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USER INSTRUCTIONS FOR SINGLE-PHASE WAVELENGTH INDUSTRIAL MIDDLE INFRARED GENERATORS TYPES 6341 - 6342 - 6090 & 6091

1) APPLICATION

Medium wavelength straight infrared generator (spectrum peak at 2.6 microns and approximately 800°C on the heated element in an atmosphere of 20°C) capable of resolving most radiant heating issues in industrial applications such as drying, cooking and polymerisation.

Horizontal or vertical assembly. The ambient temperature for usage conditions is a maximum of 200°C.

The heating element is double insulated and the generator is not connected to earth.

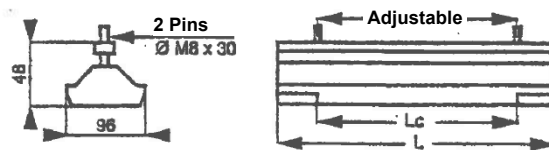
All generators can be fitted with removable protective grilles in 248mm modules, as detailed in section 2.5.

2) TECHNICAL CHARACTERISTICS

2.1. SINGLE STANDARD MIDDLE INFRARED GENERATORS TYPE 6341

The 6341 is the standard middle infrared generator. It is made up of a right heating element with large glossy aluminium reflector.

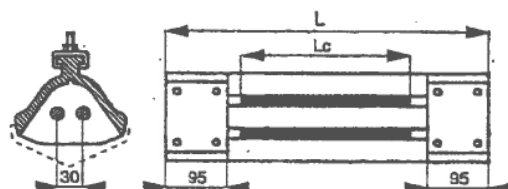
It is capable of resolving most applications: heating panels, heating tunnel, etc.



Ref. in 230V	Ref. in 400	Power +5-10%	L (mm)	Le (mm)	Ref. Replacement part 230V 400V		Weight (kg)
6341-08	6341-09	800W	622	412	6341-58	6341-59	2.6
6341-11	6341-12	1100W	777	564	6341-61	6341-62	3
6341-18	6341-19	1800W	1187	970	6341-68	6341-69	4
6341-25	6341-26	2500W	1557	1330	6341-75	6341-76	5.2
6341-30	6341-31	3000W	1872	1640	6341-80	6341-81	6.2
6341-36	6341-37	3600W	2177	1944	6341-86	6341-87	7.1

2.2. DOUBLE STANDARD MIDDLE INFRARED GENERATORS TYPE 6342

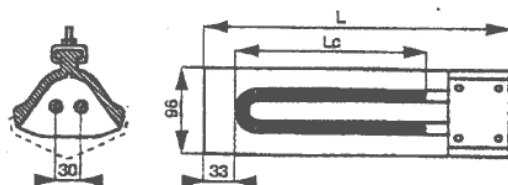
Type 6342 is a generator made up of two heating elements with an aluminium-coated steel reflector. It is used when needed to provide a high radiant flux on heating panels; it is not recommended for use in enclosed spaces or heating tunnels.



Ref. in 230V	Ref. in 400	Power +5-10%	L (mm)	Lc (mm)	Replacement part	
					230V	400V
6342-16	6342-17	1600W	622	412	6341-58	6341-59
6342-22	6342-23	2200W	777	64	6341-61	6341-62
6342-36	6342-37	3600W	1187	970	6341-68	6341-69
6342-50	6342-51	5000W	1557	1330	6341-75	6341-76
6342-60	6342-61	6000W	1872	1640	6341-80	6341-81
6341-72	6341-73	7200W	2177	1944	6341-86	6341-87

2.3. "U" MIDDLE INFRARED GENERATORS TYPE 6090

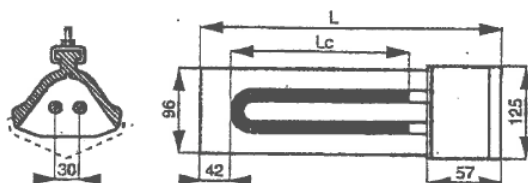
The type 6090 is a generator made up of a pin-shaped heating element with aluminium-coated reflector. It is used under the same conditions as the type 6342, where only one side is accessible for electrical connection.



Ref. in 230V	Ref. in 400	Power +5-10%	L (mm)	Lc (mm)	Replacement part	
					230V	400V
6090-08	6090-09	800W	390	255	6090-58	6090-59
6090-11	6090-12	1100W	485	350	6090-61	6090-62
6090-18	6090-19	1800W	710	575	6090-68	6090-69
6090-25	6090-26	2500W	935	800	6090-75	6090-76
6090-30	6090-31	3000W	1095	960	6090-80	6090-81
6090-36	6090-37	3600W	1290	1155	6090-86	6090-87

2.4. "U" SEALED MIDDLE INFRARED GENERATORS TYPES 6091

The type 6091 is a generator identical to type 6090. Electrical connection is performed using an IP55 sealed unit. It is used in damp areas, or places with a risk of condensation.



