

BX Series Catalytic Heaters

'G' Series Catalytic Pad - Non-Hazardous Areas

The Cata-Dyne™ BX Series infrared gas catalytic heater with 'G' Series catalytic pad is designed for use in non-hazardous heating applications such as infrared drying and curing ovens. It is fitted with a patented high temperature catalyst pad, operates on either natural or propane fuel and is available in a wide variety of cabinet sizes.

Applications

The large surface area of the Cata-Dyne™ heater allows for efficient transfer of infrared heat that can be used in a variety of applications including:

- Facility space heating
- Process heating
- Freeze protection
- Comfort heating for personnel
- Ovens

Features

- Internal heater components such as our proprietary catalyst pad and preheat Caloritech™ tubular element are manufactured in-house
- Multiple Btu input ratings and a variety of standard heater sizes available
- Offered in a variety of preheat voltages
- Natural gas (NG) or propane (LPG) configurations
- Choice of manual control or electronic control options
- Multiple heater mounting bracket configurations available
- Heater contains no moving parts and is designed to operate indefinitely when supplied with air and clean fuel

Certifications

- G Series catalytic pad is certified by Canadian Standards Association (CSA) and Factory Mutual (FM) and (European standards) for non-hazardous area applications.

See Table 4, page 12 for fuel & electrical ratings.



'X' Series Catalytic Pad - Hazardous Areas

(Only sold in the USA)

BX Series heaters are used in many different applications that involve spot or space heating where hazardous materials may be present.

Applications

- Comfort heating for industrial buildings and installations
- Freeze protection for equipment or components
- Drying or curing processes

Features

- Heater box constructed of 300 series stainless steel for corrosion protection
- Standard 3/8" NPT gas connections
- Explosion-proof electrical junction box with standard 3/4" NPT connections
- Cata-Dyne™ heaters are designed to operate on either natural gas or propane
- Cata-Dyne™ heaters do not require electrical power to operate once they have been started
- Our explosion-proof catalytic technology is the most efficient in the industrial heating market
- Heater contains no moving parts and is designed to operate indefinitely when supplied with air and clean fuel
- Internal heater components such as our proprietary catalyst pad and preheat Caloritech™ tubular element are manufactured in-house

Certifications

- X Series catalytic pad is the industry standard for hazardous location heating needs.
- Factory Mutual (FM) for use in Class I, Division 1, Group D hazardous locations. Temperature code T2C at an ambient temperature of 40°C (104°F). This style heater is only sold in the USA.

See Table 2, page 11 for fuel & electrical ratings.



Table 1 – WX Series Fuel and Electrical Rating Data (CSA and FM)

