

HUSSMANN



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This GSVM case was manufactured in Gloversville, New York. Our phone #'s are (518) 725-0644 for New York State residents and our toll free #800-753-7790 for outside New York – should you have further questions.

INTRODUCTION –

The Hussmann Model GSVM open vertical merchandiser offers versatility in the display of medium temperature (35-41°F) products such as dairy products, prepared salads, pizza and fresh entrees that are pre-chilled in a cooler.

So that you can realize maximum benefit from this fine piece of equipment we urge both you and your installer to carefully read and follow this brief set of instructions prior to installation of the equipment.

INSPECTION –

The equipment has been skidded and crated prior to shipment from the factory. It is the carrier's responsibility to deliver it to you in good condition until such time as you sign for it.

Upon receipt of the cabinet, examine the packaging for damage. If the packaging is damaged, make specific notation on the delivery ticket as to the location and extent of damage prior to signing for the piece.

Carefully remove packaging and examine the cabinet for damage. If damage is found, contact the delivering carrier immediately and request that his agent prepare an inspection report for the purpose of filing a claim. **THIS IS YOUR RESPONSIBILITY, NOT THE FACTORY'S.**

Save all packaging materials and move the cabinet as little as possible prior to inspection.

LOCATION and CLEARANCE –

It is important that careful consideration be given to locating the cabinet away from an area where direct sunlight would shine into the fixture, or where drafts from air conditioning grilles, fans, and open doors could affect its operation.

The GSVM4060 and 4072 have front condenser air intake and discharge. A minimum distance of two feet must be left open in front of the case so that air discharge and intake to the condensing unit is not obstructed.

The GSVM5272 model requires a 5" minimum clearance behind the case and clear above the case since it has straight through condenser air flow. Brackets are provided for field attachment to obtain the 5" spacing.

SKID –

The skid should be left on the cabinet until it is near its final location. The skid provides protection for both case and floor.

The skid is removed by raising one end of the case approx. 6", block securely and remove the 2 skid bolts on the raised end – then screw back into the holes 2 leg levelers.

The procedure is repeated on the opposite end. When the leg levelers are in place, the case may be slid off the skid and placed in its final location.

LEVELING –

The cabinet must be leveled properly to insure full drainage of condensate water from the evaporator coil. Level the case from front to rear and end to end. Standard levelers, packed inside the case, or optional legs can be provided for this purpose.

SEALING –

Once the case is properly leveled, the case should be sealed to the floor as shown in the following drawing, using an NSF approved material such as General Electric RTV -102 silicone sealer or equivalent.



ACCESS PANEL REMOVAL –

The louvered access panel on the lower front of the case provides access to the condensing unit, electrical box and condensate pan. Remove panel by removing screw at bottom and lifting up and pulling forward.

DRAINS –

Remote draining is not required in self-contained models. The condensate water from the evaporator drains out through the bottom of the cabinet, through a copper trap attached to the underside and into the condensing unit compartment to a heated condensate pan.

Until this trap gets filled with water from the initial defrost, there may be a small frost buildup in the coil area on startup, which should disappear after the first defrost. The pan uses a thermistor to sense the presence of water in the pan and adjusts the amount of heat required to evaporate the water.

LEGS (OPTIONAL) -

If required by Health Inspectors the levelers can be removed and replaced with NSF Approved legs to raise the case 6 inches for cleaning purposes. An optional skirt kit can be provided to clip on to the legs.

SERIAL PLATE –

The serial plate is located on the interior top wall of the cabinet towards the left end. It contains all pertinent information such as model, cabinet serial number, amperage rating, refrigerant type and charge, etc. This information will be needed to install, service, or order parts for this piece of equipment.

**AIR DISTRIBUTION and PRODUCT
LOADING –**

This cabinet has a forced-air circulation system. Air flows through the back wall over the product on the shelves, as well as out the honeycomb diffuser located above the product, across the face of the product (air curtain) and into the return air grill.

Do not load product so that it extends over the shelf edges or over the return air grille.