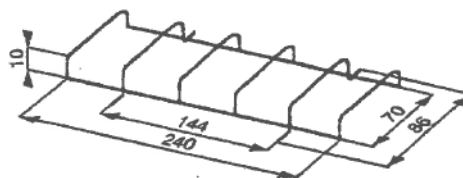
Ref. in 230V	Ref. in 400	Power +5-10%	L (mm)	Lc (mm)	Replacement part	
					230V	400V
6091-08	6091-09	800W	390	255	6091-58	6091-59
6091-11	6091-12	1100W	485	350	6091-61	6091-62
6091-18	6091-19	1800W	710	575	6091-68	6091-69
6091-25	6091-26	2500W	935	800	6091-75	6091-76
6091-30	6091-31	3000W	1095	960	6091-80	6091-81
6091-36	6091-37	3600W	1290	1155	6091-86	6091-87

2.5 REMOVABLE PROTECTIVE GRILLES REF. 6014-17

The number of grilles to use is determined based on the heating length. The final adjustment is carried out by shearing the last grille.

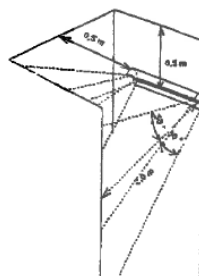
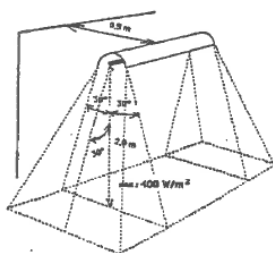
The grilles are clipped onto the edge of aluminium surfaces (such as reflectors).

Heating length	Number of grilles
150 to 340	1
341 to 630	2
631 to 920	3
921 to 1210	4
1211 to 1500	5
1501 to 1790	6
1791 to 2080	7



3) USER PRECAUTIONS

- Middle wavelength industrial infrared generators are intended for radiant heating in industrial applications.
- The operating inertia is around three minutes following the generator being switched off, so the treated product must be able to withstand accumulated heat, or measures for separation from the generator should be taken.
- Generators are designed for "high level" assembly, with a minimum height of 1.80m from the ground, or for installation in an inaccessible or protected location, so as to avoid any unintentional contact: removable protective grilles may be used for this purpose.
- Except for sealed connection unit devices, these devices are not for use outdoors or anywhere with high levels of humidity.
- When heating premises, the energy radiated to the ground surface should be less than 400W/m^2 and devices should be placed at a distance of less than 2m from the occupied areas, within the emission range and at a distance of at least 50cm from any wall other than the supporting wall.



- No flammable or pressurised product should be left near generators. Generators should not be installed in areas with a high risk of explosion, unless using a neutral atmosphere or if diluting hazardous products in the air, under the lower threshold for an explosion so as to remove these risks.
- The maximum temperature for the surface of the infrared generators, with the exception of the heating element, may not exceed 300°C and the maximum usage ambient temperature is 200°C .

4) ASSEMBLY

- The device is delivered with two sliding clips on the aluminium side, making up the back of the device. One of these clips should be used as the fixed point, and the other should be used to expand the side.
- Remove the paper or plastic used to protect the reflector.
- Check the sliding of the heating element between the rings provided to restrict the possibility of movement and clean the element using a legally authorised degreasing product.

