



CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 092734 0 000

Class No: 4813 02 TEMPERATURE-INDICATING AND REGULATING EQUIPMENT - Other Than Appliance Type

SUBMITTOR

Ogden Manufacturing Company
160721 64 W. Seegers Rd.
Arlington Heights, IL 60005
USA
Attention: Mr. Joseph Trass

March 14, 1996((Replaces:August 5, 1993))

- Temperature controllers, input 120/240V, 50/60Hz, output relay contacts spst 5A, 240V max resistive load, Models ETR-101, -102, -103, -175, -203, -1010, -1020, -1040, -4080, -7020, -7040, -8060, -8070, -8080, -8085, -9002, -9010, -9020, -9040, -9060 and -9080. Ambient 51C max.
- Temperature controller, Model ETR-9090 Series input 80-260V, 50/60Hz, output relay contacts; (RY2) 3A, 240V max resistive, 200VA, 120/240V ac pilot duty, (RY1) 2A, 240V ac resistive, 100VA, 120/240V ac pilot duty. Ambient 50C max.
- Temperature controllers, Models ETR-404, -406, -4220, -4230, -4120, -4130, -805, -8120, -8130 and -9200, followed by 3 or 4, followed by 1 through 5, followed by 1 through 8, followed by 1 through 3. Control Input - 12-36V dc; 12-36V dc 50/60Hz or 90-264V ac 50/60Hz nominal 5VA, sensor rated at Class 2 ambient temp 50C, relay output 240V ac 3.0A resistive maximum. Note: The above temperature controllers may have suffixes denoting input signals and output ratings.



CSA INTERNATIONAL

CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

Alternate File: 703274

Class No: 4813 02 TEMPERATURE-INDICATING AND REGULATING EQUIPMENT Other Than Appliance Type

LISTEE

160721 Ogden Manufacturing Company
64 W. Seegers Rd.
Arlington Heights, IL 60005
USA

August 4, 1999

- Temperature controllers, Models ETR-3200, ETR-3100, followed by 3 or 4, followed by 1 through 5, followed by 1 through 8, followed by 1 through 3 and all these suffixes are to denote different Certified input signals and output ratings only and therefore do not change the electrical characteristic of the Controllers. Control Input: 12-30V dc; 12-36V ac, 50/60Hz or 90-264V ac, 50/60Hz, nominal 5VA. Sensor rated at Class 2. Ambient temperature 50C relay contact rated 240V ac, 3.0A resistive maximum.

sp



CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 050523 0 000

Class No: 2871 02 HEATERS - Miscellaneous

SUBMITTOR

160721 Ogden Manufacturing Company
64 W. Seegers Rd.
Arlington Heights, IL 60005
USA

July 23, 1996(Replaces:December 7, 1995)

- Cartridge-type metal sheathed heater elements, 250V max, Series BL-6, BLEL, 140 to 2500W.
- Cartridge-type metal sheathed elements, 120 or 240V, Series O-2X, 30 to 325W; CU2, 40 to 150W; O-2, 40 to 400W; O-3 30 to 1000W; CU3, 75 to 300W; O-5, 60 to 1250W; CU4, 75 to 800W; O-6, 100 to 1600W; CU5, 100 to 1050W; O-7, 200 to 1800W; CU6, 200 to 1250W.
- Cartridge-type metal sheathed elements, 250V max, Series MW-2, MXEE, MWFX-2, MWEG, MX-2, BL-2, BLEE, 30-600W; MW-3, MWEG, MWFX-3, MXEG, MX-3, BL-3, BLEG, 30 to 600W; BLX-3, BXEG, BX-3, 30 to 1500W; MW-5, MWEJ, MWFX-5, MXEJ, MX-5, BL-5, BLEJ, BLX-5, BXEJ, BX-5, 200 to 2000W; BL-6, BLEL, BLX-6, BXEL, BX-6, 280 to 2500W; MW-7, MWEN, BL-7, BLEN, BLX-7, BXEN, BX-7, 225 to 4600W; 240V, Series CM3, 250 to 600W; CM4, 250 to 2000W; CM5, 300 to 2000W; CM6, 300 to 2200W, MW-6, MWEL, MWFX-6, MXEL, MX-6, 140 to 2500W, MW-4, MWEF, BL-4, BLEF, 150 to 600W.
- Cartridge-type metal sheathed elements, 125V max, 300W max, Series MWFX4, MXFF, MX4.
- Band heaters, strap-on type, 120 or 240V, Series B, FB, 75W to 5625W; Series BH, 120V, 600W; 240V, 950W max.
- Half-band heaters, strap-on type, Series HB, PB, 120V, 1800W max, 240V, 3600W max; Series BH, 240V, 700W. Notes: 1. The cartridge- and band-type heaters are certified for use in equipment where the acceptability of the combination is determined by the Canadian Standards Association. 2. The cartridge heaters may be followed by one to nine digits to indicate the length and serial number. 3. Band heaters Series B and FB and Half-band heaters Series HB, PB and BH may be followed by one to twelve digits. The first one to three digits indicate inside diameter, the next two letters designate clamping arrangement, "S" -straps, "E" -ears and termination, "T" -stud terminal, "L" -leads, "F" -flag terminal and the next two digits indicate length and the last five digits indicate the serial number. 4. The third letter of series designation of cartridge heaters may be a "M" to indicate the metric equivalent.
- Mica strip heaters, Series HS, rated 240V, 60Hz, 2850W max.

