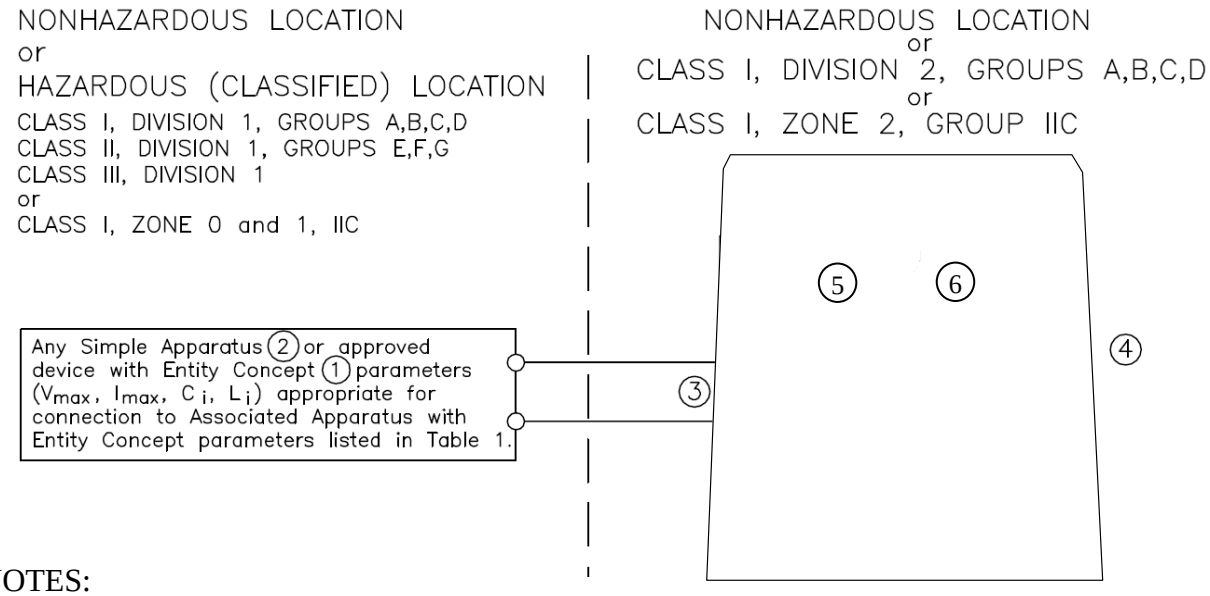

NOTES:

(1) The Entity Concept allows interconnection of intrinsically safe apparatus with associated apparatus not specifically examined in combination as a system when the approved values of Voc (or Uo) and Isc (or Io) for the associated apparatus are less than or equal to Vmax(Ui) and Imax(Ii) for the intrinsically safe apparatus and the approved values of Ca(Co) and La(Lo) for the associated apparatus are greater than Ci + Ccable and Li + Lcable, respectively, for the intrinsically safe apparatus.
Note: For installations in which both the Ci and Li of the intrinsically safe apparatus exceed 1% of the Ca and La parameters of the associated apparatus (excluding the cable), only 50% of Ca and La parameters are applicable and shall not be exceeded.
Capacitance and inductance of the field wiring from the intrinsically safe equipment to the associated apparatus shall be calculated and must be included in the system calculations as shown in Note 1. Cable capacitance, Ccable, plus intrinsically safe equipment capacitance, Ci must be less than the marked capacitance, Ca (or Co), shown on any associated apparatus used. The same applies for inductance (Lcable, Li and La or Lo, respectively). Where the cable capacitance and inductance per foot are not known, the following values shall be used: Ccable = 60 pF/ft., Lcable = 0.2 µH/ft.

(2) Simple Apparatus: An electrical component or combination of components of simple construction with well defined electrical parameters that does not generate more than 1.5 volts, 100 milliamps, and 25 milliwatts, or a passive component that does not dissipate more than 1.3 watts and is compatible with the intrinsic safety of the circuit in which it is used.

(3) Intrinsically safe circuits must be wired and separated in accordance with Article 504.20 or other local codes, as applicable.
Modules with multiple intrinsically safe field wiring pairs shall be installed as separate intrinsically safe circuits.

(4) Barriers shall not be connected to any device which uses or generates internally any voltage in excess of 250V r.m.s. or DC unless the device has been determined to adequately isolate the voltage from the barrier.

(5) The barriers are rated ‘Nonincendive’. If the barriers are intended to be mounted in a Division 2 location, they must be mounted in an enclosure with a minimum ingress protection of IP2X. If the barriers are intended to be mounted in a Zone 2 location they must be mounted in an enclosure with a minimum ingress protection of IP54. The enclosure must be able to accept Division 2 / Zone 2 wiring methods. A temperature rating of T4 applies to all nonincendive rated barriers.

(6) WARNING - Substitution of components may impair intrinsic safety and suitability for use in Class I, Div. 2/Zone 2.
AVERTISSEMENT - La substitution de composants peut compromettre la sécurité intrinsèque et l'adéquation à une utilisation en Classe I, Div. 2/Zone 2.

WARNING - Do not disconnect the equipment or actuate switches when the equipment is energized and an explosive atmosphere is present.
AVERTISSEMENT - Ne pas débrancher l'équipement et ne pas actionner les commutateurs lorsque l'équipement est sous tension et exposé à une atmosphère explosive.

For Zone 2 installations, ensure protection of supply terminals against transient voltages exceeding 140% of the rated supply voltage.

Table 1 - Entity Parameters

Model Number	Terminals	Voc (Vo) [V]	Isc (Io) [mA]	Po [mW]	Groups	Ca (Co) [uF]	La (Lo) [mH]	Lo/Ro [uH/Ohm]
HiC2077	5a,5b; 1a,1b	12.4	17.4	54	A,B (IIC)	1.24	117	597
					C,E,F,G (IIB)	7.9	469	2388
					D (IIA)	30	939	4776