VINGTOR STENTOFON by ZENITEL GROUP				Safety Guide	
Created by:	Erik Bjørkander	**Date:**	24.05.2017	**Doc. revision:**	2
Title:	**Safety guide for using IS-mA1 sounder with VSP-Ex**				

Ex related document.
All changes must be approved by
Zenitel Ex-responsible

The Banshee IS28 MK5 Intrinsically Safe Sounder from Hosiden Besson Ltd. is no longer available.

The IS-mA1 Intrinsically Safe Sounder from European Safety Systems Ltd. can be used as a replacement.

This can be connected to the VSP buffer units VSP-5004, VSP-5008 and VSP-5012 if the safety guidelines below are followed.

Power is supplied to the sounder via the + and – terminals which have the following input safety parameters:

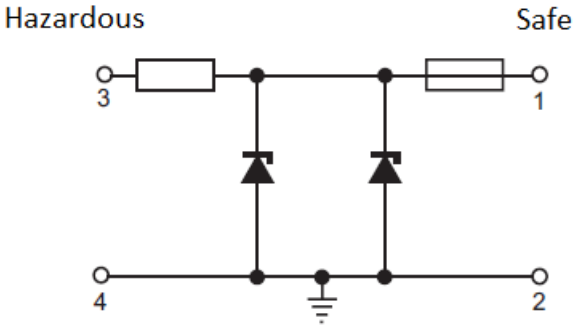
Ui = 28V
Ii = 93mA
Pi = 660mW
Ci = 0
Li = 0

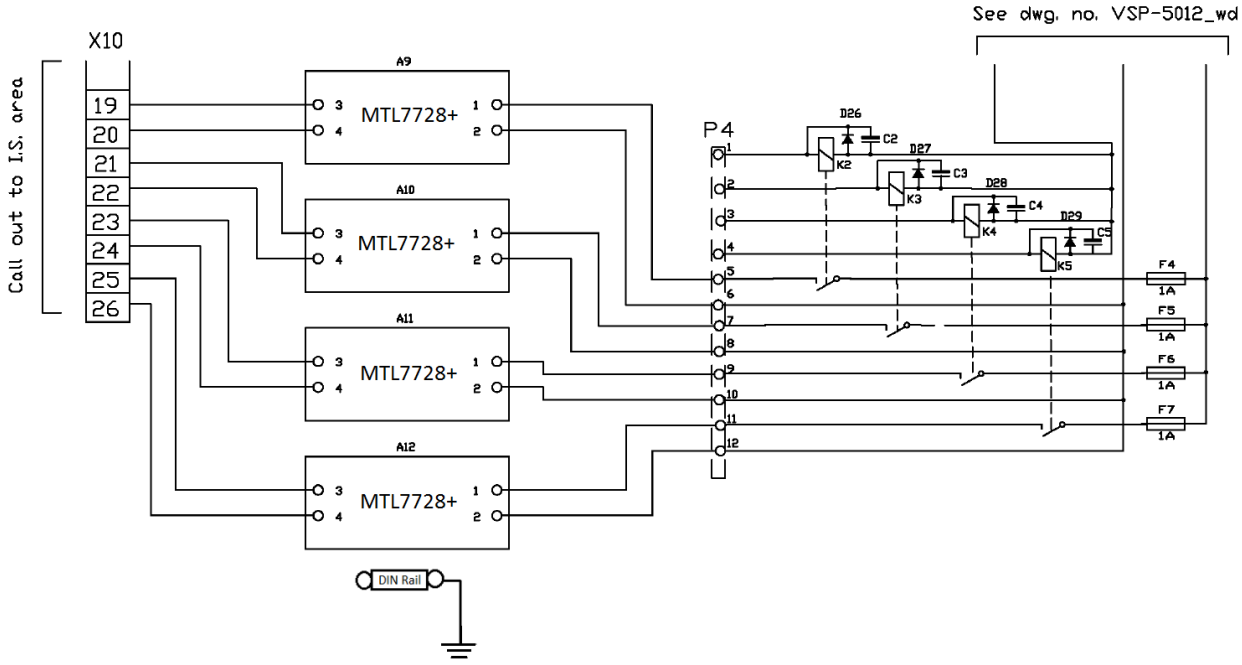
The IS-mA1 sounder may be powered from an ATEX certified Zener barrier which have output parameters equal to or less than 28V, 93mA and 660mW, where Io is resistively limited. The maximum permitted cable parameters are as specified on the certificate of the Zener barrier. The total capacitance connected to terminals + wrt - (i.e. the capacitance of the cable plus any other capacitance) shall not exceed 83nF.