POWER REQUIREMENTS –

The GSVM Models are equipped for operation on a 115/60/1 power supply.

See chart in specifications for requirements.

It is very important for the safety of both you and your customer to have each circuit properly grounded. A qualified electrician should perform all wiring in accordance with the National Electrical Code and/or all local codes. Separate circuits are recommended for each case in order to prevent product loss due to overloading or malfunction of other equipment on the same circuit. For proper operation of equipment, voltage as measured at the compressor must not vary more than 5% from the cabinet serial plate rating. If either a high or low voltage condition exists, contact your electrician, local power company, or equipment manufacturer.

ELECTRICAL BOX –

The electrical box is located behind the louvered access panel. The box is capable of sliding out for service after the hold down screw is removed.

The box contains the power switch and defrost time clock.

POWER SWITCH –

The main power switch is located behind the front louvered access panel on the side of the electrical box. This power switch controls all power to the case. **THE CABINET POWER SWITCH MUST BE IN THE OFF POSITION BEFORE STARTING ANY CLEANING OR SERVICE WORK ON THE EQUIPMENT.**

DEFROST TIME CLOCK –

The time clock, located in the electrical box, provides a definite off-time so that the evaporator will clear itself of frost.

The clock is provided with pins to initiate defrost. The failsafe setting sets the length of defrost (from 2 minutes minimum to 110 maximum).

The clock is factory pre-set for 3 defrosts (at 6 a.m. , 2 p.m. and 10 p.m.) on the 4060 and 4072 at 20 minutes

each. There are 4 defrost on the 5272 (2 a.m., 8 a.m., 2 p.m., and 8 p.m.) at 30 minutes each

Additional defrost may be required for cases located in high humidity or high usage cases. If possible, avoid setting a defrost during the day, or peak usage periods. **THE CLOCK TIME POINTER SHOULD BE SET TO THE CORRECT TIME OF DAY WHEN THE CABINET IS READY TO BE STARTED.**

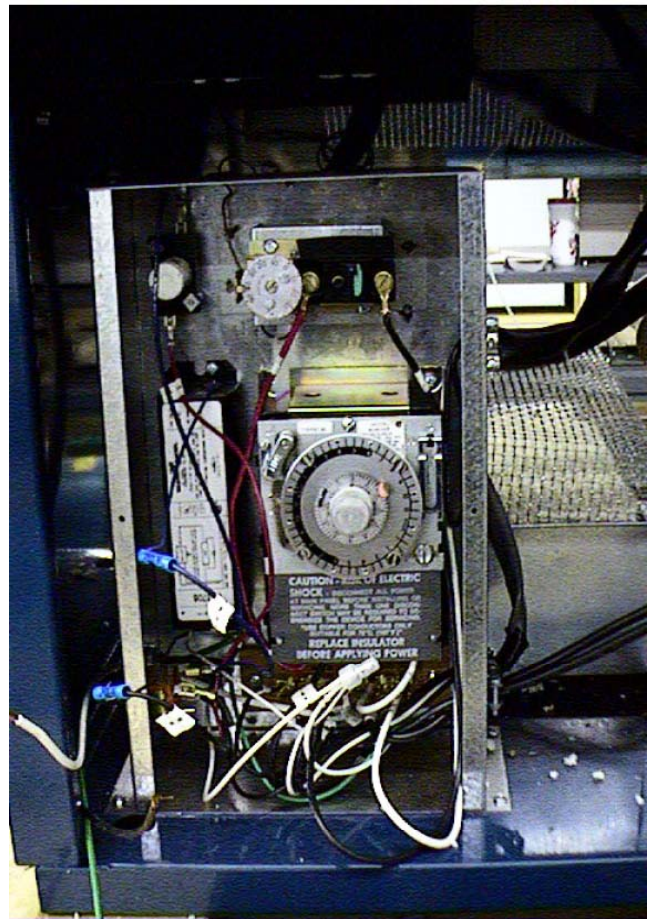
Setting the timer – Extra pins are provided with the timer.