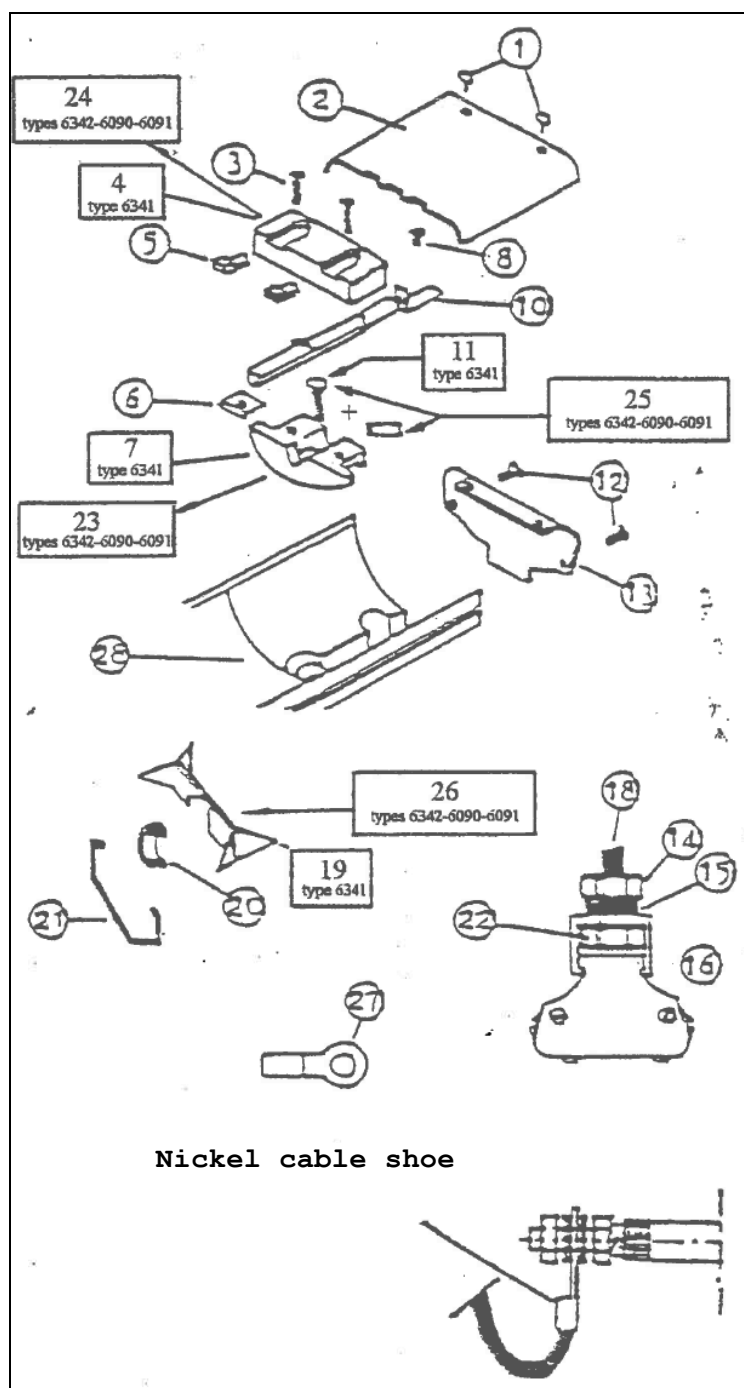
5) ELECTRICAL CONNECTIONS

- Check whether the voltage given on the nameplate corresponds to the mains voltage.
- Check that the sink current is available at the electrical power source and that the power is properly protected.
- Switch the equipment off after each use.
- Perform the electrical installation in accordance with the applicable directives, standards and specifications.
- Position the power cable or the conductors in such a way that they are not subject to radiation and to prevent contact with the device walls.
- Two threaded orifices are provided to receive metal ISO 20 compression glands for passing through connections. Because of the high temperatures on the heating element terminals, copper conductors cannot be used.
Nickel conductors are to be used in the hot area, insulated with kapton, and nickel terminal lugs, capable of withstanding up to 250°C.
The use of nickel in a hot atmosphere should be carried out bearing in mind the current reduction coefficients, which generally leads to choosing a section conductor immediately above the standard value (4mm² for most infrared generators).
- To access the connection terminals, unscrew the hoods covering the end units and slide on their axis.
- Connection is performed using an expansion loop. Check that the sliding of the heating element does not risk causing an exposed conductive part in its most unfavourable position.
- The heating elements are double-insulated. Infrared generators are not fitted with an earth connection terminal.

6) MAINTENANCE

- Switch the equipment off after each use.
- Tighten the connection screws regularly, depending on the frequency of use. This should be at least twice a year, and after the first week of use.
- Clean the reflectors and the elements, depending on the frequency of use and the possibility of build-ups of dirt. Use a dry cloth or a cloth with chalk or talc emulsion in a legally authorised degreasing solution. Alkaline cleaning products are strictly prohibited.

7) DIAGRAM AND PARTS REFERENCES



REP.:	REFERENCE	NAME
1	2013427-00	N°8 x 3/8"
2	4500008-00	
3	2013428-00	N°8 x 1"
4	4500000-00	
5	4500009-00	
6	2013424-00	
7	4500001-00	
11	761118-67+2013433-00	M4 fastenings
12	2013427-00 or 2013426-00	
13	4500010-01/02	
14	762111-67	
15	763120-67	
16	4500013-00+2013432-00	
18	2013430-00	M8 fastenings
19	4500011-00	
20	4500004-00	
21	4500005-00	
23	4500003-00	
24	4500002-00	
25	2013423-00+2013433-00	M4 fastenings
26	4500012-00	
27	55342-00	Ø5
28	4500007-01	444mm
	4500007-02	595mm
	4500007-03	1005mm
	4500007-04	1375mm
	4500007-05	1690mm
	4500007-06	1995mm

8) WARRANTY

This device is under warranty for 6 months, according to our general conditions of sale.

The warranty is limited to a replacement of devices returned to our plants, along with a written explanation of the fault, which must be confirmed following our own inspection.