Model No.	Max. Gas Input		Min. Gas Input				Max. Gas Flow				Start-Up Amperage						
	Natural Gas / Propane		Natural Gas		Propane		CFH		m ³ /hr		12V	120V	208V	240V	380V	480V	600V
	Btu/hr	kW	Btu/hr	kW	Btu/hr	kW	Natural Gas	Propane	Natural Gas	Propane							
W6x6	1,250	0.366	500	0.147	375	0.110	1.25	0.5	0.0354	0.0142	7.1	0.7	-	0.4	-	-	-
W6x12	2,500	0.733	1,000	0.293	750	0.220	2.5	1.0	0.0708	0.0283	7.1	0.7	-	0.4	-	-	-
W6x24	5,000	1.465	2,000	0.586	1,500	0.440	5.0	2.0	0.1416	0.0566	15.0	2.1	1.2	1.0	-	-	-
W6x60	12,500	3.663	5,000	1.465	3,750	1.099	12.5	5.0	0.3540	0.1416	-	-	-	-	-	1.3	-
W8x8	2,222	0.651	900	0.264	700	0.205	2.2	0.9	0.0629	0.0252	7.1	0.7	-	0.4	-	-	-
W10x12	4,167	1.221	1,700	0.498	1,250	0.366	4.2	1.7	0.1180	0.0472	15.0	2.1	1.2	1.0	-	-	-
W12x12	5,000	1.465	2,000	0.586	1,500	0.440	5.0	2.0	0.1416	0.0566	15.0	2.1	1.2	1.0	-	-	-
W12X24	10,000	2.931	4,000	1.172	3,000	0.879	10.0	4.0	0.2832	0.1133	30.0	4.2	2.4	2.1	-	1.5	0.9
W12x36	15,000	4.396	6,000	1.758	4,500	1.319	15.0	6.0	0.4248	0.1699	30.0	5.0	2.9	2.5	1.6	1.3	1.0
W12x48	20,000	5.861	8,000	2.345	6,000	1.758	20.0	8.0	0.5663	0.2265	30.0	6.7	3.9	3.3	2.1	1.7	1.3
W12x60	25,000	7.327	10,000	2.931	7,500	2.198	25.0	10.0	0.7079	0.2832	45.0	10.4	6.0	5.2	3.3	2.6	2.1
W12x72	30,000	8.792	12,000	3.517	9,000	2.638	30.0	12.0	0.8495	0.3398	-	12.1	7.0	6.0	3.8	3.0	2.4
W18x24	15,000	4.396	6,000	1.758	4,500	1.319	15.0	6.0	0.4248	0.1699	30.0	4.2	2.4	2.1	-	1.5	-
W18x30	18,750	5.495	7,500	2.198	5,625	1.649	18.75	7.5	0.5309	0.2124	-	-	-	-	-	1.5	-
W18x36	22,500	6.594	9,000	2.638	6,750	1.978	22.5	9.0	0.6371	0.2549	-	10.0	5.8	5.0	3.2	2.5	2.0
W18x48	30,000	8.792	12,000	3.517	9,000	2.638	30.0	12.0	0.8495	0.3398	-	13.3	7.7	6.7	4.2	3.3	2.7
W18x60	37,500	10.990	15,000	4.396	11,250	3.297	37.5	15.0	1.0619	0.4248	-	20.8	12.0	10.4	6.6	5.2	4.2
W18x72	45,000	13.188	18,000	5.275	13,500	3.956	45.0	18.0	1.2743	0.5097	-	24.2	14.0	12.1	7.6	6.0	4.8
W24x24	20,000	5.861	8,000	2.345	6,000	1.758	20.0	8.0	0.5663	0.2265	30.0	4.2	2.4	2.1	-	1.5	-
W24x30	25,000	7.327	10,000	2.931	7,500	2.198	25.0	10.0	0.7079	0.2832	30.0	4.2	2.4	2.1	-	1.5	-
W24x36	30,000	8.792	12,000	3.517	9,000	2.638	30.0	12.0	0.8495	0.3398	-	10.0	5.8	5.0	3.2	2.5	2.0
W24x48	40,000	11.723	16,000	4.689	12,000	3.517	40.0	16.0	1.1327	0.4531	-	13.3	7.7	6.7	4.2	3.3	2.7
W24x60	50,000	14.654	20,000	5.861	15,000	4.396	50.0	20.0	1.4159	0.5663	-	20.8	12.0	10.4	6.6	5.2	4.2
W24x72	60,000	17.584	24,000	7.034	18,000	5.275	60.0	24.0	1.6990	0.6796	-	24.2	14.0	12.1	7.6	6.0	4.8

Table 2 – BX Series Fuel and Electrical Rating Data (FM only) - Available only in the USA

