

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

ARMOURED CABLE FOR COMMERCIAL, INDUSTRIAL & APARTMENT USE

Description

CSA File #LL23462 Class 5811 01

Two, three or four copper or aluminum conductor material (ACM) conductors with low temperature EXELENE® cross-linked polyethylene insulation (RW90 XLPE) and bare copper or aluminum bonding wire. Conductor assembly paper wrapped and covered with bare interlocked aluminum armour. Rated 600 volts. LEAD FREE and RoHS compliant.

Limited Smoke Zero Halogen - CSA rated ST1 per CSA 22.2 No. 2556. Meets the FT4 flame spread test.



Standards

National CSA C22.2 N° 2556;
CSA C22.2 N° 51

Application

For open and concealed wiring in dry locations only.

For use in cabletroughs and ventilated flexible cableways in dry locations only.

Minimum recommended installation temperature minus 40°C (with suitable handling procedures).

Maximum conductor temperature 90°C. Approved for use with ceiling fixtures.

Characteristics

Electrical characteristics	
Maximum operating voltage	600 V
Usage characteristics	
Maximum operating temperature	90 °C

Selling information

Insulation Colour Code: 4 Conductors - Black, Red, Blue, White

***Copper bonding wire supplied with copper conductors. Aluminum bonding wire supplied with aluminum conductors.

#For 3-wire 120/240 V and 120/208 V service conductors for single dwellings, or for feeder conductors supplying single dwelling units of row housing, of apartments and similar buildings, and sized in accordance with Rules 8-200(1), 8-200(2) and 8-202(1), the allowable ampacity for sizes No. 6, No. 2 and No. 4/0 AWG aluminum shall be 60 A, 100 A and 200 A respectively. For No. 2/0 AWG copper it shall be 200 A. In these cases the 5% adjustment Rule 8-106(1) cannot be applied.

##Assuming 4th conductor is the neutral of a balanced 3 phase 4 wire system.

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

2 Conductors

Nexans ref.: AC90

ARMoured CABLE FOR COMMERCIAL, INDUSTRIAL & APARTMENT USE

Description

CSA File #LL23462 Class 5811 01

Two copper or aluminum conductor material (ACM) conductors with low temperature EXELENE* cross-linked polyethylene insulation (RW90 XLPE) and bare copper or aluminum bonding wire. Conductor assembly paper wrapped and covered with bare interlocked aluminum armour. Rated 600 volts. LEAD FREE and RoHS compliant.

Limited Smoke Zero Halogen - CSA rated ST1 per CSA 22.2 No. 2556. Meets the FT4 flame spread test.



Standards

National CSA C22.2 N° 2556;
CSA C22.2 N° 51

Application

For open and concealed wiring in dry locations only.

For use in cabletroughs and ventilated flexible cableways in dry locations only. Minimum recommended installation temperature minus 40°C (with suitable handling procedures).

Maximum conductor temperature 90°C. Approved for use with ceiling fixtures.

* Registered Trademark of Nexans Canada Inc.

Characteristics

Construction characteristics

Conductor material	Copper or Aluminum
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Electrical characteristics

Maximum operating voltage	600 V
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Usage characteristics

Maximum operating temperature	90 °C
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AC90 (–40°C) XLPE 600 Volts 90°C Zero Halogen

2 Conductors

Nexans ref.: AC90

Two Conductors (plus bonding wire)

Size AWG or kcmil	Insulation Thickness		Bonding Wire** Size AWG		Approximate Diameter				Approximate Net Cable Weight				Ampacity (amps) 30°C Ambient	
	mm	in	Copper	Aluminum	Copper		Aluminum		Copper		Aluminum		Copper	Aluminum
					mm	in	mm	in	kg/km	lbs/kft	kg/km	lbs/kft		
14 (1)	0.76	0.030	14	--	12.0	0.47	--	--	145	98	--	--	15	—
12 (1)	0.76	0.030	14	12	12.8	0.51	12.8	0.51	176	115	114	76	20	15
10 (1)	0.76	0.030	12	10	13.9	0.55	13.9	0.55	233	156	137	92	30	25

Selling information

Insulation Colour Code: 2 Conductors - Black, White

**Copper bonding wire supplied with copper conductors. Aluminum bonding wire supplied with aluminum conductors.

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

3 Conductors

Nexans ref.: AC90

ARMoured CABLE FOR COMMERCIAL, INDUSTRIAL & APARTMENT USE

Description

CSA File #LL23462 Class 5811 01

Three copper or aluminum conductor material (ACM) conductors with low temperature EXELENE* cross-linked polyethylene insulation (RW90 XLPE) and bare copper or aluminum bonding wire. Conductor assembly paper wrapped and covered with bare interlocked aluminum armour. Rated 600 volts. LEAD FREE and RoHS compliant.

