

AFIN DE DIMINUER LE  
NE PAS INSTALLER OÙ LA TEMPÉRATURE  
SPÉCIFIÉE EXCÈDE LA TEMPÉRATURE D'INFLAMMATION  
DE L'ENVIRONNEMENT DANGEREUX.

C12390-100

Part of  
# 105732

 **Caloritech**<sup>TM</sup>  
Engineered Electric Heat



**HAZARDOUS LOCATION RATING**  
**EMPLACEMENT DANGEREUSE**

CSA TYPE 4 IEC IP66

CL. I DIV. 2 GR. B,C,D

CL. I ZONE 2 GR. IIA, IIB H<sup>2</sup>

TEMP  
CODE

T1

CAT. NO.

CXS16740-01

PART NO.

E-655

S.O. NO.

W025143

DATE

E07 T

VOLTS

480

PH.

3

KW

108

MAWP

(PRES. MAX.)

845

PSIG  
(LB/PO<sup>2</sup>)

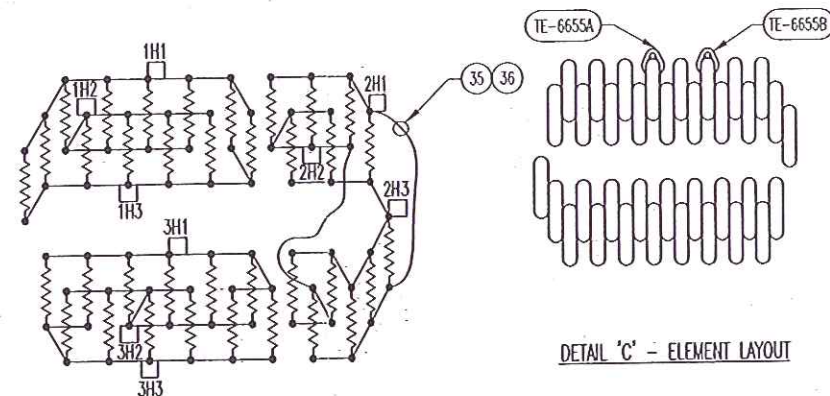
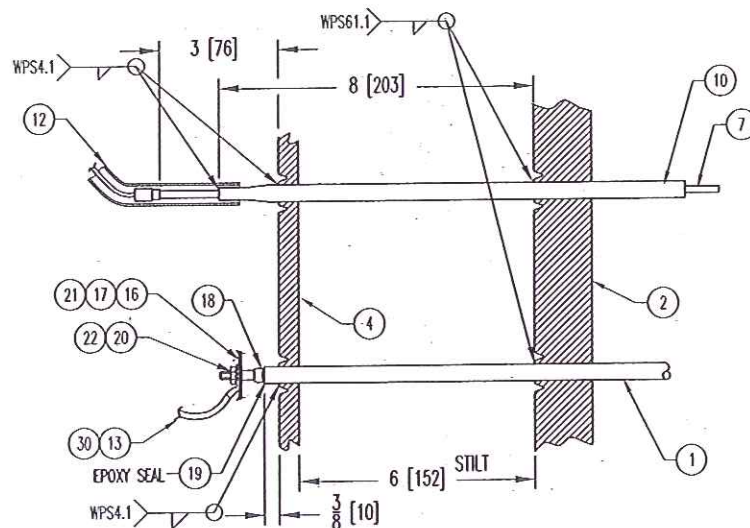
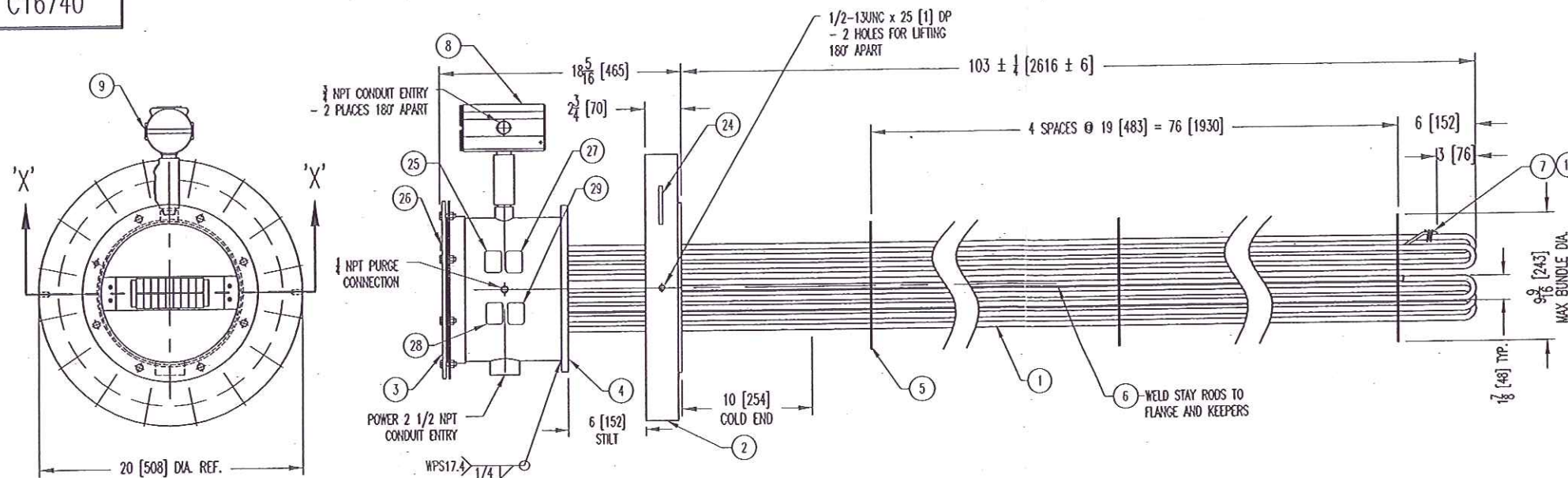
PROCESS TEMP. MAX.