Model No.	Max. Gas Input		Min. Gas Input				Max. Gas Flow				Start-Up Amperage						
	Natural Gas/ Propane		Natural Gas		Propane		CFH		m ³ /hr		12V	120V	208V	240V	380V	480V	600V
	Btu/hr	kW	Btu/hr	kW	Btu/hr	kW	Natural Gas	Propane	Natural Gas	Propane							
H6x6	1,500	0.44	500	0.147	375	0.11	1.5	0.6	0.0425	0.017	7.1	0.7	-	0.4	-	-	-
H6x12	3,000	0.879	1,000	0.293	750	0.22	3	1.2	0.085	0.034	7.1	0.7	-	0.4	-	-	-
H6x24	6,000	1.758	2,000	0.586	1,500	0.44	6	2.4	0.1699	0.068	15	2.1	1.2	1	-	-	-
H8x8	2,667	0.782	900	0.264	700	0.205	2.7	1.1	0.0755	0.0302	7.1	0.7	-	0.4	-	-	-
H10x12	5,000	1.465	1,700	0.498	1,250	0.366	5	2	0.1416	0.0566	15	2.1	1.2	1	-	-	-
H12x12	6,000	1.758	2,000	0.586	1,500	0.44	6	2.4	0.1699	0.068	15	2.1	1.2	1	-	-	-
H12X24	12,000	3.517	4,000	1.172	3,000	0.879	12	4.8	0.3398	0.1359	30	4.2	2.4	2.1	-	1.5	0.9
H12x36	18,000	5.275	6,000	1.758	4,500	1.319	18	7.2	0.5097	0.2039	-	5	2.9	2.5	1.6	1.3	1
H12x48	24,000	7.034	8,000	2.345	6,000	1.758	24	9.6	0.6796	0.2718	30	6.7	3.9	3.3	2.1	1.7	1.3
H12x60	30,000	8.792	10,000	2.931	7,500	2.198	30	12	0.8495	0.3398	45	10.4	6	5.2	3.3	2.6	2.1
H12x72	36,000	10.551	12,000	3.517	9,000	2.638	36	14.4	1.0194	0.4078	-	12.1	7	6	3.8	3	2.4
H18x24	18,000	5.275	6,000	1.758	4,500	1.319	18	7.2	0.5097	0.2039	30	4.2	2.4	2.1	-	1.5	-
H18x30	22,500	6.594	7,500	2.198	5,625	1.649	22.5	9	0.6371	0.2549	-	-	-	-	-	1.5	-
H18x36	27,000	7.913	9,000	2.638	6,750	1.978	27	10.8	0.7646	0.3058	-	10	5.8	5	3.2	2.5	2
H18x48	36,000	10.551	12,000	3.517	9,000	2.638	36	14.4	1.0194	0.4078	-	13.3	7.7	6.7	4.2	3.3	2.7
H18x60	45,000	13.188	15,000	4.396	11,250	3.297	45	18	1.2743	0.5097	-	20.8	12	10.4	6.6	5.2	4.2
H18x72	54,000	15.826	18,000	5.275	13,500	3.956	54	21.6	1.5291	0.6116	-	24.2	14	12.1	7.6	6	4.8
H24x24	24,000	7.034	8,000	2.345	6,000	1.758	24	9.6	0.6796	0.2718	30	4.2	2.4	2.1	-	1.5	-
H24x30	30,000	8.792	10,000	2.931	7,500	2.198	30	12	0.8495	0.3398	30	4.2	2.4	2.1	-	1.5	-
H24x36	36,000	10.551	12,000	3.517	9,000	2.638	36	14.4	1.0194	0.4078	-	10	5.8	5	3.2	2.5	2
H24x48	48,000	14.067	16,000	4.689	12,000	3.517	48	19.2	1.3592	0.5437	-	13.3	7.7	6.7	4.2	3.3	2.7
H24x60	60,000	17.584	20,000	5.861	15,000	4.396	60	24	1.699	0.6796	-	20.8	12	10.4	6.6	5.2	4.2
H24x72	72,000	21.101	24,000	7.034	18,000	5.275	72	28.8	2.0388	0.8155	-	24.2	14	12.1	7.6	6	4.8

Table 3 – MKII Series (CSA and FM)

