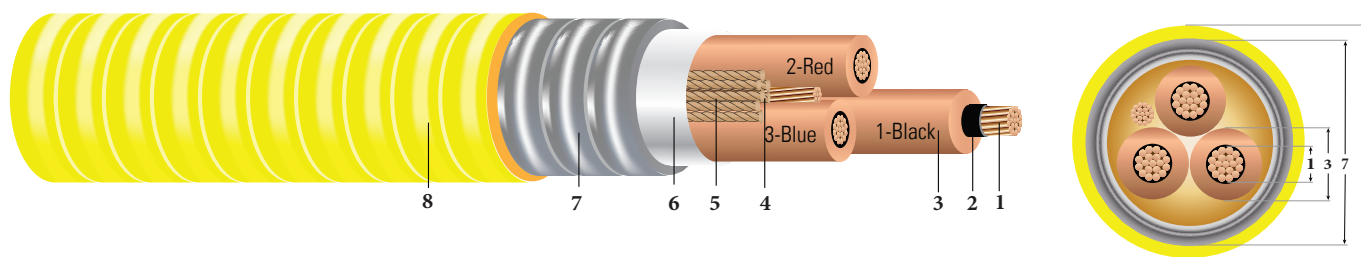


3/C CU 2.4KV 115 EPR AIA PVC MV-105

Type MV-105 Three Conductor Copper, 115 Mils Ethylene Propylene Rubber (EPR) Aluminum Interlocked Armor (AIA), Polyvinyl Chloride (PVC) Jacket



Images not to scale. See Table 1 for Dimensions

CONSTRUCTION:

1. **Conductor:** Class B compressed stranded bare copper per ASTM B3 and ASTM B8
2. **Conductor Shield:** Semi-conducting cross-linked copolymer
3. **Insulation:** 115 Mils Ethylene Propylene Rubber (EPR)
4. **Grounding Conductor:** 1 Class B compressed stranded bare copper ground per ASTM B3 and ASTM B8
5. **Filler:** Wax paper filler
6. **Binder:** Polypropylene tape
7. **Armor:** Aluminum Interlocked Armor (AIA)
8. **Overall Jacket:** Polyvinyl Chloride (PVC)

APPLICATIONS AND FEATURES:

Southwire's 2.4KV cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 105°C for normal operation, 130°C for emergency overload, and 250°C for short circuit conditions. Rated at -35°C for cold bend. For uses in Class I and II, Division 2 hazardous locations per NEC Article 501 and 502. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Soft or annealed copper
- ASTM B8 Concentric-lay-standard copper
- UL 1072 - Medium Voltage Power Cables
- ICEA S-96-659 (NEMA WC 7) 2001-5000 V Nonshielded Cables
- UL 1685/FT4 Vertical-Tray Fire Propagation and Smoke Release Test
- IEEE 1202 -Flame Test (70,000) BTU/hr Vertical Tray Test

SAMPLE PRINT LEGEND:

SOUTHWIRE [SYMBOL - LIGHTING BOLT] #P# (UL) 3/C [#AWG or #kcmil] CU 115 MILS EPR AIA 2.4KV MV-105 FOR CT USE SUN. RES. FOR DIRECT BURIAL FT4 YEAR (NESC) [SEQUENTIAL FEET MARKS]



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SPEC 46026_PSS DIVISION DATE: 06/21/2017 Rev:2.0.04C

Table 1 – Weights & Measurements

Stock Code	Cond. Size AWG	Diameter over			Ground No. x AWG	Dia. Over Armor (7) inches	Jacket Thickness mils	Approx. OD (8) inches	Approx. Weight lbs./MFT	Max Pull Tension lbs.	Min Bending Radius inches
		Cond. (1) inches	Insul. (3) inches	Insul. Shield inches							
890086 [◇]	2	0.283	0.543	-	1 x 6	1.395	50	1.495	1386	1593	10.5
TBA	1	0.322	0.582	-	1 x 4	1.479	60	1.599	1675	2009	11.2
606467	1/0	0.362	0.622	-	1 x 4	1.566	60	1.686	1943	2534	11.8
552212	2/0	0.405	0.665	-	1 x 4	1.658	60	1.778	2269	3194	12.4
TBA	3/0	0.456	0.716	-	1 x 3	1.769	60	1.889	2713	4027	13.2
552213	4/0	0.512	0.772	-	1 x 3	1.990	60	2.110	3310	5078	14.8
TBA	250	0.558	0.828	-	1 x 3	2.110	60	2.230	3768	6000	15.6
551526 [◇]	350	0.661	0.931	-	1 x 2	2.333	75	2.483	5007	8400	17.4
890645 [◇]	500	0.789	1.059	-	1 x 1	2.609	75	2.759	6714	12000	19.3
552256	750	0.968	1.238	-	1 x 0	2.996	85	3.166	9529	18000	22.2
TBA	1000	1.117	1.387	-	1 x 0	3.318	85	3.488	12189	24000	24.4

All dimensions are nominal and subject to normal manufacturing tolerances

[◇] Standard stock item

Table 2 – Electrical and Engineering Data

Stock Code	Cond. Size AWG	Resistance		Reactance		Shield Short Circuit Current 6 Cycles Amps	Allowable Ampacities 90°C/105°C	
		DC @ 25°C	AC @ 90°C	X _c @ 60Hz	X _L @ 60Hz		Directly Buried †	In Air ‡
		Ω/MFT	Ω/MFT	MΩ*MFT	Ω/MFT		Amps	Amps
890086 [◇]	2	0.162	0.203	-	0.037	15089	180 / 190	140 / 154
TBA	1	0.129	0.161	-	0.035	19029	200 / 215	160 / 180
606467	1/0	0.102	0.128	-	0.034	24011	230 / 245	185 / 205
552212	2/0	0.081	0.102	-	0.033	30264	260 / 280	215 / 240
TBA	3/0	0.064	0.081	-	0.032	38154	295 / 320	250 / 280
552213	4/0	0.051	0.064	-	0.031	48114	335 / 360	285 / 320
TBA	250	0.043	0.054	-	0.031	56845	365 / 395	320 / 355
551526 [◇]	350	0.031	0.039	-	0.030	79583	440 / 475	395 / 440
890645 [◇]	500	0.022	0.028	-	0.028	113690	530 / 570	485 / 545
552256	750	0.014	0.020	-	0.027	170535	650 / 700	615 / 685
TBA	1000	0.011	0.016	-	0.027	227380	730 / 785	705 / 790

† Ampacities are based on TABLE 310.60(C)(83) of the 2014 National Electrical Code (20°C Ambient Earth Temperature, Thermal Resistance ROH of 90)

‡ Ampacities are based on TABLE 310.60(C)(71) of the 2014 National Electrical Code (40°C Ambient Air Temperature)