- ◆ Put pin in hole of dial face at the time you wish the cabinet to defrost. Note that there is an AM and PM section on the dial face. Be sure the pin is tight.
- ◆ Set the length of time for the defrost (failsafe). Push down on the adjustment and slide it to the length of time. Do not set the time longer than 60 minutes.
- ◆ Set the time pointer to the proper time of day and start cabinet.

CONNECTIONS -

- a. Check cabinet thoroughly for loose nuts and bolts and electrical connections.

- b. Inspect the refrigeration lines for any visible damage or chafing.
- c. Replace electrical box cover.
- d. Replace the louvered access panel.
- e. Start the cabinet and allow to pull down to operating temperature before loading.



SPECIFICATIONS –

DIMENSIONS

Model	Length	Exterior Width	Height
GSVM-4060	40"	30 5/8"	60"
GSVM-4072	40"	30 5/8"	72"
GSVM-5272	52"	30 5/8"	72"

ELECTRICAL

MODEL NO.	Volts/Hz/Phase	REFRIGERANT TYPE	RUN AMPS	FUSE AMPS	POWER CORD
GSVM4060	115/60/1	R-134a	15	20	YES
GSVM4072	115/60/1	R-134a	17	25	NO
GSVM5272	115/60/1	R-134a	20	25	NO
GSVM5272	115/60/1	R-404A	17.25	25	NO **

**** The GSVM-5272 changed to R404A in January 2000. Check the Serial Plate to verify the correct refrigerant.**

Note: Applies to the GSVM4072 & 5272 Models Only-Drain Plumbing hookup recommended. Optional condensate is available if there is no access to drain plumbing. Condensate pan must be field installed and requires a dedicated 15 amp, 120-volt circuit. See page 15 for optional drain pan specifications.

BTU CAPACITY

	BTU/HR	RATING TEMPERATURE °F		
		EVAP	COND	AMBIENT
GSVM-4060	6200	20	110	90
GSVM-4072	6250	20	110	90
GSVM-5272	6300	20	110	90

Cabinets use R-134A or R-404A

SHELVING MAXIMUM WEIGHT CAPACITY (LBS) -

The following is a tabulation of the maximum evenly distributed weights that can be applied on the respective shelves. They greatly exceed most normal food products that could be displayed in the case

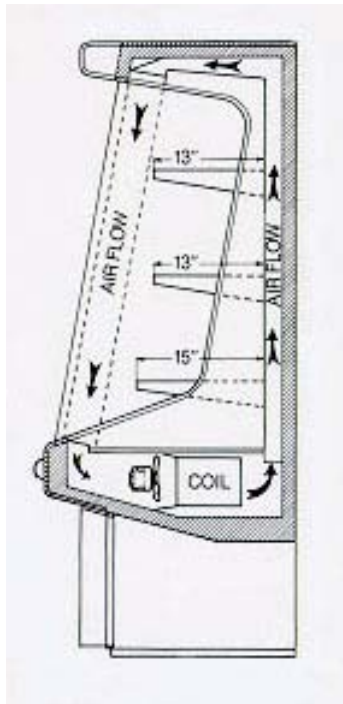
Bottom Sheet Metal Area
 Stand. 13"/15" shelves
 Stand. 13"/15" shelves w/optional
 upslope 6° adapters
 Optional Wire Baskets

Flat 1 1/2	17°Tilt	30°Tilt
Upslope	17°Tilt	30°Tilt
250#	N/A	N/A
250#	250#	75#
125#	N/A	N/A
200#	100#	30#

OPERATION and MAINTENANCE -

It is important that the two previous sections of this installation booklet have been read and followed carefully before attempting to start up the equipment.

A thorough inspection should be made prior to start up to assure that there are no loose nuts, bolts, electrical connections or refrigeration lines rubbing or chafing. Turn the power switch to the ON position. ALLOW system to reach normal operating temp.prior to loading any product. This cabinet has a forced-air curtain that flows over the top of the product.



See SHELVES for the special loading instructions. Air flows out of the honeycomb diffuser located above the product, across the product, and into the return duct. The honeycomb can be removed for cleaning.

