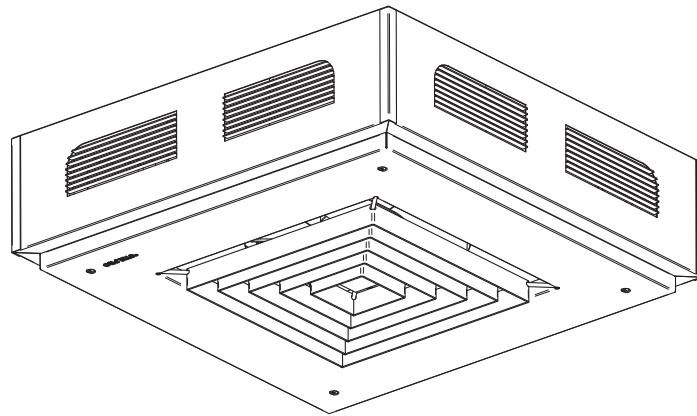
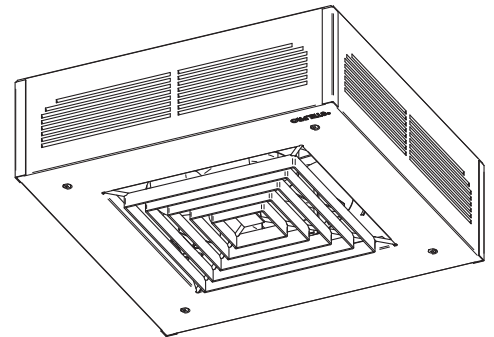
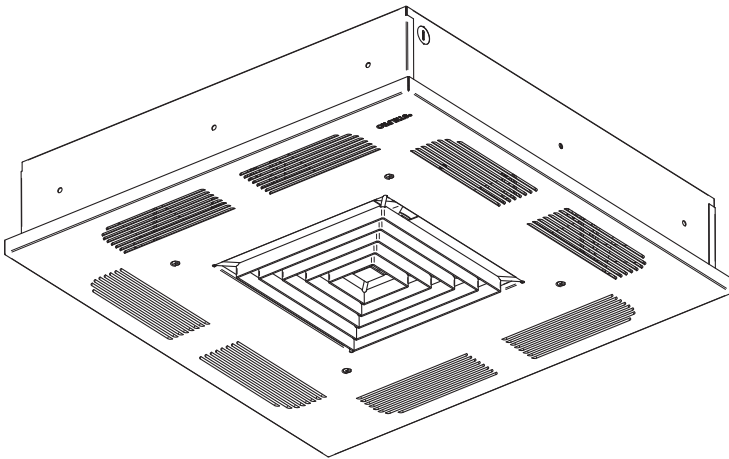




USER'S GUIDE

DR SERIES CEILING FAN HEATER

REPLACEMENT COMPONENT LIST INCLUDED



This unit
complies
with CSA
standards





WARNING

Before installing and operating this product, the user and/or installer must read, understand and follow these instructions and keep them handy for future reference. If these instructions are not followed, the warranty will be considered null and void and the manufacturer deems no further responsibility for this product.

This product must be installed by a qualified person and connected by a **certified electrician**, according to the **electrical and building codes** effective in your region.

The following instructions must be adhered to in order to avoid personal injuries or property damages, serious injuries and potentially fatal electric shocks.

Protect the heating unit with the appropriate circuit breaker or fuse, in accordance with the nameplate.

Make sure the line voltage (volt) is consistent with that indicated on the unit's nameplate.

This unit must be **grounded**.

Switch off the power at the circuit breaker/fuse before installing, repairing and cleaning the unit.

Make sure the unit is appropriate for the intended use (if needed, refer to the product catalog or a representative).

RECOMMENDED HEATING CAPACITY :

1.25 W/cubic foot (0.03 m³).

It corresponds to **10 W/square foot (0.09 m²)** based on a standard ceiling height of 8 feet (2.44 m). The recommended capacity is usually sufficient for normal heating needs. Please note that the insulation quality of walls and windows are some of the factors that influence heat losses, which modify the required capacity to heat a room. If needed, refer to a specialist (industrial and commercial buildings) who will be able to calculate these heat losses and optimize the required capacity or consult the "Online heating calculation" section of the Stelpro Design Web site (residential buildings). To heat a large room and to increase your comfort, it is recommended to install several units instead of one. For example, 2 X 1000 W rather than 1 X 2000 W.