Note: Strip heaters, Series HS, may be followed by up to twelve digits. The first letter E or M indicates English or Metric, the next one to three digits indicate length, the next letter A to S indicates length fractions, the next



Certification Record No: 050523 0 000

Class No: 2871 02

whole number with zeros indicates width, the next letter A to S indicates width fractions, the last five digits is the serial number.

- Ceramic band heaters, Series C, rated 480V ac max, 60Hz, 8000W max. Note: Model designation may be followed by up to thirteen letters and numbers to indicate inside diameters and widths.
- Flexible heaters, Series SR and SR2121, 5.0W/in{ max, 240V ac, 200C max surface temp.
- Strip and band heaters Series Type MT rated 240V ac max, 60Hz, 60W/sq-in max; 3000W max. Model designation may be followed by one to nine digits to indicate the length and serial number. Note: All the above listed heater elements are Certified only for use in equipment where the acceptability of the combination is determined by the Canadian Standards Association.



CERTIFICATION RECORD

The company named below has been authorized by CSA to represent the products listed in this record as "CSA Certified" and to affix the CSA Mark to these products according to the terms and conditions of the CSA Service Agreement and applicable CSA program requirements (including additional Markings).

File No: 055274 0 000

Class No: 2871 02 HEATERS Miscellaneous

SUBMITTOR

4512889 Ogden Manufacturing Company
64 W. Seegers Rd.
Arlington Heights, IL 60005
USA

FACTORY

4550111 Ogden Manufacturing Company
423 W. Plum St.
Edinboro, PA 16412
USA

March 16, 2000(Replaces:February 7, 1996)

- Tubular sheath heaters, Cat No XXXX (See Note 2), 600V or less, 120W per sq in or less. Tubular finned sheathed heaters, Cat No FDXX-XXXX, 600V or less, 120W per sq in max.
- Screw plug immersion heaters, Cat No KF-1, KG-1, KE-1, KI-1, KJ-1, KI-2, KJ-2, KI-3, KH-2, KH-3, KIX-1, KJX-1, KV-1, KV-2, KV-3, KB-2, KB-3, KW-1, KW-2, KW-3, KR-3, KJ-3, KQ-3, KS-3, KB-1, KB-3, KC-1, KD-1, KF-1, KF-2, KE-2, KE-3, KG-1, KH-1, KI-3, KIX-1, KJ-1, KJ-2, KS-3, KT-3, KV-3, KW-3, KX-1, KX-2, KZ-3, 600V or less, 120W per sq. in or less.
- Flanged Immersion heaters, Cat Nos K3A-3, K3C-3, K3S-3, K5C-6, K5S-6, K5A-6, K6C-12, K6S-12, K6A-12, K8C-18, K8S-18, K8A-18, K10C-27, K10S-27, K10A-27, K12C-36, K12S-36, K12A-36, K14C-45, K14S-45, K14A-45, K3A-3, K8C-6 and 24, K8S-6 and 24, K8A-6 and 24, K15A-3, K16A-36, 45, 65, 72, 84 and 96, K16C-36, 45, 65, 72, 84 and 96, K16S-36, 45, 65, 72, 84 and 96, K18A-108, 126, 135, K18C-108, 126, 135, K18S-108, 126, 135, K24A-36 and 180, 600V or less, 120W per sq in or less.

