DETAILED SPECIFICATIONS
'Key' barriers shown in blue

Model No.	Safety description			Polarities available			Application	Basic circuit	Max. end-to-end resistance	Vwkg at 10 (1)µA	Vmax	Fuse rating
MTL	V	Ω	mA	+	–	ac		Hazardous Safe	Ω	V	V	mA
7706+	28	300	93	√			Transmitters	See 'HOW THEY WORK' and 'ACTIVE / ELECTRONICALLY PROTECTED BARRIERS'	See additional specification		35	50
7707+	28	300	93	√			Switches				35	50
	28	diode									35	50
7707P+	28	164	171	√			Transmitters, switches,				35	50
	28	diode	–				controller outputs IIB				35	50
7710+	10	50	200	√			6V dc & 4V ac systems		75	6.0	7.0	50
7715+	15	100	150	√			12V systems		119	12.0	13.1	100
7715P+	15	50	291	√			12V dc systems		64	12.6	13.7	100
7722+	22	150	147	√			18V dc systems		174	19.6	20.2	50
7728+	28	300	93	√			Controller outputs, solenoids		333	25.9	26.5	50
7728-	28	300	93		√		Transmitters		333	25.9	26.5	50
7728ac	28	300	93			√			333	25.0	24.9	50
7728P+	28	234	119	√			Controller outputs, solenoid valves		252	24.9	25.9	100
7729P+	28	164	170	√			Controller outputs, solenoid valves IIB		184	24.9	25.9	100
774X	10	—	19				Prox sw input, solid state output and line fault detect	See 'ACTIVE / ELECTRONICALLY PROTECTED BARRIERS'	—	—	30/35	50
7755ac	3	10	300			√	2 or 3- Wire (floating)		19.0	(1)	3.4	250
	3	10	300			√	RTDs		19.0	(1)	3.4	250
7756ac	3	10	300			√	3 - Wire (grounded)		19.0	(0.7)	2.7	250
	3	10	300			√	RTDs		19.0	(0.7)	2.7	250
	3	10	300			√			19.0	(0.7)	2.7	250
7758+/-	7.5	10	750	√	√		Gas detectors		17	6.0	7.3	100
7761ac	9	90	100			√			107	6.0	7.0	100
	9	90	100						107	6.0	7.0	100
7761Pac	9	350	26			√	Strain-gauge bridges		378	6.8	7.5	50
	9	350	26						378	6.8	7.5	50
7764+/ac	12	1k	12	√		√	Strain-gauge bridges		1050	10.0	10.9	50
	12	1k	12						1050	10.0	10.6	50
7766ac	12	150	80			√			174	10.0	10.6	50
	12	150	80						174	10.0	10.6	50
7766Pac	12	75	157			√	Strain-gauge bridges		92	9.6	10.5	100
	12	75	157				Strain-gauge bridges		92	9.6	10.5	100
7767+	15	100	150	√			12V dc systems		119	12.0	13.1	100
	15	100	150				12V dc systems		119	12.0	13.1	100
7779+	28	300	93	√			Controller outputs	requires channels	333	25.9	26.5	50
	28	300	93				Controller outputs	separate in IIC	333	25.9	26.5	50
7796+	26	300	87	√			Vibration probes		333	23.9	24.5	50
	20	390	51						428	18.3	18.9	50
7796-	26	300	87		√		Vibration probes		333	23.9	24.5	50
	20	390	51						428	18.3	18.9	50
7760ac	10	50	200			√	Active dc & ac sensors		75	6.0	6.7	50
	10	50	200				Thermocouples		75	6.0	6.7	50
7765ac	15	100	150			√			124	12.0	12.5	50
	15	100	150						124	12.0	12.5	50
7778ac	28	600	47			√			651	0.4	0.4	50
	28	600	47						651	0.4	0.4	50
7789+	28	300	93[a]	√			Switch inputs / Signal returns		651	26.6	27.2	50
									651	26.6	27.2	50
	28	diode	—						0.9V+26Ω	26.6	27.2	50
	28	diode	—						0.9V+26Ω	26.6	27.2	50
7787+	28	300	93	√			Transmitters		333	26.6	27.2	50
	28	diode	—				Controller outputs, switches		0.9V+26Ω	26.6	27.2	50
7787P+	28	234	119	√			Transmitters, Controller outputs,		253	26.4	27.2	80
	28	diode	—				switches		0.9V+21Ω	26.4	27.2	80
7788+	28	300	93	√					333	25.9	26.5	50
	10	50	200	√					75	6.0	7.0	50
7788R+	28	300	93	√			Transmitters		333	25.9	26.5	50
	10	50	200	√					75	—	7.0	50

a Terminals 3 & 7 connected together
*Diagrams show positive versions. All diodes reversed on negative versions. Additional diodes fitted on ac versions.