If the unit capacity is insufficient for the size of the room, it will be in operation continuously, and may become defective earlier and turn yellow.

Respect distances and positions indicated in the installation section

If the installer or the user modifies the unit, he will be held responsible for any damage resulting from this modification, and the CSA certification could be void.

This unit must not come into contact with a water source and must be protected from splashes. Do not use it if any part has been immersed.

When mounting the unit, make sure that the anchorage used can support the total weight of the unit with the mounting brackets.

When cutting or drilling into a ceiling, do not damage electrical wiring and other hidden utilities.

When starting up the unit for the first time or after a long period, it is normal that it produces some temporary odours and whitish smoke.

Because this unit is hot when in use, it may pose risks even in normal operation. Therefore, be careful and responsible when using it. To avoid burns, do not let bare skin touch hot surfaces. The unit must cool down for few minutes since it will stay warm for some time after shut down.

All units require a minimum mounting height of 8 feet (2.44 m) from finished floor. Depending on the model, keep at least 12 or 24 inches away from any vertical surfaces or walls (see the installation section). However, make sure flammable objects or pieces of furniture do not come into contact with the unit and keep them at least **24 inches (61 cm)** from the unit since they are more flammable than walls and ceilings. Failure to comply with this warning could lead to a fire. Some materials are more heat-sensitive than others, so make sure those near the unit can withstand heat.

Never block unit air vents. This obstruction could lead to overheating, which could result in a fire.

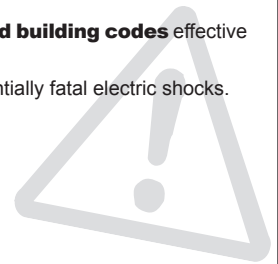
Do not insert or allow foreign objects to enter any air vent as this may cause electric shocks, fires, or damages to the unit.

This unit has hot and arcing or sparking parts inside. It is not designed to be used or stored in wet areas or areas containing flammable liquids, combustible materials or corrosive, abrasive, chemical, explosive and flammable substances such as, but not limited to, gasoline, paint, chlorine, sawdust and cleaning products. Store it in a dry place when not using it.

Some areas are dustier than others. Thus, it is the user's responsibility to evaluate if the unit **must be cleaned** based on the amount of dirt accumulated on and inside air vents. Accumulated dirt can lead to a component malfunction or discoloration (yellow). It may cause a fire hazard if not installed and maintained in accordance with these instructions.

The thermal protection activation indicates that the unit has been subjected to abnormal operating conditions. If the thermal protection remains activated or activates and deactivates repeatedly, it is recommended that a qualified electrician or a certified repair centre examine the unit in order to make sure it is not damaged. (Refer to the limited warranty)

If the unit is damaged or defective, cut off power supply at circuit breaker/fuse and call a certified repair centre. (Refer to the limited warranty)

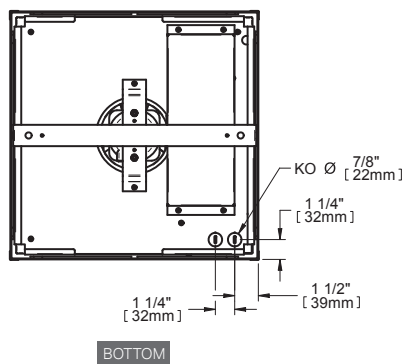
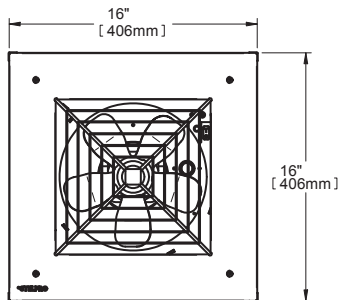
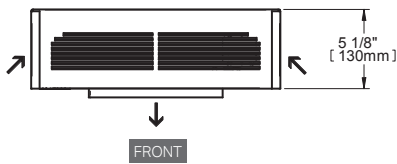