TEMPERATURE CONTROL -

Interior cabinet temperatures are controlled through the use of a bulb and capillary type temperature control. The control is located in the electrical box.

The sensing bulb is mounted on the top of the evaporator coil on the 4060 and 4072. On the 5272 it is located on the rear wall behind the evaporator coil. Be sure to disconnect power supply prior to any service work on the control.

The control is factory pre-set between 19° and 21°F for the GSVM4060, 4072 and - 26° to 28°F on the GSVM5272 to maintain between 35° and 40°F interior cabinet average temperatures.

The differential is set at 8-10°F or a little over halfway towards "MAX". Donot adjust lower or evap. icing will occur. It can be adjusted to other desired temperatures by turning the dial to the corresponding dial face temperatures. The indicated dial temperature will not directly

correspond to the actual cabinet temperature due to the bulb location and depending on various conditions, a certain amount of time lag will be noticed between the new setting and the resulting temperature.

CONDENSING UNIT –

A regular program should be set up for cleaning the fin-and-tube condenser. Normally, this cleaning is required every 3 to 4 months, but the individual store application may shorten or lengthen this time period. Dust and dirt accumulation can cause serious efficiency loss.

Access is gained to the unit area by removing the louvered grille. Before attempting to slide out condensing unit you must first remove the screws from the condenser unit baffles. The unit slides forward to facilitate cleaning and for service. Care should be taken when pushing the unit back in, to insure that the pullout coil does not become kinked or damaged in some way. The baffle screws must be replaced after sliding the condensing unit back into position. Double check to make sure the drain hose is in the drain pan before putting the access grille back on. The rear access panel is also removable if it is necessary to work at the back of the case.

SHELVES –

The GSVM4060 cabinet is equipped with 2 standard shelves for the display of your product. The 13” shelf should be located at the top and 15” shelf should be located below it. The GSVM5272 and 4072

has an additional 13” shelf as standard which should be located above the 15” shelf also.

The shelves should be positioned so they do not protrude into the front (top to bottom) air curtain. Do not use deeper shelves or allow product to protrude over the shelves into the air curtain.

THERMOMETER –

A solar thermometer is provided that registers degrees °F. The thermometer is located in the front center.

A solar powered thermometer is equipped with each cabinet. The thermometer is located in the top front center of the cabinet interior. Temperature is displayed in Fahrenheit degrees as standard. Celsius display is available as an option.

The thermometer may be replaced by removing the two screws securing the thermometer to its mounting bracket. Remove the sensing element from the clip. Install the new thermometer in reverse order.

To clean the sensing element of the thermometer, follow the same procedure as replacement. Cleaning of the element is accomplished by using water and mild detergent. Be sure to wipe the element clean of any residues so proper temperatures are displayed.

LIGHTING –

Interior lighting is provided by a cool white fluorescent bulb under the top header (standard), and additional lights under each shelf. The tubes are sleeved to maintain proper heat around the bulb for maximum light intensity and to protect the product in case of breakage.

The tubes can be replaced without removing shelves or product. To replace the bulb, twist the bulb and slide the prongs clear of the lampholder. When re-installing this type of bulb, be sure the prongs on the bulb twist and lock into place.

LIGHT SWITCH (es) -

The standard case has one upper light with a switch located under the top left end behind the honeycomb. Additionally, the lighting on each shelf has a separate switch located under the center of each shelf.

BALLAST (s) -

The ballast for the top standard light is located in the electrical box. Access is gained by removing the access panel.

Access to the shelving ballasts is gained by removing the respective shelf (after unplugging the harness), and removing the three screws from the ballast cover.

CLEANING EXTERIOR –

When cleaning the exterior of the cabinet, use a soft cloth or sponges with water and a mild detergent. Rinse and wipe dry. Do not use an abrasive cleanser on the painted surfaces as this will mar the finish.

For plexiglass windows, use an approved plexiglass cleaner such as Craftics 20/20 Plasti-Cleaner.