Model No.	Max. Gas Input		Min. Gas Input				Max. Gas Flow				Start-Up Amperage	
	Natural Gas / Propane		Natural Gas		Propane		CFH		m ³ /hr		12V	120V
	Btu/hr	kW	Btu/hr	kW	Btu/hr	kW	Natural Gas	Propane	Natural Gas	Propane		
MK12x12	5,000	1.464	2,000	0.586	1,500	0.440	5.0	2.0	0.1416	0.0566	15.0	2.1
MK12x24	10,000	2.929	4,000	1.172	3,000	0.879	10.0	4.0	0.2832	0.1133	30.0	4.2
MK18x24	15,000	4.393	6,000	1.758	4,500	1.319	15.0	6.0	0.4248	0.1699	30.0	4.2
MK18x48	30,000	8.787	12,000	3.517	9,000	2.638	30.0	12.0	0.8495	0.3398	–	13.3
MK24x24	20,000	5.858	8,000	2.345	6,000	1.758	20.0	8.0	0.5663	0.2265	30.0	4.2
MK24x48	40,000	11.716	16,000	4.689	12,000	3.517	40.0	16.0	1.1327	0.4531	–	13.3

Table 4 – G Series Fuel and Electrical Rating Data (CSA and FM - Non-Hazardous)

Model No.	Max. Gas Input		Min. Gas Input				Max. Gas Flow				Start-Up Amperage						
	Natural Gas / Propane		Natural Gas		Propane		CFH		m ³ /hr		12V	120V	208V	240V	380V	480V	600V
	Btu/hr	kW	Btu/hr	kW	Btu/hr	kW	Natural Gas	Propane	Natural Gas	Propane							
H6x6	1,500	0.440	500	0.147	375	0.110	1.5	0.6	0.0425	0.0170	7.1	0.7	–	0.4	–	–	–
H6x12	3,000	0.879	1,000	0.293	750	0.220	3.0	1.2	0.0850	0.0340	7.1	0.7	–	0.4	–	–	–
H6x24	6,000	1.758	2,000	0.586	1,500	0.440	6.0	2.4	0.1699	0.0680	15.0	2.1	1.2	1.0	–	–	–
H8x8	2,667	0.782	900	0.264	700	0.205	2.7	1.1	0.0755	0.0302	7.1	0.7	–	0.4	–	–	–
H10x12	5,000	1.465	1,700	0.498	1,250	0.366	5.0	2.0	0.1416	0.0566	15.0	2.1	1.2	1.0	–	–	–
H12x12	6,000	1.758	2,000	0.586	1,500	0.440	6.0	2.4	0.1699	0.0680	15.0	2.1	1.2	1.0	–	–	–
H12X24	12,000	3.517	4,000	1.172	3,000	0.879	12.0	4.8	0.3398	0.1359	30.0	4.2	2.4	2.1	–	1.5	0.9
H12x36	18,000	5.275	6,000	1.758	4,500	1.319	18.0	7.2	0.5097	0.2039	–	5.0	2.9	2.5	1.6	1.3	1.0
H12x48	24,000	7.034	8,000	2.345	6,000	1.758	24.0	9.6	0.6796	0.2718	30.0	6.7	3.9	3.3	2.1	1.7	1.3
H12x60	30,000	8.792	10,000	2.931	7,500	2.198	30.0	12.0	0.8495	0.3398	45.0	10.4	6.0	5.2	3.3	2.6	2.1
H12x72	36,000	10.551	12,000	3.517	9,000	2.638	36.0	14.4	1.0194	0.4078	–	12.1	7.0	6.0	3.8	3.0	2.4
H18x24	18,000	5.275	6,000	1.758	4,500	1.319	18.0	7.2	0.5097	0.2039	30.0	4.2	2.4	2.1	–	1.5	–
H18x30	22,500	6.594	7,500	2.198	5,625	1.649	22.5	9.0	0.6371	0.2549	–	–	–	–	–	1.5	–
H18x36	27,000	7.913	9,000	2.638	6,750	1.978	27.0	10.8	0.7646	0.3058	–	10.0	5.8	5.0	3.2	2.5	2.0
H18x48	36,000	10.551	12,000	3.517	9,000	2.638	36.0	14.4	1.0194	0.4078	–	13.3	7.7	6.7	4.2	3.3	2.7
H18x60	45,000	13.188	15,000	4.396	11,250	3.297	45.0	18.0	1.2743	0.5097	–	20.8	12.0	10.4	6.6	5.2	4.2
H18x72	54,000	15.826	18,000	5.275	13,500	3.956	54.0	21.6	1.5291	0.6116	–	24.2	14.0	12.1	7.6	6.0	4.8
H24x24	24,000	7.034	8,000	2.345	6,000	1.758	24.0	9.6	0.6796	0.2718	30.0	4.2	2.4	2.1	–	1.5	–
H24x30	30,000	8.792	10,000	2.931	7,500	2.198	30.0	12.0	0.8495	0.3398	30.0	4.2	2.4	2.1	–	1.5	–
H24x36	36,000	10.551	12,000	3.517	9,000	2.638	36.0	14.4	1.0194	0.4078	–	10.0	5.8	5.0	3.2	2.5	2.0
H24x48	48,000	14.067	16,000	4.689	12,000	3.517	48.0	19.2	1.3592	0.5437	–	13.3	7.7	6.7	4.2	3.3	2.7
H24x60	60,000	17.584	20,000	5.861	15,000	4.396	60.0	24.0	1.6990	0.6796	–	20.8	12.0	10.4	6.6	5.2	4.2
H24x72	72,000	21.101	24,000	7.034	18,000	5.275	72.0	28.8	2.0388	0.8155	–	24.2	14.0	12.1	7.6	6.0	4.8