SPECIFICATIONS

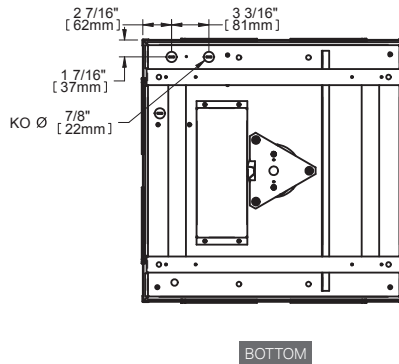
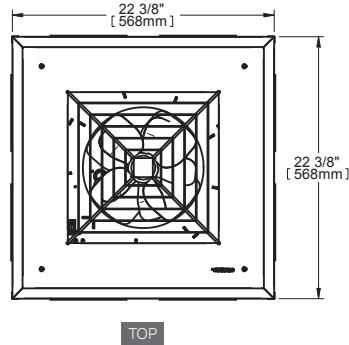
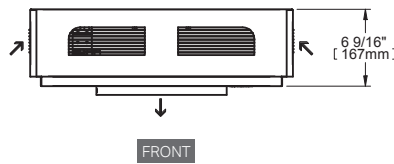
CEILING FAN HEATER			
MODELS	DRI	DRII	DRR
VOLTS	208 V / 240 V	208, 240, 277, 347, 480 AND 600 V	208, 240, 277, 347, 480 AND 600 V
WATTS	2000 TO 5000 W	2000 TO 10000 W	2000 TO 5000 W
WEIGHT	16 LB / 7,2 KG	45 LB / 20,4 KG	16 LB / 7,2 KG
LENGTH	16" / 406 MM	22 3/8" / 568 MM	23 5/8" / 600 MM
WIDTH	16" / 406 MM	22 3/8" / 568 MM	23 5/8" / 600 MM
HEIGHT	5 1/8" / 130 MM	6 9/16" / 167 MM	4 15/16" / 126 MM

TECHNICAL DRAWINGS

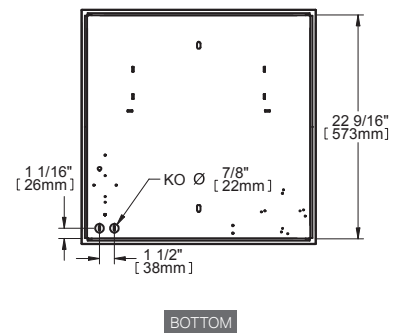
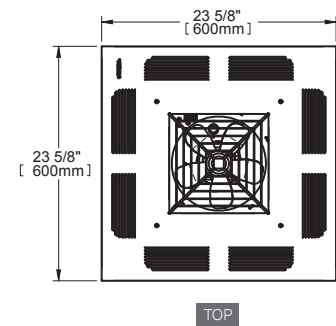
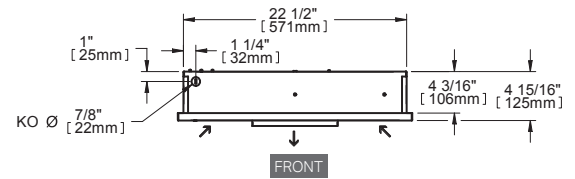
DRI - surface mounted



DRII - surface mounted



DRR - recessed



INSTALLATION

N.B. Cut off power supply at circuit breaker/fuse before proceeding to the installation.

This unit is designed to be recessed (DRR), installed on the surface of a finished ceiling or suspended from the ceiling (DRI, DRII). All the other parts required for a suspended installation are not provided with the unit.

All units require a minimum mounting height of 8 feet (2.44 m) from finished floor.

For best results, do not exceed the following recommended mounting heights:

UNITS	MAXIMUM MOUNTING HEIGHTS
2 or 3 kW	8 ft. (2.44 m)
4 or 5 kW	10 ft. (3.04 m)
7.5 or 10 kW	12 ft. (3.66 m)

Depending on the model, keep at least 12 or 24 inches away from any vertical surfaces or walls (see drawings on next page).

