

Aluminum AC90-HL 600V XLP Insulation



APPLICATION:

AC90-HL cables are for open and concealed wiring in dry locations only. For use in cable troughs and ventilated flexible cableway. Minimum recommended installation temperature is minus 40°C. Maximum conductor temperature is 90°C. Approved for use with ceiling fixtures. Approved for use in and relating to Class I, II, and III, Division 1 and 2 Hazardous Locations.

CONDUCTORS:

- Compact bare AA-8000 series aluminum alloy, Class B stranded per ASTM

INSULATION:

- Abrasion, heat and moisture resistant, -40°C rated cross-linked polyethylene insulation (XLP)

ASSEMBLY:

- The insulated conductors and a bare aluminum bonding wire cabled together wrapped with a paper or mylar tape

ARMOUR:

- Interlocked aluminum applied over the cable assembly

STANDARDS:

- CSA C22.1 Canadian Electrical Code
- CSA C22.2 No. 51 Armoured Cables & No. 174 Cables and Cable Glands for Use in Hazardous Locations
- ASTM B800, B801

COLOUR CODE:

Cond #	Color
3C	Black - Red - Blue
4C	Black - Red - Blue - White

Part Number	Conductor		Bonding Wire Size	Min. Average Insulation	Nominal OD Over Armour	Approx. Total Weight		Ampacity* at 90°C
	Size	Min. No. of Strands				lbs/kft	lbs/km	
	AWG/kcmil		AWG	mm	mm			amps
Three Conductor								
8-03AC90	8	7	10	0.76	20.9	152	500	45
6-03AC90	6	7	8	0.76	21.4	217	714	55
4-03AC90	4	7	6	1.02	23.9	293	960	75
3-03AC90	3	7	6	1.02	24.4	347	1139	85
2-03AC90	2	7	6	1.02	26.8	387	1271	100
1-03AC90	1	18	4	1.27	29.1	466	1531	115
1/0-03AC90	1/0	18	4	1.27	31.1	554	1819	135
2/0-03AC90	2/0	18	4	1.27	33.3	652	2139	150
3/0-03AC90	3/0	18	4	1.27	35.9	772	2533	175
4/0-03AC90	4/0	18	4	1.27	39.3	954	3130	205
250-03AC90	250	35	2	1.52	42.5	1138	3736	230
300-03AC90	300	35	2	1.52	45.4	1309	4297	260
350-03AC90	350	35	2	1.52	48.0	1477	4846	280
400-03AC90	400	35	2	1.52	50.3	1642	5390	305
500-03AC90	500	35	1	1.52	54.8	1989	6529	350
600-03AC90	600	58	1	1.52	58.5	2068	6789	385
750-03AC90	750	58	1/0	1.52	64.0	2815	9238	435



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	Size	Min. No. of Strands				lbs/kft	lbs/km	
	AWG/kcmil		AWG	mm	mm			amps
Four Conductor								
8-04AC90	8	7	10	0.76	21.9	199	654	45
6-04AC90	6	7	8	0.76	23.7	270	885	55
4-04AC90	4	7	6	1.02	26.6	361	1185	75
3-04AC90	3	7	6	1.02	27.3	437	1434	85
2-04AC90	2	7	6	1.02	29.6	483	1586	100
1-04AC90	1	18	4	1.27	32.8	597	1960	115
1/0-04AC90	1/0	18	4	1.27	34.9	701	2300	135
2/0-04AC90	2/0	18	4	1.27	36.9	826	2711	150
3/0-04AC90	3/0	18	4	1.27	39.8	1015	3330	175
4/0-04AC90	4/0	18	4	1.27	43.0	1215	3987	205
250-04AC90	250	35	2	1.52	47.0	1448	4753	230
300-04AC90	300	35	2	1.52	50.0	1671	5485	260
350-04AC90	350	35	2	1.52	52.8	1891	6207	280
400-04AC90	400	35	2	1.52	55.5	2110	6925	305
500-04AC90	500	35	1	1.52	60.3	2562	8407	350
600-04AC90	600	58	1	1.52	65.7	3481	11423	385
750-04AC90	750	58	1/0	1.52	70.8	3644	11960	435

All values are nominal and subject to correction.

* Ampacity for not more than three conductors in raceway or cable or earth (directly buried), based on ambient temperature of 30°C per Table 4 of 2018 Canadian Electrical Code for cable with three current carrying conductors.

