EU REACH Declaration 233 Substances of Very High Concern Considered



Excelsys CoolX Series CoolX600, CoolX1000, CoolX1800 AC/DC Power Supplies

Issued: April 11, 2023

REACH: Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) No. 1907/2006

REACH is the European Union's chemical substances regulatory framework.

Advanced Energy does not produce chemical substances or mixtures but does manufacture electrical and electronic equipment that might contain REACH substances in component parts of the final product.

Article 33 of REACH requires manufacturers to inform customers of Substances of Very High Concern (SVHCs), when contained in component parts of their product at concentrations above 0.1% by weight. The REACH Candidate List of SVHCs is published online by the European Chemical Agency (ECHA). Sufficient SVHC information must be provided to the customer to allow for safe use.

Article 67 of REACH describes restrictions on the manufacture, placing on the market, and uses of certain substances on the Restricted Substances List in Annex XVII.

POPs Regulation (EU) 2019/1021 prohibits or severely restricts the production and use of Persistent Organic Pollutants (POPs) in products being placed on the market per the Stockholm Convention and Aarhus Protocol.

REACH review of product conducted under the following conditions:	European Chemicals Agency (ECHA) SVHC candidate list:	January 17, 2023 publication date:	233 SVHCs
Authorized by:	Type of product manufactured,	Complex article assembled from many compo-	
1.8%	per REACH definition:	nent articles, electrical & electronic equipment	
	Subject to REACH Article 7,	No, substances in articles < 1 tonne per year	
	ECHA registration ?:	No, substances not intended to be released	
Brazelle Marie Castillo	SVHC concentration of > 0.1%,	SVHC weight divided by weight of pa	rt containing
Materials Compliance Engineer	calculation method:	SVHC, per European Court of Justice ruling	

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Based on information from component part manufacturers, Advanced Energy declares the following:

Article 67 Declaration:

Products listed <u>DO NOT contain</u> any Restricted Substances in REACH Annex XVII or POPs Regulation.

Article 33 Declaration:

Products listed <u>contain</u> these SVHC(s) in the REACH Candidate List above concentration of 0.1%.

SVHC Name	CAS Number	Content Concentration	Location of SVHC's
Lead	7439-92-1	0.13% - 3.70%	Die attach solder in diodes, transistors, and suppressors
		0.27%	Glass materials in suppressors
		0.32%	Brass in resistors
Diboron trioxide	1303-86-2	0.12% - 0.35%	Glass materials in capacitors
Lead monoxide (lead oxide)	1317-36-8	0.13% - 8.85%	Glass materials in resistors, diodes, and thermistors

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Product Declared Compliant: CoolX Series Power Supplies

CoolX configured	power supply r	part numbering system	m:
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ab = 06, 10,18 CoolPac cabinet with AC input, slots for CoolMods:

06 = 600W output - with 4 slots, no cooling fan 10 = 1000W output - with 6 slots, no cooling fan 18 = 1800W output - with 6 slots, variable speed fan

c = S or M S = ITE/Industrial product

M = Medical product

u, v, w, x, y, z = CoolMod plug-in DC output modules starting with Cm:

0, #, or A - Z 0 = Unpopulated slot

= Unavailable slot (due to multi-slot module in neighboring slot)

A = CmA E = CmE B = CmB F = CmF C = CmC G = CmG

D = CmD H = CmH

d = N, C, S, P, or X N = Standard model (Unconfigured)

C = Conformal Coating

S = Ruggedised, including conformal coating

P = Configured

X = Internal use only

e = '-', 0 - 9 or A - Z '-' = Screw Terminal (Standard), normal leakage

1 = IEC Terminal

2 = Screw Terminal, Reverse Fan 3 = IEC Terminal, Reverse Fan

4 = Screw Terminal, Low Leakage 5 = IEC Terminal, Low Leakage

6 = Screw Terminal, Low Leakage, Reverse Fan 7 = IEC Terminal, Low Leakage, Reverse Fan A - Z = Other connector options (cables etc.)

f = A or B A = 12V Aux output (standard)

B = 5V Aux output

g = Not used, '-', or A-Z Not used = Standard model, end of part number (h is not used)

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'-' = Standard model with h options (- used when h is used)

A-Z = Reserved for internal use (not standard software variants)

L = Cover, not standard

h = Optional Any alphanumeric character. Logistics use only.

Product Declared Compliant: CoolMod modules, for CoolX Power Supplies

CoolX CoolMod plug-in modules part numbering system
Part Number = Cma-bcd

Cm = all CoolMod part numbers start with 'Cm'

a = A - Z Type of CoolMod module:

Standard, High power, Dual Output, or Wide Trim

See Note below

'-' = Not used, '-', Not used = Standard model, end of part number (bcd is not used)

P, C, or S '-' = Standard model with bcd options (- used when bcd is used)

P = Specific output adjustment settings

C = Conformal Coating

S = Ruggedised, including conformal coating

bcd = Optional Any three alphanumeric characters.

Logistics use only.

Note: Use '-' to designate standard model when bcd is used. Example: CmB-X03 Not used when bcd is not used, end of part number. Example: CmB