CLEANING INTERIOR –

For cleaning the interior of the product compartment, remove the product, disconnect the electrical power, and allow cabinet to warm to room temperature. Use a soft cloth or sponge with a mild detergent to wash the interior.

The drainage area and drain should be checked to insure that they have not become clogged. If the condensate drain hose is removed from the electric condensate pan for cleaning, it must be reinstalled prior to operating the case. Do not use an abrasive cleanser on the painted surfaces
GSVM-4060 only has Electric Condensate Pan as Standard

Wipe dry before restarting the cabinet. The time clock (see Defrost Time Clock section) should be reset to the correct time of day. Allow the cabinet to cool down to proper temperature before reloading product.

CLEANING STAINLESS STEEL SURFACES –

Generally soap and water will be sufficient for most cleanings when done often and regularly. When necessary, several cleaning agents can be used. Some of them are Comet, Bab-O, Liquid NuSteel, Cooper's Stainless Steel Cleaner, and Allen's Stainless Steel Cleaner.

REFRIGERATION –

The GSVM models employ a refrigeration system using a hermetic compressor. The GSVM4060 and GSVM4072 systems employ a capillary tube for refrigerant flow control. The capillary tube is soldered to the suction line pull-out coil for proper heat exchange. If the capillary should become plugged or damaged for some reason it is best to replace the whole heat exchanger with a new one. Consult the factory for the proper replacement.

The GSVM-5272 employs a bleed port type expansion valve for proper refrigerant control.

As stated previously, these cases are self-contained with the condensing unit mounted at the bottom. They are equipped with a hermetic compressor and a capillary tube. The condenser is of fin and tube construction and **SHOULD BE PERIODICALLY CLEANED TO MAINTAIN EFFICIENT OPERATION.**

If for any reason the cabinet must be recharged, consult the serial plate found inside the cabinet for the proper refrigerant charge and weight.

If it should become necessary to leak test the system, please adhere to the following notice:

BECAUSE OF THE CFC ATMOSPHERIC CONSIDERATIONS BEING TAKEN TODAY, WE ASK THAT LEAK TESTING BE DONE WITH REFRIGERANT 22 MIXED WITH NITROGEN

LEAK TESTING –

The test gas cylinder must be equipped with a pressure gauge and regulator so that system test pressures do not exceed maximum allowable limits. Do not ever use anything other than a R-22/Nitrogen mixture for leak testing.

Attach a refrigerant test gas cylinder to your service manifold and connect the manifold to the charging port on the liquid line valve.

Charge an R-22/Nitrogen mixture into the system, raising the pressure to the unit's nameplate for the low side and high side pressures. Using an electronic detector, carefully check the entire system for leaks. Take special care to inspect all brazed and flare connections.

EVACUATION –

After the system is proven leak tight, thoroughly evacuate the system according to the following procedure:

- a. Discharge the refrigerant-nitrogen mixture, allowing it to blow from the system as rapidly as possible, into any empty cylinder.

Be sure that all service valves are open to allow all of the mixture to be discharged.

- b. Connect a deep-drain vacuum pump to both the high and low side of the system. Pull a vacuum on the system to at least 1500 microns.
- c. Break the vacuum by adding refrigerant into the system until the pressure is above 0 psig. Always charge the refrigerant line

into the system through a new drier in the charging manifold line. A 16 cubic inch drier is sufficient for this purpose.

- d. Repeat steps 2 and 3 two more times, the third time evacuating the system to 500 microns.

The following pressures are optimum when the case is in a 75° to 80°F ambient and is running from 35° to 40°F cabinet temperature and are for reference only:

MODEL NO.	REFRIGERANT TYPE	SUCTION PRESSURE (psig)	HEAD PRESSURE (psig)
GSVM4060	R-134a	12-15	130-150
GSVM4072	R-134a	12-15	130-150
GSVM5272	R-134a	14-18	130-150
GSVM5272	R-404A	40-50	310-320

Consult the serial plate for the correct refrigerant charge. This charge is critical and should be weighed in.

TEMPERATURE CONTROL –

The temperature control is located in the electrical box. The sensing bulb is located on the left hand end of the lower back wall.

