



# EI, EIO INTRINSICALLY SAFE VALVES

## Definitions

$C_a$  : Maximum Allowed Capacitance

$I_{sc}$  : Maximum Output Current

$V_{oc}$  : Maximum Output Voltage

$C_i$  : Maximum Internal Capacitance

$L_a$  : Maximum Allowed Inductance

$V_{max}$  : Maximum Input Voltage

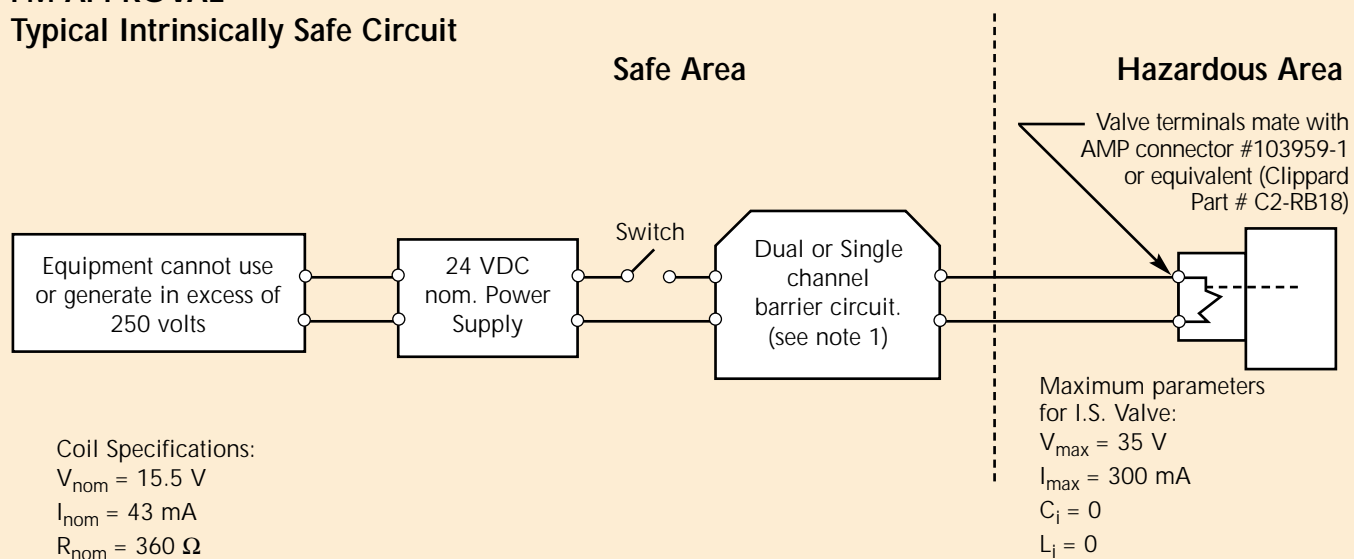
$I_{max}$  : Maximum Input Current

$L_i$  : Maximum Internal Inductance

$V_t$  : Voltage Total

## FM APPROVAL

### Typical Intrinsicly Safe Circuit



#### Coil Specifications:

$V_{nom} = 15.5 \text{ V}$

$I_{nom} = 43 \text{ mA}$

$R_{nom} = 360 \Omega$

- For barrier interconnection refer to maximum barrier output parameters as referenced on the specific barrier installation drawing. Connect as follows:
  - $V_{max} > V_{oc}$  of single channel barrier or  $V_t$  of dual channel barrier
  - $I_{max} > I_{sc}$  of single channel barrier or  $I_t$  of dual channel barrier
  - $C_i + \text{field wiring} < C_a$  of single or dual channel barrier
  - $L_i = \text{field wiring} < L_a$  of single or dual channel barrier
- Installation of intrinsicly safe system is to be done in accordance with ANSI / ISA-RP12.6

## NUMBERING SYSTEMS