Dragon units are designed so that the fan can run independently of the heating element. This is useful if you plan to use the fan during the summer months or want to circulate the air in the space between heating cycles in winter.

To enable this feature, the appropriate number of wires must be installed between the controls (thermostat and/or 3-way switch required for OFS models) and the unit.

The table below provides an overview of typical installations and is for reference only. The installer MUST check the wiring diagram found on the inside of the junction box cover of the unit to ensure that the correct number of wires are installed to enable independent fan control. This table does not include connections for remote thermostats.

In cases where 3 wires are required for the connection but only 2 are available, it is possible to connect the F and L2 wires to one of the wires, then connect the L1 wire to the other. In such a case, however, the fan cannot be operated independently of the heating elements.

CONNECTIONS TABLE

DRI	DRII	DRR	DESCRIPTION	NUMBER OF WIRES	CONNECTIONS DESCRIPTION
1 PHASE					
DRIXX1	---	---	Without control	3	L1, L2, F
DRIXX1OFS	---	---	Without control, with OFS	4	L1, L2, M, A
DRIXX1T	DRIIXX1T	DRRXX1T	With built-in thermostat	2	L1, L2
DRIXX1TOFS	DRIIXX1TOFS	DRRXX1TOFS	With built-in thermostat and OFS	5	L1, L2, M, A, F
DRIXX1C24	DRIIXX1C24	DRRXX1C24	With 24 V control	2	L1, L2
DRIXX1C24OFS	---	---	With 24 V control and OFS	4	L1, L2, M, A
---	DRIIXX1C24OFS	DRRXX1C24OFS		5	L1, L2, M, A, F
---	DRIIXX1C	DRRXX1C	With 240 V control	2	L1, L2
---	DRIIXX1COFS	DRRXX1COFS	With 240 V control and OFS	5	L1, L2, M, A, F
---	DRIIXX1CT	DRRXX1CT	With 240 V control and built-in thermostat	2	L1, L2
---	DRIIXX1CTOFS	DRRXX1CTOFS	With 240 V control, built-in thermostat and OFS	5	L1, L2, M, A, F
3 PHASES					
---	DRIIXX3C24	DRRXX3C24	With 24 V control	3	L1, L2, L3
---	DRIIXX3C24OFS	DRRXX3C24OFS	With 24 V control and OFS	6	L1, L2, L3, M, A, F
---	DRIIXX3C	DRRXX3C	With 240 V control	3	L1, L2, L3
---	DRIIXX3COFS	DRRXX3COFS	With 240 V control and OFS	6	L1, L2, L3, M, A, F
---	DRIIXX3CT	DRRXX3CT	With 240 V control and built-in thermostat	3	L1, L2, L3
---	DRIIXX3CTOFS	DRRXX3CTOFS	With 240 V control, built-in thermostat and OFS	6	L1, L2, L3, M, A, F