When replacing make sure the bulb is in the proper location and that the hole in the liner is properly sealed after the replacement has been made.

The control is adjustable from –30° to 50°F (dial face marking). The actual cabinet temperature is approximately 6 to 9° warmer than the control setting so this must be taken into consideration.

The control also has an adjustable differential that determines the difference between the cut-in and cut-out temperature. This is adjustable from 5 to 20°. The factory setting is from 8-10° to insure proper off time to keep the evaporator from icing.

EVAPORATOR FAN MOTORS –

To replace an evaporator fan motor, the product must be removed from the cabinet and the bottom shelf also removed.

Next, remove the plate covering the fans by removing the 2 screws, and 4 bolts holding this in place. The fans are now ac-

TROUBLE SHOOTING CHARTS

<u>TROUBLE</u>	<u>PROBABLE CAUSE</u>	<u>SOLUTION</u>
Compressor will not start no noise	1. Power disconnected	1. Check service cord or wiring connection.
	2. Blown fuse or breaker	2. Replace fuse or reset breaker
	3. Defective or broken wiring	3. Repair or replace
	4. Defective overload	4. Replace
	5. Defective temperature control	5. Replace
Compressor will not start, cuts out on overload	1. Low voltage	1. Check voltage at cabinet, should not be more than 5% below rating.
	2. Defective compressor	2. Replace
	3. Defective relay	3. Replace
	4. Restriction (pinched cap tube)	4. Repair or replace
	5. Restriction (moisture)	5. Leak check, replace drier evacuate and recharge
	6. Condenser blocked with dust and dirt	6. Clean condenser
	7. Defective condenser fan motor	7. Replace
Warm storage temperature	1. Temperature control not set properly	1. Reset control
	2. Short of refrigerant	2. Leak check, replace drier evacuate and recharge
	3. Cabinet location too warm	3. Move to cooler location or correct excessive heat source.

	4. Refrigerant overcharge	4. Purge system, evacuate and recharge.
	5. Low voltage, compressor cycling on overload	5. Check voltage at compressor should not be more than 5% below rating
Compressor runs continuously. Product too warm	1. Short of refrigerant	1. Leak check, replace drier, evacuate and recharge
	2. Inefficient compressor	2. Replace
Compressor runs continuously. Product too cold	1. Defective control	1. Replace
	2. Control sensing element not in positive contact	2. Assure proper contact
	3. Short on refrigerant	3. Leak check, replace drier, evacuate and recharge.

TROUBLE SHOOTING LIGHT CHART

<u>PROBLEM</u>	<u>SOLUTION</u>
Lights won't start	<ol style="list-style-type: none"> 1. Check light switch 2. Check continuity to ballast 3. Check to see if bulbs inserted properly in sockets 4. Check voltage
Lights flicker	<ol style="list-style-type: none"> 1. Allow lamps to warm up 2. Check lamp sleeve for cracks 3. Check sockets for moisture and proper contact 4. Bulb replacement may be necessary 5. Check voltage 6. New bulbs tend to flicker until used

Ballast Hums

1. Check voltage
2. Replace ballast

GSVM ACCESSORIES

The following is a description of the various accessories available for the GSVM, including sketches, where applicable of the many shelving/wire goods items available.

CASTER KIT – Consists of 5" braking casters, which screw in to the standard threaded holes in the four corners under the case occupied by the standard leg levelers, which will have to be removed. The kit will add 5 5/8" to the height of the case.

LEG KIT – The legs also go into the same holes as the standard levelers, which will have to be removed. The legs are adjustable and will add 5 5/16 to the height of the case. The skirt kit requires the use of these legs.

4-SIDED SKIRT KIT – As stated, this is a 4-sided skirt that will enclose the open area under the case when the leg kit is used. It clamps onto the legs.

NIGHT COVER – This is a clear, 5 mil. thick, polyester shade type of cover that will cover the face of the case. It will fasten to the top of the case and be drawn to a snap fastener in the area above the front bumper. The cover, although loose fitting on the ends, will conserve energy during periods when the store is not open. The cover is standard on the GSVM5272 effective August '96.