Table 5 – WXS Slim Line Series Fuel and Electrical Rating Data (FM Only)

Model No.	Max. Gas Input		Min. Gas Input				Max. Gas Flow				Start-Up Amperage			
	Natural Gas / Propane		Natural Gas		Propane		CFH		m ³ /hr		12V	120V	240V	
	Btu/hr	kW	Btu/hr	kW	Btu/hr	kW	Natural Gas	Propane	Natural Gas	Propane				
WXS6x6	1,750	0.513	583	0.171	438	0.128	1.8	0.7	0.0496	0.0198	7.1	0.7	0.4	
WXS6x12	3,500	1.025	1,167	0.342	875	0.256	3.5	1.4	0.0991	0.0396	7.1	0.7	0.4	
WXS6x24	7,000	2.050	2,333	0.684	1,750	0.513	7.0	2.8	0.1982	0.0793	15.0	2.1	1.0	
WXS8x8	3,111	0.911	1,037	0.304	778	0.228	3.1	1.2	0.0881	0.0352	7.1	0.7	0.4	
WXS10x12	5,833	1.709	1,944	0.570	1,458	0.427	5.8	2.3	0.1652	0.0661	15.0	2.1	1.0	
WXS12x12	7,000	2.050	2,333	0.684	1,750	0.513	7.0	2.8	0.1982	0.0793	15.0	2.1	1.0	
WXS12x24	14,000	4.101	4,667	1.368	3,500	1.026	14.0	5.6	0.3964	0.1586	30.0	4.2	2.0	
WXS12x36	21,000	6.151	7,000	2.051	5,250	1.539	21.0	8.4	0.5947	0.2379	30.0	5.0	2.5	
WXS12x48	28,000	8.201	9,333	2.735	7,000	2.051	28.0	11.2	0.7929	0.3172	30.0	6.7	3.3	
WXS24x24	28,000	8.201	9,333	2.735	7,000	2.051	28.0	11.2	0.7929	0.3172	30.0	4.2	2.0	
WXS24x36	42,000	12.302	14,000	4.103	10,500	3.077	42.0	16.8	1.1893	0.4757	–	10.0	5.0	
WXS24x48	56,000	16.402	18,667	5.471	14,000	4.103	56.0	22.4	1.5858	0.6343	–	13.3	6.7	
Round	8 in	2,500	0.732	825	0.242	625	0.183	2.5	1.0	0.0708	0.0283	7.1	0.7	–
	12 in	5,500	1.611	1,825	0.535	1,375	0.403	5.5	2.2	0.1557	0.0623	15.0	2.1	–