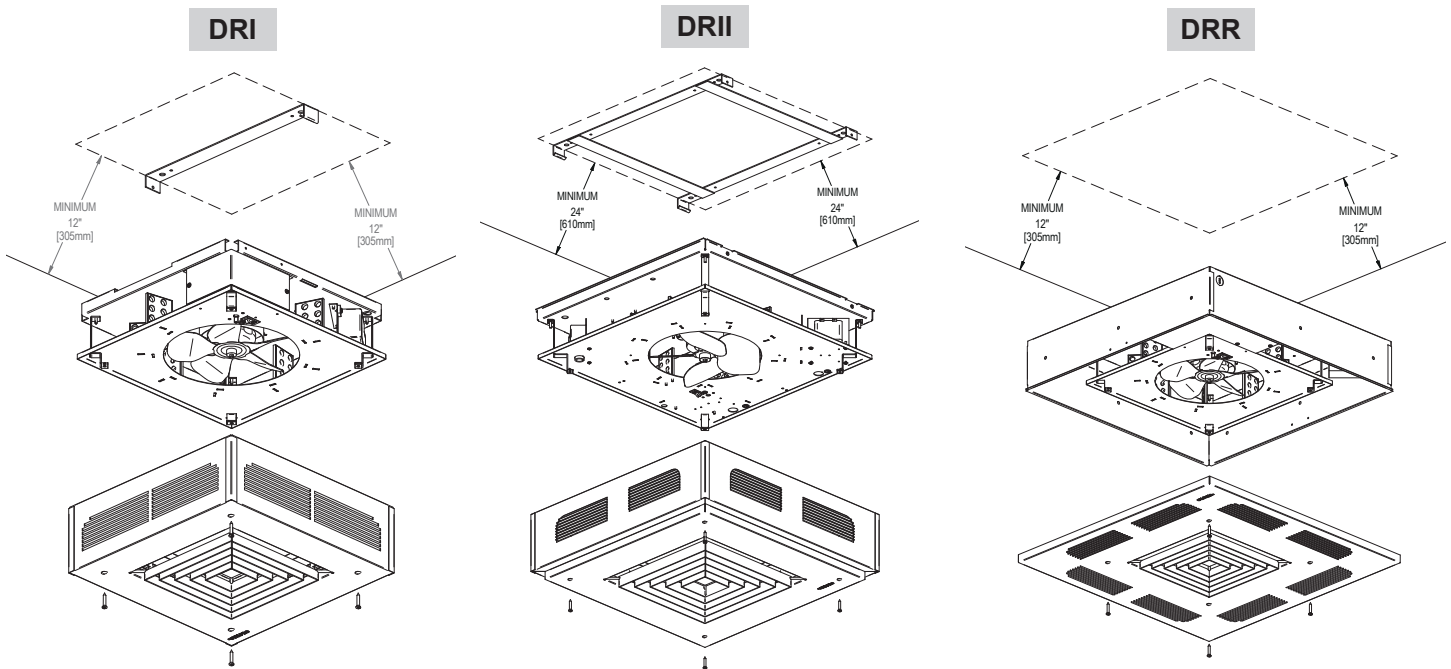
DRI and DRII

1. Remove the external cover of the unit and set it aside (4 screws).
2. Remove the mounting bracket (1 or 2 screws and hinges depending on the model).
3. Screw the mounting bracket to the ceiling and make sure the ceiling structure is strong enough to support the unit. Make sure the mounting bracket is installed in such a way that the unit will sit straight and level.
4. Remove the wiring compartment cover and consult the electrical connection plan.
5. Hook the slotted side of the internal assembly to the mounting bracket. Let the unit hang from the bracket.
6. If your model is not equipped with the optional built-in thermostat, a wall-mounted thermostat must be installed to control the heater.
7. Run the electrical supply cable, with the correct number of wires, up to the wiring compartment of the unit. Provide a sufficient length of wire to facilitate the connections, which are made while the unit is still hanging from the bracket.
8. Make the electrical connections using the supplied wire connectors (marrettes). Connect the ground wire to the grounding screw. Make sure all connections are secured and tight.
9. Replace the wiring compartment cover. Swing the other half of the interior assembly into position and screw the assembly to the bracket with the screw(s) previously removed in step 2.
10. Replace the external cover and screw it into place with the four screws removed in step 1.
11. Test the unit to make sure it is running properly.

DRR

N.B. This product has been designed to be installed into a suspended ceiling, not into a closed ceiling. Keep in mind that if you intend on recessing it into a closed ceiling, you will not have access to it for maintenance and/or repair purposes in the future.

1. Remove the wiring compartment cover and consult the electrical connection plan.
2. Run the electrical supply cable, with the correct number of wires, up to the wiring compartment of the unit.
3. Make the electrical connections using the supplied wire connectors (marrettes). Connect the ground wire to the grounding screw. Make sure all connections are secured and tight.
4. Replace the wiring compartment cover.
5. If your model is not equipped with the optional built-in thermostat, a wall-mounted thermostat must be installed to control the heater.
6. This product has been designed to be installed into a suspended ceiling, therefore there are no mounting brackets supplied with the unit; it must be supported by the metal framing of the suspended ceiling.
7. Test the unit to make sure it is running properly.



MAINTENANCE

N.B. In order for the warranty to be valid, the unit must be cleaned regularly.

