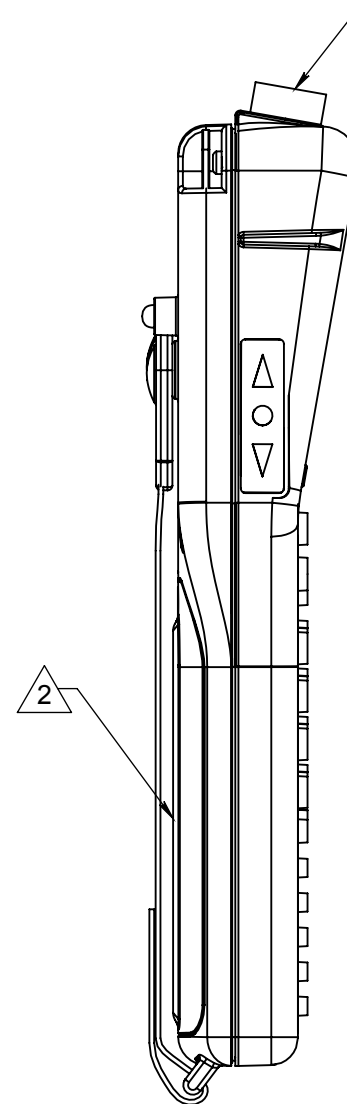
CE 0539 II 1 G  
EEx ia IIC T4  
DEMKO 08 ATEX 0726203

Intrinsically Safe, Exia  
Class I Div 1 Groups A, B, C, D: T4  
-5°C<Ta<+50°C

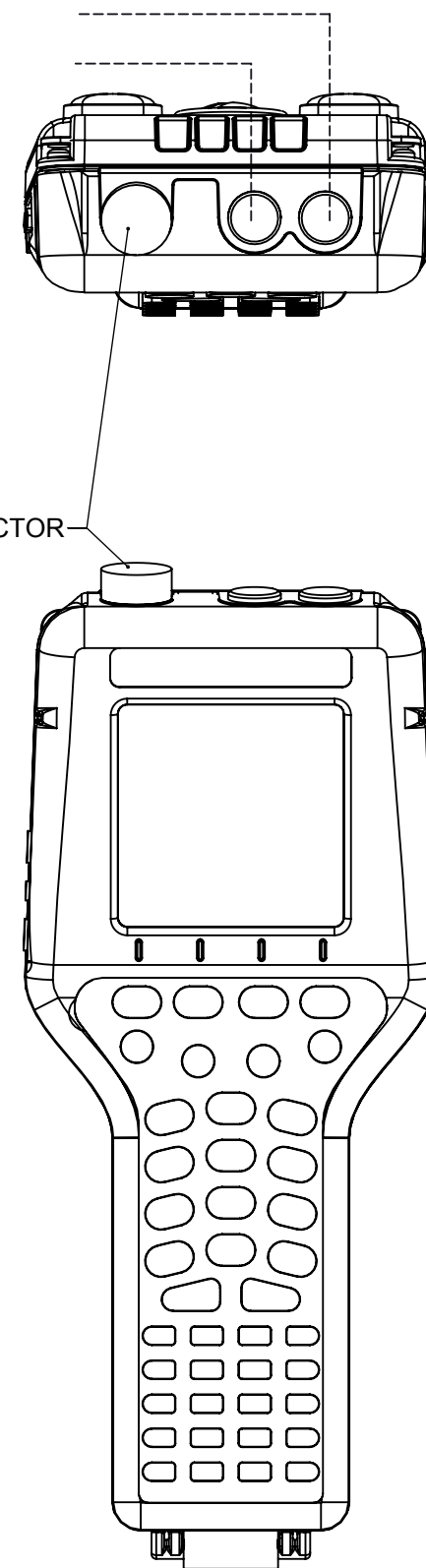
### Hart Terminals:

Connect to Certified Intrinsically Safe circuit only for Hart Comm.  
Vmax= 30VDC Imax= 100mA  
Ci = 0 Li= 0

Note: Capacitance and Inductance values connected to the Intrinsically safe circuit are not to exceed the values specified by the entity parameters. Use Ccable=60pf/ft and Lcable=.2μH/ft for cable length used.



