AIRGUARD®EX VFD

XLPE/Polymeric Armor/PVC, Low-Voltage Power UL Type TC-ER-HL 600V or UL Type TC-ER 1000V

Product Construction:

Conductor:

- 4 AWG thru 750 kcmil annealed bare copper per ASTM B3, Class B stranding per ASTM B8
- · 14 AWG thru 6 AWG annealed bare copper per ASTM B3, Class C stranding per ASTM B8

- · Flame-retardant Cross-linked Polyethylene (XLPE)
- · Color-coded per ICEA Method 4

Ground Conductor(s):

- · Annealed stranded tinned copper per ASTM B33
- · Three split ground wires are sized in accordance with NEC Table 250.122

· Overall shielded is Flexfoil® aluminum/polymer in contact with stranded tinned copper ground wire

Polymeric Armor:

· High strength and high crush resistant Air Bag™ layer extruded over the core assembly

Jacket:

Lead-free, flame-retardant, sunlight-resistant Polyvinyl Chloride (PVC)

Applications:

· Variable Frequency Drives: 3-conductor AIRGUARD®EX cables with three (3) symmetrical ground wires are the preferred wiring method for use with AC motors controlled by pulse-width modulated inverters in VFD applications



Applications (cont'd):

- For use in Class I, II and III, Divisions 1 and 2; and Class I, Zones 1 and 2 hazardous locations per NEC Articles 501, 502, 503 and 505
- · For use as services, feeders and branch circuits for power, lighting, control, and signal circuits in accordance with NEC Articles 330 and 725
- Installed indoors or outdoors, wet or dry locations. directly buried, embedded in concrete, in a raceway, as aerial cable on a messenger, in cable trays, or as exposed runs secured to supports in accordance with NEC Article 330

Features:

- · Rated at 90°C wet or dry
- · Ripcord applied to all cables with jacket of 60 mils
- · Meets cold bend test at -25°C
- · Type TC-ER-HL versions meets crush and impact requirements of Type MC-HL cables.
- · Sunlight- and weather-resistant
- · Excellent flame resistance
- · Excellent physical, thermal and electrical properties
- · Excellent moisture resistance
- · Good resistance to abrasion and heat deformation

Compliances:

Industry Compliances:

- NEC Type XHHW-2 conductors
 UL 1277 Type TC-ER-HL, UL File # E57179
- · ICEA S-95-658/NEMA WC70

Flame Test Compliances:

- · UL 1685 Vertical Flame Test
- · IEEE 1202/FT4

Other Compliances:

- · EPA 40 CFR, Part 261 for leachable lead content per TCLP
- · OSHA Acceptable
- · RoHS Compliant

Packaging:

· Material cut to length and shipped on nonreturnable wood reels

III VED applications							
PRODUCT NUMBER	NUMBER AND CIRCUIT CONDUCTOR SIZE (AWG)	INSULATION THICKNESS (mils)	NUMBER & GROUND CONDUCTOR SIZE (AWG)	JACKET THICKNESS (mils)	NOMINAL OVERALL CABLE O.D. (in)	NOMINAL CABLE WEIGHT (lbs/kft)	‡AMPACITY (AMPS)
AIRGUARD®Ex Low-Voltage Power, 3/C VFD 600 Volt or 1000 Volt							
10000.01403318	3/C #14	30	3 - #18	60	0.54	167	25
10000.01203316	3/C #12	30	3 - #16	60	0.58	208	30
10000.01003314	3/C #10	30	3 - #14	60	0.63	269	40
10000.00803314	3/C #8	45	3 - #14	60	0.77	386	55
10000.00603312	3/C #6	45	3 - #12	80	0.89	560	75
10000.00403312	3/C #4	45	3 - #12	80	0.97	729	95
10000.00203310	3/C #2	45	3 - #10	80	1.10	1027	130
10000.00103310	3/C #1	55	3 - #10	80	1.21	1235	145
10000.11003310	3/C #1/0	55	3 - #10	80	1.29	1473	170
10000.21003310	3/C #2/0	55	3 - #10	80	1.40	1771	195
10000.31003308	3/C #3/0	55	3 - #8	80	1.48	2178	225
10000.41003308	3/C #4/0	55	3 - #8	80	1.61	2651	260
10000.25003308	3/C #250	65	3 - #8	110	1.83	3179	290
10000.35003306	3/C #350	65	3 - #6	110	2.05	4283	350
10000.50003306	3/C #500	65	3 - #6	110	2.32	5754	430
10000.75003304	3/C #750	80	3 - #4	140	2.82	8669	535

The above dimensions are approximate and subject to normal manufacturing tolerances.

‡ Per 2023 NEC Table 310.16 "Allowable Ampacities of Insulated Conductors Rated up to and including 2000 Volts, 60°C through 90°C (140°F through 194°F), Not More Than Three Current-Carrying Conductors"

