

Exar® 400 LOCA Class 1E UL 3271 125°C - 600V CSA AWM XHHW SIS

Exar® 400 is a LOCA qualified irradiation cross-linked polymeric insulation possessing remarkable mechanical and electrical properties along with excellent radiation, water, steam, temperature and flame resistance. Specially developed for meeting high safety standards for nuclear and fossil fuel power plants, Exar 400 processes extremely well on the latest high speed cut and strip machines. This product has unusually high chemical resistance including many potting compounds, toners and solvents. An excellent primary and jacket insulation for flexible control cables used in environmentally tough conditions. Save money by avoiding costly scrap, rework and untimely replacement.

Benefits and Features

LOCA qualified Class 1E

ICEA 40 years at 90°C and 200 megarads

Resistant to radiation exposure

Resistant to water and steam

IEEE 383 and VW-1 Flame Rating

Meets 10 CFR 50 Appendix B Quality Assurance

for Nuclear Power Plants

UL/CSA AWM 125°C - 600V

UL XHHW, RHH, RHW, SIS Rated

RoHS Compliant

Applications

Including but not limited to:

Nuclear and Fossil Fuel Power Plants

Power and Control Cables

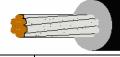
Switch Board Equipment

Office Equipment

Underground conduit or raceway

Wet Locations

Motors



Champlain Cable Corporation

Part Number	Standard Conductors	Nom. Dia of Conductor		Insulation Thickness		Nom. OD		Finished Weight	Ampacity
	Tin Copper	in.	mm.	in.	mm.	in.	mm.	(lbs/mft)	
15-11750	22 (19/34)	.031	.79	.030	.76	.095	2.41	6.04	11
15-11749	20 (19/32)	.038	.97	.030	.76	.103	2.61	7.85	14
15-11733	18 (19/.0092)	.045	1.14	.030	.76	.105	2.67	9.52	20
15-11742	16 (26/30)	.058	1.47	.030	.76	.122	3.09	13.36	26
15-11745	14 (41/30)	.073	1.85	.030	.76	.136	3.45	18.04	42
15-11748	12 (65/30)	.093	2.36	.030	.76	.150	3.81	27.54	55
15-11746	10 (105/30)	.111	2.82	.030	.76	.172	4.37	40.82	72
15-11549	8 (133/29)	.147	3.73	.045	1.14	.238	6.04	70.49	97
15-11548	6 (133/27)	.183	4.65	.060	1.52	.305	7.75	114.28	131
15-11547	4 (133/25)	.263	6.68	.060	1.52	.385	9.78	171.90	172
15-11542	2 (259/26)	.323	8.20	.060	1.52	.445	11.30	256.49	232
15-11541	1 (259/25)	.372	9.44	.060	1.52	.492	12.50	316.20	266
15-11540	1/0 (259/24)	.424	10.77	.080	2.03	.588	14.99	413.00	309
15-11539	2/0 (259/23)	.465	11.81	.080	2.03	.629	15.98	533.00	355
15-11538	3/0 (259/22)	.520	13.21	.080	2.03	.684	17.37	629.00	410
15-11537	4/0 (259/21)	.586	14.80	.080	2.03	.750	19.05	775.00	481

^{*}Ampacity 125°C rated single-insulated conductor in free air at 40°C ambient air temperature.





PROPERTIES	EXAR [®] 400				
Approvals / Listings:					
LOCA	Class 1E				
UL	STYLE 3271				
CSA	AWM 125°C 600V				
Physical: *					
Temperature Rating	125°C				
Voltage Rating (Vrms)	600V				
Cold Bend - 4h @ -65°C	Passes				
Shore "A" Hardness	89				
Shore "D" Hardness	38				
Room Temperature UL Abrasion (cycles)	5000				
Bend Radius	3 X overall diameter				
Tensile Strength: *					
Unaged	2000 PSI				
Retention after 7 days @ 158 °C	90%				
Retention after 90 days @ 136 °C	85%				
Elongation: *					
Unaged	250%				
Retention after 7 days @ 158 °C	90%				
Retention after 90 days @ 136 °C	70%				
Water Absorption					
ICEA-S-66-524	Passes				
Flame Test: *					
IPCEA S-19-81	Passes				
UL VW-1	Passes				
IEEE Std. 383-1974	Passes				
Electrical: *					
Dielectric Constant	2.72				
Dielectric breakdown strength (Vrms)	23,000				
Oxygen Index:	28				
Gamma Radiation Resistance – Total:					
Integral dose (Cobalt 60 @ a rate of less than 1 megarad/hr.)	200 megarads				
Ultraviolet Light Resistance:					
Per ASTM G-23 Type H	5000 hrs.				

^{*} Properties are tested to UL 758 and UL 1581.

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