Cut off power supply at circuit breaker/fuse before cleaning the unit. Use a soft rag for dusting. When cleaning, use only a damp rag and non-abrasive dish soap. Do not use abrasive or chemical cleaners because they may damage the finishing. If the unit is used in a very dusty location, use a vacuum brush to remove dust and other foreign objects from the grilles. Note that cigarette smoke could yellow the discharge grille and that the best way to prevent it is to clean the unit on a regular basis.

Do not use cleaning products identified with these symbols:



N.B. Note that there is electrical current linked to the unit even if the thermostat is set off. This means that there is a risk of electric shock as long as the unit is energized.

TROUBLESHOOTING

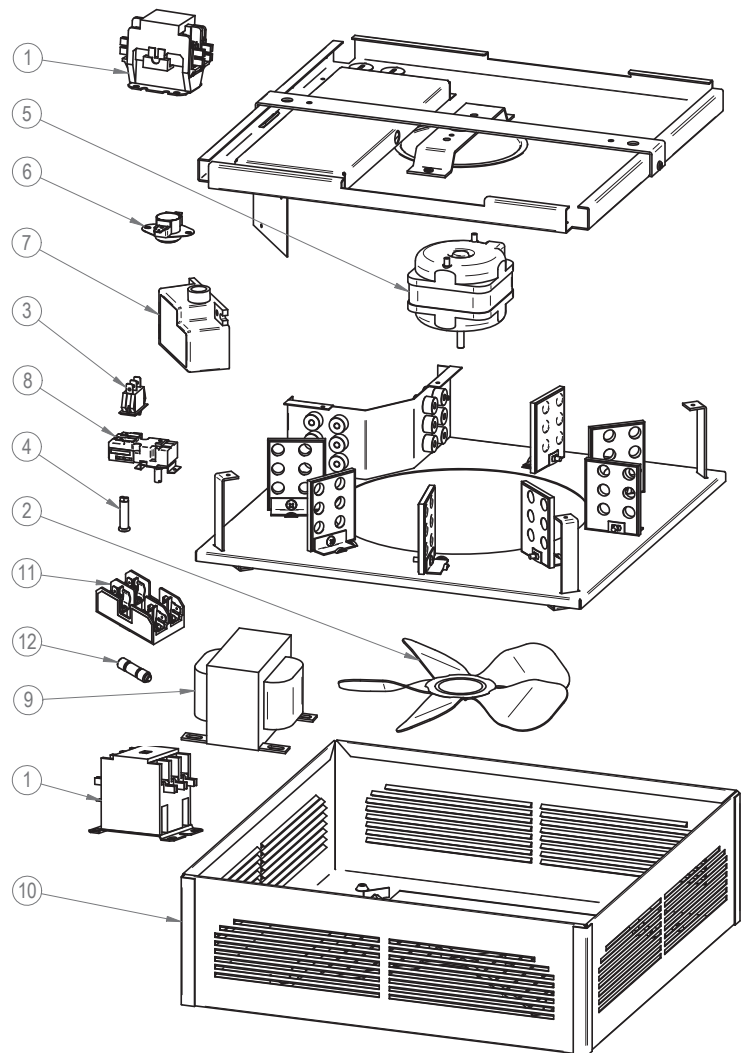
PROBLEM	DEFECTIVE PART OR PART TO CHECK
The unit does not work	<ul style="list-style-type: none"> • Defective thermostat or wrong thermostat setting • Open circuit breaker or fuse • The thermal protection has been activated • Faulty connections
The unit runs continuously	<ul style="list-style-type: none"> • Defective thermostat or wrong thermostat setting • Heat losses higher than the unit capacity
The enclosure is extremely hot	<ul style="list-style-type: none"> • Defective thermal protection • Blocked air vents • Defective motor
The unit cycles under control of the thermal protection (overheat indicator)	<ul style="list-style-type: none"> • Blocked air vents • Defective motor
Overheating	<ul style="list-style-type: none"> • Defective motor • Defective thermostat or wrong thermostat setting
The breaker trips when the heater is turned on	<ul style="list-style-type: none"> • Faulty connections • Voltage higher than that written on the nameplate
Elements are on, but the motor does not work	<ul style="list-style-type: none"> • Defective motor
The desired room temperature cannot be reached	<ul style="list-style-type: none"> • One or more elements are defective • Defective thermostat or wrong thermostat setting • Voltage lower than that written on the nameplate • Heat losses higher than the unit capacity

N.B. If you do not solve the problem after checking these points, cut off the power supply at the main electrical panel and contact our customer service (see the "Limited warranty" section to obtain the phone numbers).