Connection using MTL7728+ Zener barrier

The MTL7728+ Zener barrier has the following output safety parameters for terminal 3 wrt terminal 4:

IS-mA1			MTL7728+	
Ui:	28V	=	Uo:	28V
Ii:	93mA	=	Io:	93mA
Pi:	660mW	>	Po:	650mW

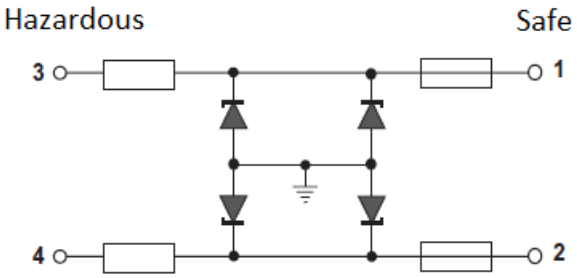




Connection using MTL7779+ Zener barrier

The MTL7779+ Zener barrier is a dual version of the MTL7728+ Zener barrier, and has the following output safety parameters:

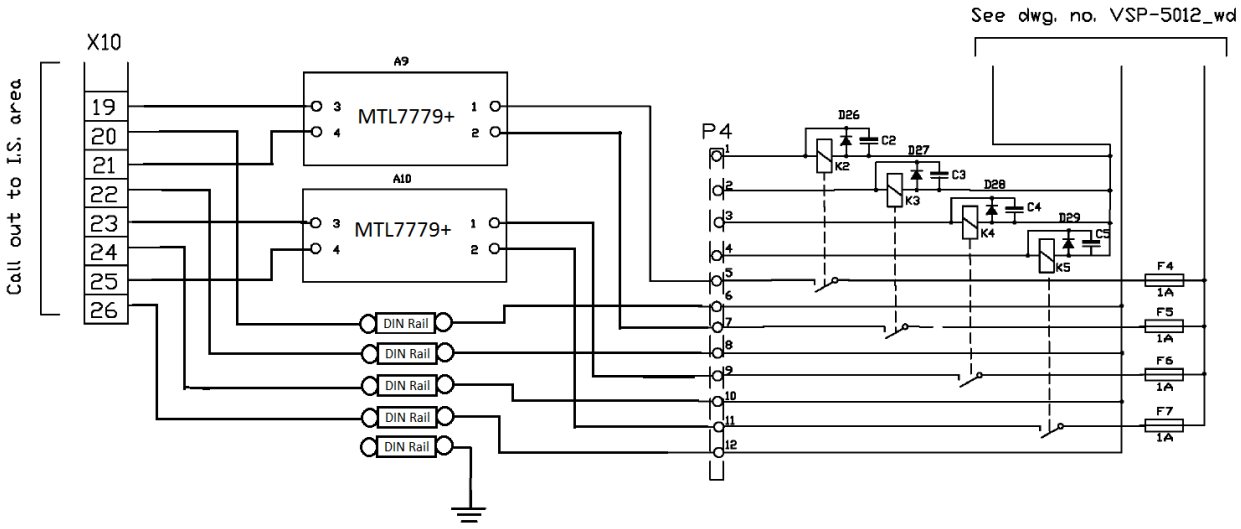
IS-mA1			MTL7779+	
Ui:	28V	=	Uo:	28V
Ii:	93mA	=	Io:	93mA
Pi:	660mW	>	Po:	650mW



The safety parameters are valid for

- Terminal 3 wrt DIN Rail Foot
- Terminal 4 wrt DIN Rail Foot

Warning: Connecting the sounder between terminal 3 and 4 is not permitted.



Connection using MTL7787+ Zener barrier

The MTL7787+ Zener barrier has the following output safety parameters for terminal 3 wrt terminal 4:

IS-mA1			MTL7728+	
Ui:	28V	=	Uo:	28V
Ii:	93mA	=	Io:	93mA
Pi:	660mW	>	Po:	650mW