Limited Smoke Zero Halogen - CSA rated ST1 per CSA 22.2 No. 2556. Meets the FT4 flame spread test.



Standards

National CSA C22.2 N° 2556;
CSA C22.2 N° 51

Application

For open and concealed wiring in dry locations only.

For use in cabletroughs and ventilated flexible cableways in dry locations only. Minimum recommended installation temperature minus 40°C (with suitable handling procedures).

Maximum conductor temperature 90°C. Approved for use with ceiling fixtures.

* Registered Trademark of Nexans Canada Inc.

Characteristics

Construction characteristics

Conductor material	Copper or Aluminum
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Electrical characteristics

Maximum operating voltage	600 V
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Usage characteristics

Maximum operating temperature	90 °C
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AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

3 Conductors

Nexans ref.: AC90

Three Conductors (plus bonding wire)

Size AWG or kcmil	Insulation Thickness		Bonding Wire*** Size AWG		Approximate Diameter				Approximate Net Cable Weight				Ampacity (amps) 30°C Ambient	
	mm	in	Copper	Aluminum	Copper		Aluminum		Copper		Aluminum		Copper	Aluminum
					mm	in	mm	in	kg/km	lbs/kft	kg/km	lbs/kft		
14 (1)	0.76	0.030	14	--	12.5	0.49	--	--	170	115	--	--	15	--
12 (1)	0.76	0.030	14	12	13.4	0.53	13.4	0.53	215	145	140	95	20	15
10 (1)	0.76	0.030	12	10	14.6	0.57	14.6	0.57	290	195	175	115	30	25
8	1.14	0.045	10	10	19.1	0.75	19.1	0.75	505	340	300	200	45	30
6	1.14	0.045	8	8	21.3	0.84	20.6	0.81	705	475	380	255	65	55#
4	1.14	0.045	8	6	24.1	0.95	23.1	0.91	965	650	490	330	85	65
3	1.14	0.045	6	6	25.4	1.00	24.4	0.96	1195	800	560	375	105	75
2	1.14	0.045	6	6	26.9	1.06	25.9	1.02	1410	950	640	430	120	95#
1	1.40	0.055	6	4	30.5	1.20	28.9	1.14	1720	1155	785	530	140	105
1/0	1.40	0.055	6	4	32.5	1.28	31.0	1.22	2055	1380	905	605	155	120
2/0	1.40	0.055	6	4	34.9	1.38	33.0	1.30	2485	1670	1055	710	185#	145
3/0	1.40	0.055	4	4	37.7	1.49	35.8	1.41	3090	2075	1230	825	210	165
4/0	1.40	0.055	4	4	40.8	1.61	38.6	1.52	3755	2520	1450	975	235	185#
250	1.65	0.065	4	2	44.5	1.75	42.2	1.66	4375	2940	1840	1235	265	215
300	1.65	0.065	4	2	48.5	1.91	45.7	1.80	5315	3570	2295	1540	295	240
350	1.65	0.065	3	2	51.2	2.02	48.3	1.90	6120	4115	2560	1715	325	260
400	1.65	0.065	3	2	53.7	2.12	50.3	1.98	6870	4615	2800	1880	345	290
500	1.65	0.065	3	1	58.3	2.30	54.9	2.16	8370	5625	3365	2260	395	330
600	2.03	0.080	2	1	64.1	2.53	60.4	2.38	10045	6750	4000	2685	455	370
750	2.03	0.080	2	1	69.7	2.75	65.7	2.59	12260	8240	4790	3210	500	405
1000	2.03	0.080	1	--	78.0	3.07	--	--	16015	10760	--	--	585	480

Selling information

Insulation Colour Code: 3 Conductors - Black, Red, White

***Copper bonding wire supplied with copper conductors. Aluminum bonding wire supplied with aluminum conductors.

#For 3-wire 120/240 V and 120/208 V service conductors for single dwellings, or for feeder conductors supplying single dwelling units of row housing, of apartments and similar buildings, and sized in accordance with Rules 8-200(1), 8-200(2) and 8-202(1), the allowable ampacity for sizes No. 6, No. 2 and No. 4/0 AWG aluminum shall be 60 A, 100 A and 200 A respectively. For No. 2/0 AWG copper it shall be 200 A. In these cases the 5% adjustment Rule 8-106(1) cannot be applied.