REPLACEMENT COMPONENT LIST

DRI, DRII AND DRR MODELS

REF. #	PART #	DESCRIPTION
1	CONT-3022	CONTACTOR 30A 2 POLES 240/208 V
1	CONT-3002	CONTACTOR 30A 2 POLES 24 V
1	CONT-3512	CONTACTOR 35A 2 POLES 120 V
1	CONT-3503	CONTACTOR 35A 3 POLES 24 V
1	CONT-4023	CONTACTOR 40A 3 POLES 208/240 V
1	CONT-4013	CONTACTOR 40A 3 POLES 120 V
1	CONT-5013	CONTACTOR 50A 3 POLES 120 V
2	BLA-005	BLADE 9" 26" 5B (2 TO 5 KW)
2	BLA-009	BLADE 10" 26" (7.5 TO 10 KW)
3	SWI-006	SWITCH (SPDT)
3	SWI-002**	SWITCH (DPDT) HI/LOW
4	PL-240	PILOT LIGHT 240 V
4	PL-120	PILOT LIGHT 120 V
4	PL-028	PILOT LIGHT 24 V
5	MO-016-1	ENCLOSED MOTOR 240 V (2 TO 5 KW)
5	MO-020	MOTOR 240 V (7.5 TO 10 KW)
5	MO-024**	MOTOR 600 V/3PH (15 TO 40 KW)
6	PROT-006	PROTECTION L150
7	REL-002**	RELAY 240 V
7	R841C1011	RELAY 208/24 V
7	R841C1029	RELAY 240/24 V
7	RE153T	ELECTRONIC RELAY (15 A MAX AND 347 V MAX)
7	RM120T	RELAY 120V / 24V, 25A
7	RM240T	RELAY 208 - 240V / 24V, 25A
7	RM277T	RELAY 277V / 24V, 25A
7	RM347T	RELAY 347V / 24V, 18A
7	RM347C	RELAY 347V / 24V, 18A
8	ST-017	THERMOSTAT SP
8	ST-007	THERMOSTAT SP
9	TRF200025	TRANSFORMER 240/24/25VA
9	TRF200040D	TRANSFORMER 208-240/24/40VA, CL.2 CL.B
9	TRF300025	TRANSFORMER 347/24/25VA
9	TRF320100	TRANSFORMER 347/240/100VA
9	TRF410200D	TRANSFORMER 347/240/200VA
9	TRF320150	TRANSFORMER 347/240/150VA
9	TRF600025	TRANSFORMER 600/24/25VA
9	TRF620100	TRANSFORMER 600/240/100VA
9	TRF620200	TRANSFORMER 600/240/200VA
9	TRF620025	TRANSFORMER 600/240/25VA
9	TRF620150	TRANSFORMER 600/240/150VA
9	TRF210025D	TRANSFORMER 240-480/120-240/25VA
9	TRF310025D	TRANSFORMER 347-380/120-240/25VA
9	TRF500025D	TRANSFORMER 240-480/12-24/25VA
9	TRF510100D	TRANSFORMER 240-480/120-240/100VA
9	TRF520150	TRANSFORMER 480/240/150VA
9	TRF520200D	TRANSFORMER 240-480/120-240/200VA
9	TRF610025D	TRANSFORMER 480-600/120-240/25VA
9	TRF610050D	TRANSFORMER 600/120-240/50VA
9	TRF700025	TRANSFORMER 277/24/25VA
9	TRF810025D	TRANSFORMER 208-416/120-240/25VA
10	M-DR100A1	GRILLE (DRI)
10	M-DR200A1	GRILLE (DRII)
10	M-DRR00A1	GRILLE (DRR)
11	HOLD-005	FUSE HOLDER 2 POLES 600V
11	HOLD-010	FUSE HOLDER 2 POLES 600V
12	FS-005	FUSE 15A CLASS CC 600V T.D.
12	FS-024	FUSE 25A CLASS CC 600V T.D.
12	FS-027	FUSE 45A CLASS J 600V T.D.



