



## Features

- Circuit Integrity cable
- Superior Flame Retardance
- Excellent wet electrical properties
- Enhanced Mechanical toughness
- Wide temperature range  $-25^{\circ}\text{C}$  to  $90^{\circ}\text{C}$
- Thermoset Insulation
- Oil resistant
- Low Smoke
- Zero Halogen
- Voltage Rating 450/750V
- Sunlight Resistance
- Ampacity follows BS 7671:2008 table 4E1A

## Performance Standards

- Pass BS 6853 Annex B for toxic fumes
- Satisfies performance requirements of LUL 1-085 A3:2011 for flammability, smoke emission and toxic fumes
- Satisfies performance requirements of LUL S1085 A4:2015 for flammability, smoke emission and toxic fumes
- Satisfies performance requirements of BS-7211:2012 for EI5 insulation tape
- Satisfies flame and smoke requirements of NFPA 130 & 502
- Passes requirements of BS 6387 Categories C, W & Z
- Pass IEC 60331-3 120 min resistance to fire and impact
- Pass EN 50200 120 min resistance to fire and mechanical shock
- Pass EN 61034-2 smoke emission
- Pass IEC 60332-3-25 and IEC 60332-3-24
- Satisfies IEC 60754-1 acid gas and IEC 60754-2 pH and conductivity

## Construction

**Conductor:** Bare copper per IEC 60228, Class 2

**Flame Barrier:** Mica tape

**Insulation:** Crosslinked low smoke halogen free polymer (colours – as required)

\*Rated  $90^{\circ}\text{C}$  for normal operation,  $130^{\circ}\text{C}$  for emergency overload conditions and  $250^{\circ}\text{C}$  for short circuit conditions

## Scope

Exane® CircuitSAFE employs a rugged thermoset low smoke halogen free insulation compound. The thermoset insulation provides superior resistance to fire and moisture. It may be installed in wet or dry locations, indoors and outdoors. The cable maintains Circuit Integrity and operates under fire condition.

Exane® CircuitSAFE small, lightweight construction makes it perfect for installation in metal trays, conduits, ducts or in direct burial applications. Exane® CircuitSAFE is an ideal cable for power, control and instrumentation circuits in transit systems and tunnels.

# Exane® CircuitSAFE Emergency Circuit Cable



Low Smoke Zero Halogen 90°C  
450/750 Volt  
LUL 1-085  
NFPA 130 & 502  
BS 7211-2012  
BS 6387 C, W & Z



Conductor mm <sup>2</sup>	Conductor Diameter Nom. mm	Radial Wall Thickness mm	Nominal Cable Diameter mm	Conductor Resistance** Ohms/ km	Weight kg/km
0.75*	1.11	0.60	3.02	24.8	18
1*	1.28	0.60	3.25	18.2	21
1.5	1.55	0.70	3.75	12.2	30
2.5	1.96	0.80	4.34	7.56	42
4	2.48	0.80	4.87	4.7	60
6	3.04	0.80	5.43	3.11	81
10	3.92	1.00	6.72	1.84	131
16	4.95	1.00	7.92	1.16	195
25	6.4	1.20	9.65	0.73	294
35	7.34	1.20	11.10	0.53	396
50	8.89	1.40	13.08	0.39	561
70	10.50	1.40	14.73	0.27	761
95	12.24	1.60	16.89	0.20	1,027
120	13.80	1.60	16.42	0.154	1,245
150	15.43	1.80	20.47	0.126	1,555
185	17.11	2.00	22.59	0.10	1,913
240	19.50	2.20	25.40	0.076	2,467
300	21.84	2.40	28.19	0.0607	3,061
400	25.22	2.60	31.92	0.0475	4,044

\* .75-1 mm<sup>2</sup> Rated 300/500 Volt per BS 7211:2012

\*\* According to IEC 60228



Marmon Engineered Wire & Cable LLC  
A Berkshire Hathaway Company