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

4 Conductors

Nexans ref.: AC90

ARMoured CABLE FOR COMMERCIAL, INDUSTRIAL & APARTMENT USE

Description

CSA File #LL23462 Class 5811 01

Four copper or aluminum conductor material (ACM) conductors with low temperature EXELENE* cross-linked polyethylene insulation (RW90 XLPE) and bare copper or aluminum bonding wire. Conductor assembly paper wrapped and covered with bare interlocked aluminum armour. Rated 600 volts. LEAD FREE and RoHS compliant.

Limited Smoke Zero Halogen - CSA rated ST1 per CSA 22.2 No. 2556. Meets the FT4 flame spread test.



Standards

National CSA C22.2 N° 2556;
CSA C22.2 N° 51

Application

For open and concealed wiring in dry locations only.

For use in cabletroughs and ventilated flexible cableways in dry locations only.

Minimum recommended installation temperature minus 40°C (with suitable handling procedures).

Maximum conductor temperature 90°C. Approved for use with ceiling fixtures.

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Characteristics

Construction characteristics	
Conductor material	Copper or Aluminum
Electrical characteristics	
Maximum operating voltage	600 V
Usage characteristics	
Maximum operating temperature	90 °C

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

4 Conductors

Nexans ref.: AC90

Four Conductors (plus bonding wire)

Size AWG or kcmil	Insulation Thickness		Bonding Wire*** Size AWG		Approximate Diameter				Approximate Net Cable Weight				Ampacity## (amps) 30°C Ambient	
	mm	in	Cu	Al	Copper		Aluminum		Copper		Aluminum		Cu	Al
					mm	in	mm	in	kg/km	lbs/kft	kg/km	lbs/kft		
14 (1)	0.76	0.030	14	--	13.3	0.52	--	--	203	137	--	--	15	--
12 (1)	0.76	0.030	14	12	14.3	0.56	14.3	0.56	260	175	150	102	20	15
10 (1)	0.76	0.030	12	10	15.6	0.62	15.6	0.62	355	239	190	128	30	25
8	1.14	0.045	10	10	18.5	0.73	18.5	0.73	525	355	270	180	45	30
6	1.14	0.045	8	8	23.5	0.93	22.6	0.89	875	585	450	305	65	55#
4	1.14	0.045	8	6	26.0	1.03	25.4	1.00	1215	815	600	405	85	65
3	1.14	0.045	6	6	28.1	1.11	26.9	1.06	1495	1005	685	460	105	75
2	1.14	0.045	6	6	30.0	1.18	28.7	1.13	1785	1200	790	530	120	95#
1	1.40	0.055	6	4	33.1	1.31	32.0	1.26	2185	1465	965	650	140	105
1/0	1.40	0.055	6	4	35.7	1.41	34.3	1.35	2630	1770	1125	760	155	120
2/0	1.40	0.055	6	4	38.4	1.51	36.6	1.44	3190	2115	1310	880	185#	145
3/0	1.40	0.055	4	4	41.4	1.63	39.4	1.55	3970	2670	1540	1035	210	165
4/0	1.40	0.055	4	4	46.1	1.82	42.4	1.67	5020	3375	1985	1335	235	185#
250	1.65	0.065	4	2	50.2	1.98	47.2	1.86	5865	3940	2515	1690	265	215
300	1.65	0.065	4	2	53.3	2.10	50.2	1.98	6870	4615	2870	1925	295	240
350	1.65	0.065	3	2	56.4	2.22	53.0	2.09	7920	5325	3220	2165	325	260
400	1.65	0.065	3	2	59.2	2.33	55.6	2.19	8920	5995	3540	2380	345	290
500	1.65	0.065	3	1	64.4	2.54	60.4	2.38	10925	7345	4290	2885	395	330
600	2.03	0.080	2	1	71.0	2.80	67.0	2.64	13090	8795	5085	3420	455	370
750	2.03	0.080	2	1/0	77.2	3.04	72.9	2.87	16030	10770	6105	4100	500	405

Selling information

Insulation Colour Code: 4 Conductors - Black, Red, Blue, White

***Copper bonding wire supplied with copper conductors. Aluminum bonding wire supplied with aluminum conductors.

#For 3-wire 120/240 V and 120/208 V service conductors for single dwellings, or for feeder conductors supplying single dwelling units of row housing, of apartments and similar buildings, and sized in accordance with Rules 8-200(1), 8-200(2) and 8-202(1), the allowable ampacity for sizes No. 6, No. 2 and No. 4/0 AWG aluminum shall be 60 A, 100 A and 200 A respectively. For No. 2/0 AWG copper it shall be 200 A. In these cases the 5% adjustment Rule 8-106(1) cannot be applied.

##Assuming 4th conductor is the neutral of a balanced 3 phase 4 wire system.