LIMITED WARRANTY

This limited warranty is offered by Stelpro Design Inc. ("Stelpro") and applies to the following products made by Stelpro: models DRI, DRII and DRR. **Please read this limited warranty carefully. Subject to the terms of this warranty**, Stelpro warrants its products and their components against defects in workmanship and/or materials for the following periods from the date of purchase: **3 years**. This warranty applies only to the original purchaser; it is non-transferable and cannot be extended.

CLAIM PROCEDURE

If at any time during the warranty period the unit becomes defective, you must cut off the power supply at the main electrical panel and contact 1) your installer or distributor, 2) your service center or 3) Stelpro's customer service department. In all cases, you must have a **copy of the invoice** and provide the **information written on the product nameplate**. Stelpro reserves the right to examine or to ask one of its representatives to examine the product itself or any part of it before honoring the warranty. Stelpro reserves the right to **replace** the entire unit, **refund** its purchase price or **repair** a defective part. Please note that repairs made within the warranty period must be authorized in advance in writing by Stelpro and carried out by persons authorized by Stelpro.

Before returning a product to Stelpro, you must have a Stelpro authorization number (RMA). To obtain it, call the customer service department at: **1-800-363-3414** (electricians and distributors - French), **1-800-343-1022** (electricians and distributors - English), or **1-866-766-6020** (consumers). The authorization number must be clearly written on the parcel or it will be refused.

CONDITIONS, EXCLUSIONS AND DISCLAIMER OF LIABILITY

This warranty is exclusive and in lieu of all other representations and warranties (except of title), expressed or implied, and Stelpro expressly disclaims and excludes any implied warranty of merchantability or implied warranty of fitness for a particular purpose.

Stelpro's liability with respect to products is limited as provided above. Stelpro shall not be subject to any other obligations or liabilities whatsoever, whether based on contract, tort or other theories of law, with respect to goods or services furnished by it, or any undertakings, acts or omissions relating thereto. Without limiting the generality of the foregoing, Stelpro expressly disclaims any liability for property or personal injury damages, penalties, special or punitive damages, damages for lost profits, loss of use of equipment, cost of capital, cost of substitute products, facilities or services, shutdowns, slowdowns, or for other types of economic loss or for claims of a dealer's customers or any third party for such damages. Stelpro specifically disclaims all consequential, incidental and contingent damages whatsoever.

This warranty does not cover any damages or failures resulting from: 1) a faulty installation or improper storage; 2) an abusive or abnormal use, lack of maintenance, improper maintenance (other than that prescribed by Stelpro) or a use other than that for which the unit was designed; 3) a natural disaster or an event out of Stelpro's control, including, but not limited to, hurricanes, tornadoes, earthquakes, terrorist attacks, wars, overvoltage, flooding, water damages, etc. This warranty does not cover any accidental or intentional losses or damages nor does it cover damages caused by negligence of the user or owner of the product. Moreover, it does not cover the cost of disconnection, transport, and installation.

The warranty is limited to the repair or the replacement of the unit or the refund of its purchase price, **at the discretion of Stelpro**. Any parts replaced or repaired within the warranty period with the written authorization of Stelpro will be warranted for the remainder of the original warranty period. This warranty will be considered null and void and Stelpro will have the right to refuse any claims if **products have been altered** without the written authorization of Stelpro and if the nameplate numbers have been removed or modified. This warranty does not cover scratches, dents, corrosion or discoloration caused by excessive heat, chemical cleaning products and abrasive agents. It does not cover any damage that occurred during the shipping.

Some states and provinces do not allow the exclusion or limitation of incidental or consequential damages and some of them do not allow limitations on how long an implied warranty lasts, so these exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state or from province to province.