WRAP-AROUND BUMPER KIT – This bumper replaces the standard front bumper and warps around both sides of the case at the standard height of 22" to the centerline of the 2 1/4" wide bumper.

COLORED ACCENT PANEL – This panel can be (a) the top front panel over the product or (b) the panel behind the bumper or (c) the access panel below the bumper panel, or any combination of these.

SHELF END TRIM KIT – Consists of (4) painted steel ends for the standard 13" and 15" shelves. This trim conceals and protects the exposed ends of the shelves, and attaches by two snap fasteners supplied with each trim piece for the 4060. The 4072 and 5272 need 6.

HIGH HUMIDITY CONDENSATE PAN – (For GSVM4072 & 5272) This is a 1,000 watt, 9 amp pan with a 6ft-9 in 115v power cord attached. Dedicated circuit required.

SHELF UPSLOPE ADAPTER KIT – This kit consists of (4) zinc coated wire adapters to increase the two standard shelves' upslope from 1 1/2° to 6°.

PRICE TAG MOLDING KIT – This kit consists of aluminum price tag molding for the standard shelves. This molding will hold both 1" and 1.235" standard price tags. (Note that the standard shelves accept 1.235" tags).

WIRE PRODUCT STOP KIT – This kit consists of a 2" high chrome plated open wire stops for the standard shelf. This stop is mounted under tension and should not be confused with the wire front in the partition kit.

WIRE PARTITION KIT – This is a free standing wire system, which attaches to the standard shelves, and consists of a wire front (different from the Product Stop), two wire sides, and two partitions from the front to back, all chrome plated and 3" high.

WIRE CROSS DIVIDER – This is a 3" high x 4" long divider that could be ordered to be used with the Wire Partition Kit above, in whatever quantities are desired.

WIRE BASKET KITS – One kit is available to replace the top 13" shelf (s) and another is available to replace the bottom 15" shelf. Each kit consists of a wire basket, (2) brackets, and two dividers, which could also be used as ends. These parts are zinc plated. The baskets have an 8" high back and a 4" sloped front.

WIRE BASKET DIVIDERS – These are additional dividers which can be used with the Wire Basket Kit to obtain additional partitioned areas in the baskets.

ADDITIONAL LIGHTED SHELF – This consists of an additional 13" lighted shelf that can be positioned between the two standard shelves. It is the same construction as the top standard 13" shelf.

WARRANTY AND PARTS INFORMATION

IMPORTANT – Please read carefully to assure prompt and accurate service.

ORDERING PARTS REPLACEMENT –

Contact your nearest Hussmann Distributor.

Always specify model and serial number of cabinet.

If correct part number is not know, give a clear description of part itself and its function in the cabinet or remote unit.

WARRANTY PARTS PROCEDURE

Same as first three items in Ordering Replacement Parts Procedure.

Give original installation date of cabinet and, if possible, forward a copy of the original invoice or delivery receipt.

All shipments of in-warranty replacement parts will be invoiced from the factory until such time as the defective part is returned and proved to be defective by our Quality Control Department.

Contact your Hussmann Distributor for instructions on returning in-warranty parts.

Warranty parts must be returned to the factory within 30 days of date of failure to assure proper disposition.

Lack of any of the above information may result in the shipment of the wrong part, or a delay in shipment.

COMPRESSOR REPLACEMENT PROCEDURE –

Replacement compressors will not be shipped from the Hussmann factory. They may be obtained from you nearest Copeland Wholesaler.

Your wholesaler will replace, free of charge, any compressor found to be defective within twelve months of installation, not to exceed twenty months from the date of manufacture – as determined by the compressor serial number on the compressor serial plate.

For any defective compressor beyond the twelve or twenty month time period, a salvage value credit will be given too partially offset the invoice for the replacement.