Notes:

1. The heater elements are Certified only for use in equipment where the acceptability of the combination is determined by the Canadian Standards Association.
2. Cat number designation of tubular sheath heaters are as follows:
 - First X: Indicates the type of sheath material as follows: A - 0.490 incoloy, AV - 0.250 titanium, AW - 0.475 titanium, AX - 0.430 titanium, AY - 0.375 titanium, AZ - 0.312 titanium, B - 0.490 stainless steel, BV - 0.250 alloy 600 inconel, BW - 0.475 alloy 600 inconel, BX - 0.430 alloy 600 inconel, BY - 0.375 alloy 600 inconel, BZ - 0.312 alloy 600 inconel, BU - 0.625 alloy 600 inconel, C - 0.490 copper, CV - 0.250 alloy 400 monel, CW - 0.475 alloy 400 monel, CX - 0.430 alloy 400 monel, CY - 0.375 alloy 400 monel, CZ - 0.312 alloy 400 monel, D - 0.490 steel, E - 0.437 incoloy, F - 0.437 stainless steel, G - 0.437 copper, H - 0.437 steel, J - 0.375 incoloy, L - 0.375 stainless steel, M - 0.375 copper, N - 0.375 steel, O - 0.312 incoloy, P - 0.312 stainless steel, Q - 0.312 copper, R - 0.312 steel, S - 0.250 incoloy, T - 0.250 stainless steel, U - 0.250 copper, V - 0.250 steel, W - 0.625 stainless steel, X - copper flash, Y - 0.625 copper, Z - 0.625 steel.



● Second X: Indicates the length in inches as follows:

Greater Than	Less Than or Equal to	No.
0	18	1
18	30	2
30	42	3
42	54	4
54	66	5
66	78	6
78	90	7
90	102	8
102	114	9
114	126	10
126	138	11
138	150	12
150	162	13
162	174	14
174	186	15
186	198	16
198	210	17
210	222	18
222	234	19
234	246	20
246	258	21
258	270	22
270	282	23
282	294	24
294	306	25



306	318	26
318	330	27
330	342	28
342	354	29
354	366	30
366	378	31
390	402	32
270	282	23
282	294	24
294	306	25
306	318	26
318	330	27
330	342	29
342	354	29
354	366	30
366	367	31
378	390	32
390	402	33
402	414	34
414	426	35
426	438	36
438	450	37
450	462	38
462	474	39
474	486	40
486	498	41
498	510	42

- Third X: Indicates the form and configuration as follows:

W	Formed
X	Straight
Y	Bushings
Z	Forming/bushings
L	Rubber mould

- Fourth X: Indicates the serial number.
- Metal sheathed strip heater elements, Series HD, 300V and less, 45W per sq in or less.

Notes:

1. Suffix letters and numbers are added to the strip heaters to denote the following: First suffix letter is A, L or S to indicate casing material.
Second suffix number consists of two or three digits indicating length of casing.
Third suffix letter is A, B or C to indicate terminal location. A indicates terminals on opposite ends. B indicates staggered terminals on same end. C indicates parallel terminals on same end.
Fourth suffix number is a four digit numerical serial number. A prefix letter may be added to denote the utilisation of fins.
Fifth suffix letter "B" (optional) to indicate use of a terminal housing.

2. The heaters are Certified for use only in equipment where the acceptability of the combination has been determined by the Canadian Standards Association.

- Aluma-Flex band heater, Cat No AFH-XXXXXX-XXX-XX, 480V or less, 45W per sq in max.

Notes:

1. Cat No designation of Aluma-Flex band heater is as follows: (1) AFH: Aluma-Flex heater.
(2) First to fifth X: Two to five digits indicate heater inside diameter and width, except that no number for the width is present for standard 1-1/2 in wide heaters. The digits indicate only the inside diameter such as: 30 = 3 in, 35 = 3-1/2 in and 140 = 14 in. On heaters greater than 1-1/2 in wide, the first one or two digits indicate heater width. Example: 3 = 3 in, 35 = 3-1/2 in and 5 = 5 in. The last two to three digits indicate heater id such as 50 = 5 in, 55 = 5-1/2 in or 140 = 14 in.
(3) Sixth to eighth or ninth X: Three or four digits starting at 001 indicate sequential digits of heater design.
(4) Ninth or tenth X: One letter indicating option types as follows:
 - 1) S - No wiring box.
 - 2) B - Wiring box present.
 - 3) C - Copper, steel, or stainless steel cooling tubes on 3 in wide units.
Can be supplied heat/cool or cooling only.
 - 4) L - Spring loaded screw for thermal expansion compensation (over 18 in dia).
 - 5) P - Probe hole.



-
- The band heaters are Certified only for use in equipment where the acceptability of the combination is determined by the Canadian Standards Association.
 - Component air finned tubular heater assemblies model Series FDH and CFDH rated 600V ac, 1 or 3 phase, 60Hz, 370kW max. All model numbers with suffix letters and numbers.

/jmb