(TEMP. MAX. D'OPERATION)

700

°F

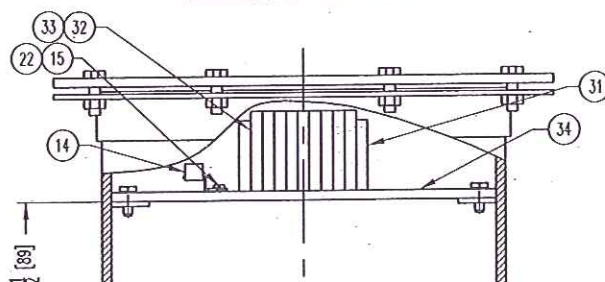
MADE IN CANADA / FABRIQUÉ AU CANADA



DETAIL 'B' - WIRING DIAGRAM  
34A - 3 CIRCUITS @ 36 KW

DETAIL 'C' - ELEMENT LAYOUT

DETAIL 'A' - ELEMENT ATTACHMENT



NOTES:

- 1 ALL DIMENSIONS IN INCHES [MILLIMETRES IN BRACKETS].
- 2 HYDROSTATIC TEST PER EP-1004. USING DISTILLED WATER, MAXIMUM CHLORIDE CONTENT 25 PPM. CLEAN HEATER BUNDLE AFTER HYDROSTATIC TEST BY SPRAYING WITH COMPRESSED AIR AND PLACING IN OVEN AT 240°F FOR COMPLETE DRYING.
- 3 DIELECTRIC STRENGTH TEST PER EP-1003, ADDENDUM 005.
- 4 FLANGE DRILLING: B10601-75 FIG.J EXCEPT NO GROUND.  
& B10601-99 FIG.M.  
BASE PLATE DRILLING: B10601-75 FIG.J EXCEPT c/w  
CHAMFER WEISIDE.
- 5 TERMINAL BOX (DET.3) & THERMOCOUPLE JUNCTION BOX (DET.8)  
ARE CSA C/US APPROVED FOR CLASS 1, DIV.2 GROUP B, C, & D  
UL LISTED ENEC 3500, 3500-35, 3500-36, 3500-37, 3500-38, 3500-39, 3500-40, 3500-41, 3500-42, 3500-43, 3500-44, 3500-45, 3500-46, 3500-47, 3500-48, 3500-49, 3500-50, 3500-51, 3500-52, 3500-53, 3500-54, 3500-55, 3500-56, 3500-57, 3500-58, 3500-59, 3500-60, 3500-61, 3500-62, 3500-63, 3500-64, 3500-65, 3500-66, 3500-67, 3500-68, 3500-69, 3500-70, 3500-71, 3500-72, 3500-73, 3500-74, 3500-75, 3500-76, 3500-77, 3500-78, 3500-79, 3500-80, 3500-81, 3500-82, 3500-83, 3500-84, 3500-85, 3500-86, 3500-87, 3500-88, 3500-89, 3500-90, 3500-91, 3500-92, 3500-93, 3500-94, 3500-95, 3500-96, 3500-97, 3500-98, 3500-99, 3500-100, 3500-101, 3500-102, 3500-103, 3500-104, 3500-105, 3500-106, 3500-107, 3500-108, 3500-109, 3500-110, 3500-111, 3500-112, 3500-113, 3500-114, 3500-115, 3500-116, 3500-117, 3500-118, 3500-119, 3500-120, 3500-121, 3500-122, 3500-123, 3500-124, 3500-125, 3500-126, 3500-127, 3500-128, 3500-129, 3500-130, 3500-131, 3500-132, 3500-133, 3500-134, 3500-135, 3500-136, 3500-137, 3500-138, 3500-139, 3500-140, 3500-141, 3500-142, 3500-143, 3500-144, 3500-145, 3500-146, 3500-147, 3500-148, 3500-149, 3500-150, 3500-151, 3500-152, 3500-153, 3500-154, 3500-155, 3500-156, 3500-157, 3500-158, 3500-159, 3500-160, 3500-161, 3500-162, 3500-163, 3500-164, 3500-165, 3500-166, 3500-167, 3500-168, 3500-169, 3500-170, 3500-171, 3500-172, 3500-173, 3500-174, 3500-175, 3500-176, 3500-177, 3500-178, 3500-179, 3500-180, 3500-181, 3500-182, 3500-183, 3500-184, 3500-185, 3500-186, 3500-187, 3500-188, 