

# Simpull® CT1 - 13ET

15kVU Type MV-105. Copper Conductor.  
Thermosetting Conductor and Insulation Shield. EPR Insulation.  
Copper Tape Shield. Simpull® PVC Jacket.  
RoHS



## APPLICATIONS

Southwire SIMpull CT1-13ET Type MV-105 Cable is for use in aerial, direct burial, cable trays, conduit, and underground duct installations as permitted by the National Electrical Code. These cables are capable of operating continuously at a conductor temperature not in excess of 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and are rated at 15,000V, 133% insulation level (ungrounded system). For use in Class I, Div II locations. Maximum sidewall pressure is 1000 lbs. This cable can be installed without the need for pulling lubricant.

## SPECIFICATIONS

Southwire SIMpull CT1-13ET Type MV-105 Cable is manufactured and tested in accordance with the latest revisions of the following standards and specification:

- UL 1072 - Medium Voltage Power Cables.
- ICEA S-93-639 (NEMA WC 74)
- ICEA S-97-682 (when requested)
- UL 1685 - (AWG 1/0 and larger) - UL-CT Flame Exposure Test
- IEEE 1202/FT4 - Flame Test (70,000 Btu/hr Vertical Tray Test) with CPE and Solonon jacket.
- AEIC CS-8
- RoHS

## CONSTRUCTION

Southwire SIMpull CT1-13ET Type MV-105 Cable offers our patented SIM (Sliqwik® Infused Membrane) Technology® for easier pulling, flexible, easy bending insulation, easy cable preparation, fast stripping thermosetting insulation shield, 105°C continuous operating temperature, 100% shield coverage, and it is triple extruded. Cable is sunlight resistant, suitable for direct burial, and listed for cable tray use in sizes AWG 1/0 and larger. SOLONON™ low smoke, non halogen polyolefin jackets and CPE jackets are available upon request.

# CT1-13ET 1c, 15kV, 220mil EPR(133%), TS, PVC, CT Rated

Product Code	Size	Conductor Diameter		0.220" (5.59mm) Insulation Diameter		Extruded Insulation Shield Diameter		Min. Point Jacket Thickness		Approximate Overall Diameter		Approximate Net Weight		Allowable Ampacities+	
		AWG or kcmil	inch*	mm	inch**	mm	inch***	mm	inch	mm	inch	mm	lb./Mft.	kg/km	Duct
CT1-13ET-002	2-7	0.283	7.19	0.773	19.62	0.828	21.02	0.070	1.78	0.995	25.3	641	953	165	165
CT1-13ET-001	1-19	0.322	8.18	0.813	20.64	0.868	22.03	0.070	1.78	1.035	26.3	719	1070	185	190
CT1-13ET-010	1/0-19	0.362	9.19	0.853	21.65	0.908	23.05	0.070	1.78	1.075	27.3	814	1212	215	215
CT1-13ET-020	2/0-19	0.405	10.29	0.893	22.67	0.948	24.07	0.070	1.78	1.115	28.3	925	1376	245	255
CT1-13ET-030	3/0-19	0.456	11.58	0.943	23.94	.998	25.34	0.070	1.78	1.165	29.6	1066	1585	275	290
CT1-13ET-040	4/0-19	0.512	13.0	0.998	25.34	1.053	26.73	0.070	1.78	1.22	31	1238	1841	315	330
CT1-13ET-250	250-37	0.558	14.17	1.053	26.73	1.108	28.13	0.070	1.78	1.275	32.4	1392	2071	345	365
CT1-13ET-350	350-37	0.661	16.8	1.158	29.4	1.213	30.8	0.070	1.78	1.38	35	1772	2637	415	440
CT1-13ET-500	500-37	0.79	20.07	1.283	32.58	1.338	33.97	0.070	1.78	1.505	38.2	2317	3447	500	535
CT1-13ET-750	750-61	0.968	24.59	1.47	37.34	1.525	38.74	0.1	2.54	1.755	44.6	3313	4930	610	655
CT1-13ET-100	1000-61	1.117	28.37	1.615	41.02	1.67	42.42	0.1	2.54	1.9	48.3	4185	6228	690	755

\*Nominal diameter per ASTM Standards. \*\*±0.030" \*\*\*±0.050"  
 +Ampacities are based on the NEC, 2008 Edition. Duct ampacities are based on Table 310.77 three conductors in one underground duct, 105°C conductor, 20°C earth ambient temperature. Conduit in air ampacities are based on Table 310.73 three cables in isolated conduit in air, 105°C conductor, 40°C ambient temperature.

**Scope:** This specification covers single conductor EPR (ethylene propylene rubber) insulated, shielded, thermoplastic jacketed power cable for use in aerial, direct burial, cable trays, conduit, and underground duct installations. This cable is capable of operating continuously at a conductor temperature not in excess of 105°C for normal operation, 140°C for emergency overload conditions, and 250°C for short circuit conditions, and is rated at 15,000 V, 133% insulation level (ungrounded system).

**Standards:** The following standards shall form a part of this specification - UL Standard 1072 for Medium Voltage Power Cable and ICEA S-93-639 (NEMA WC 74) 5-46 kV Shielded Power Cable for Use in the Transmission & Distribution of Electric Energy.

**Conductor:** The conductor shall be Class B compressed soft or annealed copper in accordance with ASTM specs B3 and B8 and ICEA Part 2, Section 2.1 and 2.5.

**Conductor Shield:** The conductor shall be shielded with an extruded semi-conducting thermosetting polymeric layer over the conductor, applied in tandem with and firmly bonded to the insulation.

**Insulation:** The insulation shall be EPR (ethylene propylene rubber) meeting the requirements of the referenced standards. The nominal thickness shall be 0.220".

**Insulation Shield:** The insulation shall be shielded with an extruded layer of semi-conducting thermosetting material which shall be identified as being semi-conducting. Over this layer shall be applied a helically-wrapped 5-mil copper tape with 25% overlap.

**Jacket:** The cable shall be provided with a jacket of black sunlight resistant PVC conforming to the requirements specified for polyvinyl chloride jackets in ICEA. The average thickness shall be in accordance with Table 7-3 of ICEA. Optional SOLONON low smoke, non halogen polyolefin jackets and CPE jackets are available upon request.

**Identification:** Cable shall be identified by surface printing on the jacket.

**Tests:** Qualification tests shall be conducted in accordance with the requirements of AEIC.