

SPECIFICATION CONTROL DRAWING

ZHB-X

TITLE

INSULATED POWER CABLE, 2000 VOLT

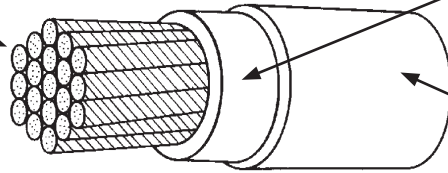
Date
11-6-07

Revision
G

CONDUCTOR - TIN-COATED COPPER

PRIMARY INSULATION -

RADIATION - CROSSLINKED,
POLYALKENE
COLOR - WHITE



JACKET - HALOGEN FREE POLYOLEFIN
COLOR - BLACK

CONSTRUCTION DETAILS

PART NUMBER 1/	WIRE SIZE (AWG)	WIRE SIZE (MCM)	CONDUCTOR STRANDING (number x AWG)	MAXIMUM DIAMETER OF STRANDED CONDUCTOR (in.)	FINISHED WIRE		
					MAXIMUM RESISTANCE AT 20°C (ohms/1000 ft.)	NOMINAL DIAMETER (in.)	NOMINAL WEIGHT (lb/1000 ft.)
ZHB-14	14	----	37 x 30	.075	3.11	.164	24.1
ZHB-12	12	----	37 x 28	.089	2.02	.177	29.8
ZHB-10	10	----	37 x 26	.113	1.26	.200	43.0
ZHB- 8	8	----	133 x 29	.162	.701	.270	75.8
ZHB- 6	6	----	133 x 27	.204	.445	.311	109.
ZHB- 4	4	----	133 x 25	.257	.280	.364	162.
ZHB- 2	2	----	665 x 30	.331	.183	.455	260.
ZHB- 1	1	----	817 x 30	.372	.149	.496	310.
ZHB- 0	0	----	1045 x 30	.418	.116	.541	388.
ZHB-00	00	----	1330 x 30	.464	.091	.587	479.
ZHB-000	000	----	1665 x 30	.531	.071	.654	593.
ZHB-0000	0000	----	2109 x 30	.585	.056	.730	742.
ZHB-250	----	250	2499 x 30	.716	.043	.832	914.
ZHB-350	----	350	3458 x 30	.849	.036	.959	1273.

Users should evaluate the suitability of this product for their application. Specifications are subject to change without notice.
Tyco Electronics also reserves the right to make changes in materials or processing, which do not affect compliance with any specification, without notification to Buyer.

1/ COLORS AND COLOR CODE DESIGNATORS SHALL BE IN ACCORDANCE WITH MIL-STD-681. OTHER CODES AND SUFFIXES MAY BE ADDED
TO THE PART NUMBER, AS NECESSARY, TO CAPTURE ANY ADDITIONAL REQUIREMENTS IMPOSED BY THE PURCHASE ORDER.

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DIMENSIONS ARE IN INCHES, AND UNLESS OTHERWISE DESIGNATED ARE NOMINAL

THIS SPECIFICATION SHEET TAKES PRECEDENCE OVER DOCUMENTS REFERENCED HEREIN.
REFERENCED DOCUMENTS SHALL BE OF THE ISSUE IN EFFECT ON DATE OF INVITATION FOR BID.



Raychem Wire & Cable
501 Oakside Avenue
Redwood City, CA 94063-3800
Phone: 1-800-227-8816
Fax: 1-650-361-6297

WIRE RATINGS AND ADDITIONAL REQUIREMENTS
(Testing procedures per Raychem Specification 35.)

TEMPERATURE RATING: 110°C

Maximum continuous conductor temperature

VOLTAGE RATING: 2000 volts (rms) at sea level

ACCELERATED AGING: 175 ± 4°C for 4 hours, hung straight, then bend over a 12 X mandrel, No cracking

CONCENTRICITY: 70% (minimum)

FLAMMABILITY: Shall be tested in accordance with ICEA S-19-81

INSULATION ELONGATION AND TENSILE STRENGTH:

Primary Insulation,

Elongation, 150% (minimum)

Tensile Strength, 1300 lbf/in² (minimum)

Primary Jacket,

Elongation, 150% (minimum)

Tensile Strength, 1300 lbf/in² (minimum)

INSULATION FLAWS:

Primary Insulation

Spark Test 2.0 kV (rms)

Impulse Dielectric Test, 6.0 kV (peak)

Finished Wire

Impulse Dielectric Test, 8.0 kV (peak)

INSULATION RESISTANCE: 100 megohms for 1000 ft (minimum)

INSULATION THICKNESS: (Minimum overall wall - 90% of nominal)

For AWG 14 - 10, .015 inch (nominal) for primary insulation

.030 inch (nominal) for outer jacket

For AWG 8 - 4, .017 inch (nominal) for primary insulation

.038 inch (nominal) for outer jacket

For AWG 2 - 000, .025 inch (nominal) for primary insulation

.040 inch (nominal) for outer jacket

For AWG 0000 - 350 MCM, .025 inch (nominal) for primary insulation

.050 inch (nominal) for outer jacket

LOW TEMPERATURE-COLD BEND: -40 ± 2°C, Tested in accordance with ICEA-S-19-81

PRODUCT IDENTIFICATION: Mark outer jacket in a contrasting color at 12 inch (nominal) intervals with the following:

" RAYCHEM ZHB-AWG 110 C 2000V Year of Manufacturing "