3500-189, 3500-190, 3500-191, 3500-192, 3500-193, 3500-194, 3500-195, 3500-196, 3500-197, 3500-198, 3500-199, 3500-200, 3500-201, 3500-202, 3500-203, 3500-204, 3500-205, 3500-206, 3500-207, 3500-208, 3500-209, 3500-210, 3500-211, 3500-212, 3500-213, 3500-214, 3500-215, 3500-216, 3500-217, 3500-218, 3500-219, 3500-220, 3500-221, 3500-222, 3500-223, 3500-224, 3500-225, 3500-226, 3500-227, 3500-228, 3500-229, 3500-230, 3500-231, 3500-232, 3500-233, 3500-234, 3500-235, 3500-236, 3500-237, 3500-238, 3500-239, 3500-240, 3500-241, 3500-242, 3500-243, 3500-244, 3500-245, 3500-246, 3500-247, 3500-248, 3500-249, 3500-250, 3500-251, 3500-252, 3500-253, 3500-254, 3500-255, 3500-256, 3500-257, 3500-258, 3500-259, 3500-260, 3500-261, 3500-262, 3500-263, 3500-264, 3500-265, 3500-266, 3500-267, 3500-268, 3500-269, 3500-270, 3500-271, 3500-272, 3500-273, 3500-274, 3500-275, 3500-276, 3500-277, 3500-278, 3500-279, 3500-280, 3500-281, 3500-282, 3500-283, 3500-284, 3500-285, 3500-286, 3500-287, 3500-288, 3500-289, 3500-290, 3500-291, 3500-292, 3500-293, 3500-294, 3500-295, 3500-296, 3500-297, 3500-298, 3500-299, 3500-300, 3500-301, 3500-302, 3500-303, 3500-304, 3500-305, 3500-306, 3500-307, 3500-308, 3500-309, 3500-310, 3500-311, 3500-312, 3500-313, 3500-314, 3500-315, 3500-316, 3500-317, 3500-318, 3500-319, 3500-320, 3500-321, 3500-322, 3500-323, 3500-324, 3500-325, 3500-326, 3500-327, 3500-328, 3500-329, 3500-330, 3500-331, 3500-332, 3500-333, 3500-334, 3500-335, 3500-336, 3500-337, 3500-338, 3500-339, 3500-340, 3500-341, 3500-342, 3500-343, 3500-344, 3500-345, 3500-346, 3500-347, 3500-348, 3500-349, 3500-350, 3500-351, 3500-352, 3500-353, 3500-354, 3500-355, 3500-356, 3500-357, 3500-358, 3500-359, 3500-360, 3500-361, 3500-362, 3500-363, 3500-364, 3500-365, 3500-366, 3500-367, 3500-368, 3500-369, 3500-370, 3500-371, 3500-372, 3500-373, 3500-374, 3500-375, 3500-376, 3500-377, 3500-378, 3500-379, 3500-380, 3500-381, 3500-382, 3500-383, 3500-384, 3500-385, 3500-386, 3500-387, 3500-388, 3500-389, 3500-390, 3500-391, 3500-392, 3500-393, 3500-394, 3500-395, 3500-396, 3500-397, 3500-398, 3500-399, 3500-400, 3500-401, 3500-402, 3500-403, 3500-404, 3500-405, 3500-406, 3500-407, 3500-408, 3500-409, 3500-410, 3500-411, 3500-412, 3500-413, 3500-414, 3500-415, 3500-416, 3500-417, 3500-418, 3500-419, 3500-420, 3500-421, 3500-422,