DO NOT USE DONGLE CONNECTOR



## WARNINGS:

1. SUBSTITUTING OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY!
2. To prevent ignition of flammable or explosive atmospheres,
  - Disconnect power before servicing.
  - Do Not open or service unit including battery compartment, in flammable or explosive atmosphere.
  - Do Not mix the old batteries with new or mix batteries from different manufacturers.
  - Do Not replace batteries in explosive or hazardous atmosphere.
  - Do Not use any battery other than these listed.

(6) AA Alkaline, Duracell PC1500  
Alkaline, Duracell MN1500  
Alkaline, Varta 4906

3. Dongle Connector Must Not Be Used.

- a. RS232 comm. port Must Not Be Used.
- b. AC/DC Adapter Must Not Be Used.

## NOTE:

1. Pimax (Hazardous Location Use) = 0.7W MAX. with back light on.

## MFC 4150 Series Intrinsic Safety Control Drawing

### RELATED DRAWING

DEMKO APPROVED DRAWING  
NO REVISION TO DRAWING  
ALLOWED WITHOUT APPROVAL  
OF THE STANDARDS ENGINEER

PROPRIETARY AND CONFIDENTIAL  
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF MERIAM PROCESS TECHNOLOGIES. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF MERIAM PROCESS TECHNOLOGIES IS PROHIBITED.

### UNLESS OTHERWISE SPECIFIED: DIM. ARE IN INCH/(MM)

1. DIMENSIONS AND TOLERANCING PER ASME Y14.5M-1994
2. INCH STANDARD AND INCLUDE APPLIED FINISHES
3. MULTIVIEW AND SECTIONAL VIEW DRAWINGS PER ASME Y14.3M-1994
4. APPLICATION OF ENGINEERING DRAWINGS PER ASME Y14.24-1999
5. REMOVE BURRS AND SHARP EDGES: MAX = .020/[0.5]
7. CHAMFER OR DEBURR HOLES: MAX = .010/[0.25]
8. MACHINED FILLET RADIUS: .020/[0.5]
9. MACHINED SURFACE FLAT WITHIN .001 IN/IN [0.25mm/mm]; OTHER SURFACE FLAT WITHIN .005 IN/IN [0.127 mm/mm]
10. SURFACE FINISHES: 125 μIN or [3.2 μm]
11. CONCENTRICITY MACH. SURF. TIR WITHIN 1/2 SUM OF DIAM.TOLERANCE, .001 / [0.025] MIN.
12. TOLERANCES DECIMALS ARE:
 

INCH	mm	ANGULAR
XX ± .030	XX ± 0.8	∠ ± 0°30'
X.XX ± .010	X.XX ± 0.25	
X.XXX ± .005	X.XXX ± 0.13	

MATERIAL: ;  
OPTIONAL:  
FINISH:  
OPTIONAL:

### APPROVALS

	NAME	DATE
DRAWN	DAVID HALAN	1-26-07
CHECKED	TIM LINT	1-26-07
ENG APPR.	STEVE WALKER	1-26-07
MFG APPR.		
Q.A.		

COMMENTS:  
DOCUMENTED ON 3D CAD with SolidWorks.  
Solids File:mfc\_12-06\_rev2\_metalclip\_2  
Drawing File:9R000052-A W RELATED  
WHERE USED:MERIAM MANUAL



10920 MADISON AVENUE  
CLEVELAND, OHIO 44102

TITLE:  
**MFC 4150 HART Communicator  
Meriam Control Drawing**

SIZE DWG. NO. REV  
**C 9R000052 A**

SCALE: 1:1 WEIGHT: SHEET 1 OF 1

DO NOT SCALE DRAWING