



Charlotte™
Wire & Cable Company Inc.

“Taking Care of Business”

toll free: 800-929-9473

ALUMINUM GENERATOR CABLE

3/C #1 ALUMINUM , 6/C #18 COPPER , & 1/C #6 ALUMINUM GROUND
OVERALL ORANGE PVC JACKET , 90DEGREES C WET OR DRY
UL TYPE TC-ER-JP , SUNLIGHT RESISTANT , DIRECT BURIAL, OIL RES II

CONSTRUCTION:

FEEDER CONDUCTORS #1AWG 19STRANDS OF AA-8000SERIES ALUMINUM, INSULATED WITH PVC INSULATION AND NYLON JACKET PER UL83 (THWN).
COLOR CODE IS BLACK, WHITE, AND RED.

BRANCH CONDUCTORS #18AWG 16STRANDS OF BARE COPPER WITH PVC INSULATION AND NYLON JACKET PER UL66 (TFFN).
COLOR CODE IS BLACK, RED, WHITE, BLUE, YELLOW, AND YELLOW WITH BLACK STRIPE.

GROUND CONDUCTOR #6AWG 7STRANDS OF AA-8000SERIES ALUMINUM, INSULATED WITH PVC INSULATION AND NYLON JACKET PER UL83 (THWN).
COLOR IS GREEN.

ASSEMBLY CONDUCTORS CABLED TOGETHER WITH SUITABLE FILLERS FOR ROUNDNESS WHERE NEEDED, AND
MYLAR CABLE TAPE.

OVERALL JACKET SUNLIGHT RESISTANT, FLAME RETARDANT, ORANGE PVC PER UL 1277, WHICH PROTECTS AGAINST HEAT, FLAME, CHEMICALS,
MOISTURE, AND MECHANICAL DAMAGE.

Charlotte Wire Part#	Cable Component	Number of Conductors & Size AWG	Stranding of Conductors	Insulation Thickness (in.)		Cable Jacket Thickness (in.)	Overall Diameter (in.)	Approx. Net Wt. (Lbs/Mft)
				PVC	Nylon			
CW12670	Feeder Conductors	3 - #1	19	.050"	.007"	.080"	1.10"	670
	Branch Conductors	6 - #18	16	.015"	.005"			
	Ground Conductor	1 - #6	7	.030"	.005"			

AMPACITY: (per NEC Table 310.16 - based on 3 current carrying conductors in Raceway,
Cable, or Earth (Direct Burial), ambient temperature of 30Deg C (86Deg F))

Conductor temperature rating:

75Deg C: 100amps

90Deg C: 115amps

APPLICATION:

Cable for use in connecting between generator and transfer switch on 17kW - 24kW generators.
TC-ER-JP (Joist Pull) rating per NEC 336.10(9) allows use in one and two-family dwelling units
for branch circuits and feeders.

STANDARDS:

UL Standard 1277 for Type TC Cables.

NEC Article 336 for Type TC-ER-JP Cables.

TC-ER rated cables comply with crush and impact requirements of MC cable.

Passes UL, CSA FT4, and IEEE1202 70,000BTU Flame Test.

UL Standard 83 for THWN Conductors.

UL Standard 66 for TFFN Conductors.

RoHS Compliant.