- [8] FLANGE (DET.2) PAINTING: PER SHAW STONE & WEBSTER SPEC. 120653-S-M-00250-01
- SURFACE PREP: SANDBLAST TO SSPC SP10.  
PRIME COAT: CARBOLINE CARBOZINC 11, INORGANIC ZINC PRIMER  
2-3 MILS DFT.
- TOP COAT: CARBOLINE THERMALINE 4700, HIGH TEMP.  
SILICONE 1.5 MILS DFT.
- COLOR: ALUMINUM.
- THE USE OF SILICA SAND FOR BLASTING IS NOT ALLOWED.  
ABRASIVES USED FOR BLASTING MUST BE KEPT DRY AT ALL TIMES AND  
MUST NOT BE RECYCLED.
- [9] EPOXY SEAL ELEMENTS (DET.1) PER EP-1009 USING  
EPOXY RESIN (DET.19).
- [10] MTR REQUIRED FOR ALL PRESSURE BOUNDARY MATERIALS INCLUDING  
FLANGE, & ELEMENT TUBING. MATERIAL ORIGIN TO BE USA,  
CANADA, WESTERN EUROPE OR JAPAN.
- [11] REPRESS ELEMENT HARPIN BENDS.
- [12] FLANGE BOLT HOLES TO STRADDLE CENTRELINES.
- [13] GASKET (DET.23) SUPPLIED LOOSE.

|        |     |                                    |                    |
|--------|-----|------------------------------------|--------------------|
|        | 36  | RING CONNECTOR                     |                    |
|        | 35  | WIRE JUMPER                        |                    |
|        | 34  | DN RAIL                            |                    |
|        | 33  | TERMINAL BLOCKS END PLATE          |                    |
| [7]    | 32  | TERMINAL BLOCKS 95A                |                    |
|        | 31  | TERMINAL BLOCK STOP                |                    |
|        | 30  | RING CONNECTOR                     |                    |
|        | 29  | LABEL CAUTION                      |                    |
|        | 28  | LABEL CAUTION                      |                    |
|        | 27  | LABEL CAUTION                      |                    |
|        | 26  | LABEL CAUTION                      |                    |
|        | 25  | NAMEPLATE                          |                    |
|        | 24  | LABEL - CRN                        |                    |
| [13]   | 23  | GASKET 10"-600LB.                  | 3/8SS S<br>c/w 93A |
|        | 22  | LOCK WASHER #10 EXT TOOTH          |                    |
|        | 21  | FLAT WASHER #10                    |                    |
|        | 20  | HEX NUT #10-3ZUNF                  |                    |
| [9]    | 19  | EPOXY RESIN                        |                    |
|        | 18  | BUSHING SILICONE RUBBER            |                    |
|        | 17  | BUS BAR                            |                    |
|        | 16  | BUS BAR                            |                    |
|        | 15  | SCREW #10-3ZUNF x 3/8 LG           |                    |
|        | 14  | GROUND LUG - SUU-70                |                    |
|        | 13  | WIRE LEADS                         |                    |
| [6]    | 12  | INSULATING SLEEVE - # 2 x 12LG.    |                    |
|        | 11  | THERMOCOUPLE RING                  |                    |
| [10]   | 10  | THERMOCOUPLE NIPPLE                |                    |
|        | 9   | DRY SEAL PLUG-3/4 NPT              | PLA                |
| [7]    | 8   | THERMOCOUPLE JUNCTION BOX ASSEMBLY |                    |
| [6]    | 7   | THERMOCOUPLE 'K' - TYPE DUPLEX     |                    |
|        | 6   | STAY ROD 3/8 DIA x 97 1/2 LG       |                    |
|        | 5   | KEEPER                             |                    |
| [4]    | 4   | TERMINAL BOX BASE PLATE            |                    |
| [5]    | 3   | TERMINAL BOX M.R./DN. 2            |                    |
| [8][4] | 2   | FLANGE 10"-600LB R.F. BLIND        | SA/AI              |
| [9][3] | 1   | ELEMENT .430 DIA x .049W           |                    |
|        | DET | DESCRIPTION                        |                    |