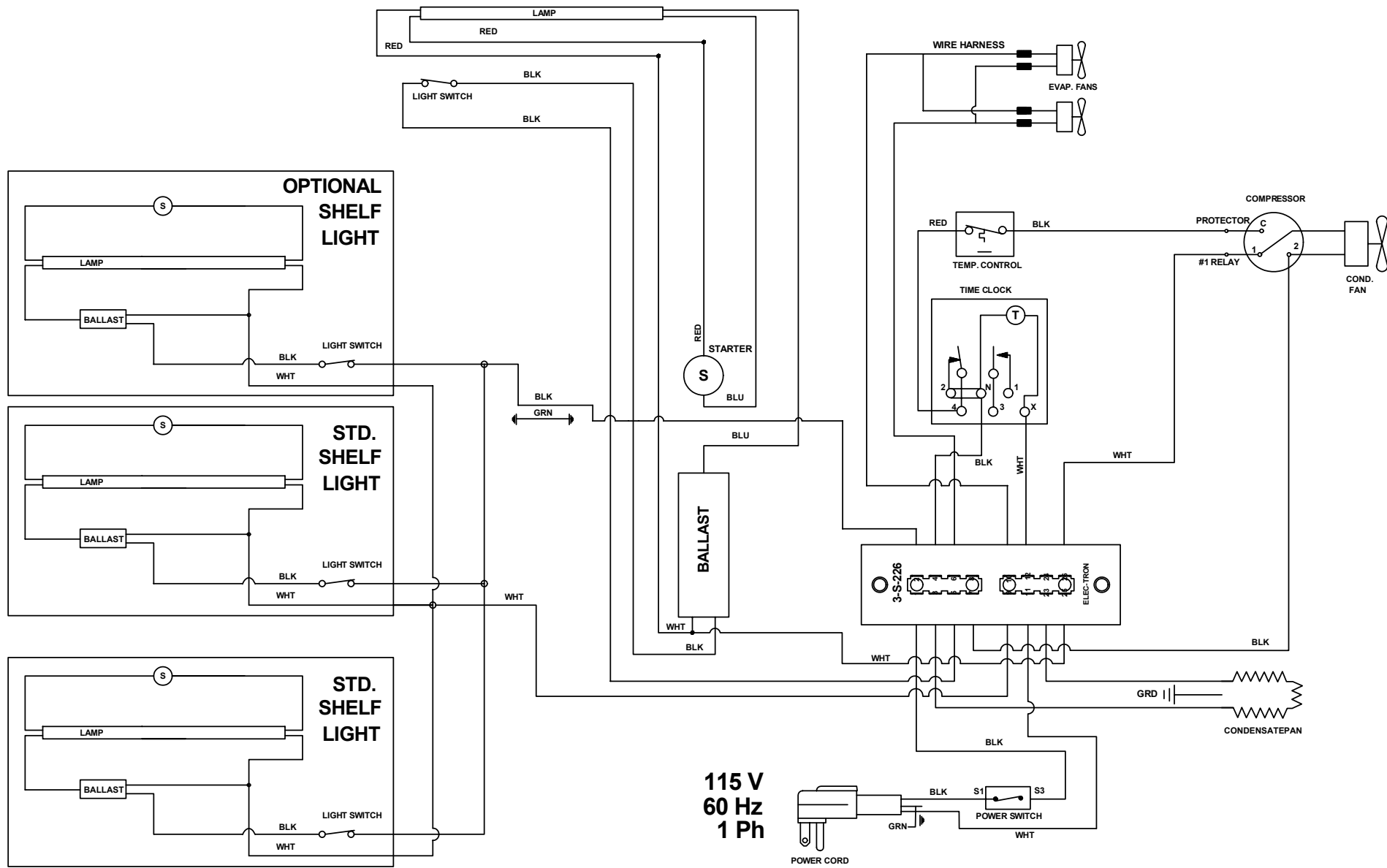
To obtain reimbursement forward to: Hussmann Corporation
140 East State Street
Gloversville, NY
12078

the following information:

The cabinet model and serial number

2. A copy of the wholesaler's invoice, along with a copy of the salvage value credit.

UPPER LIGHT

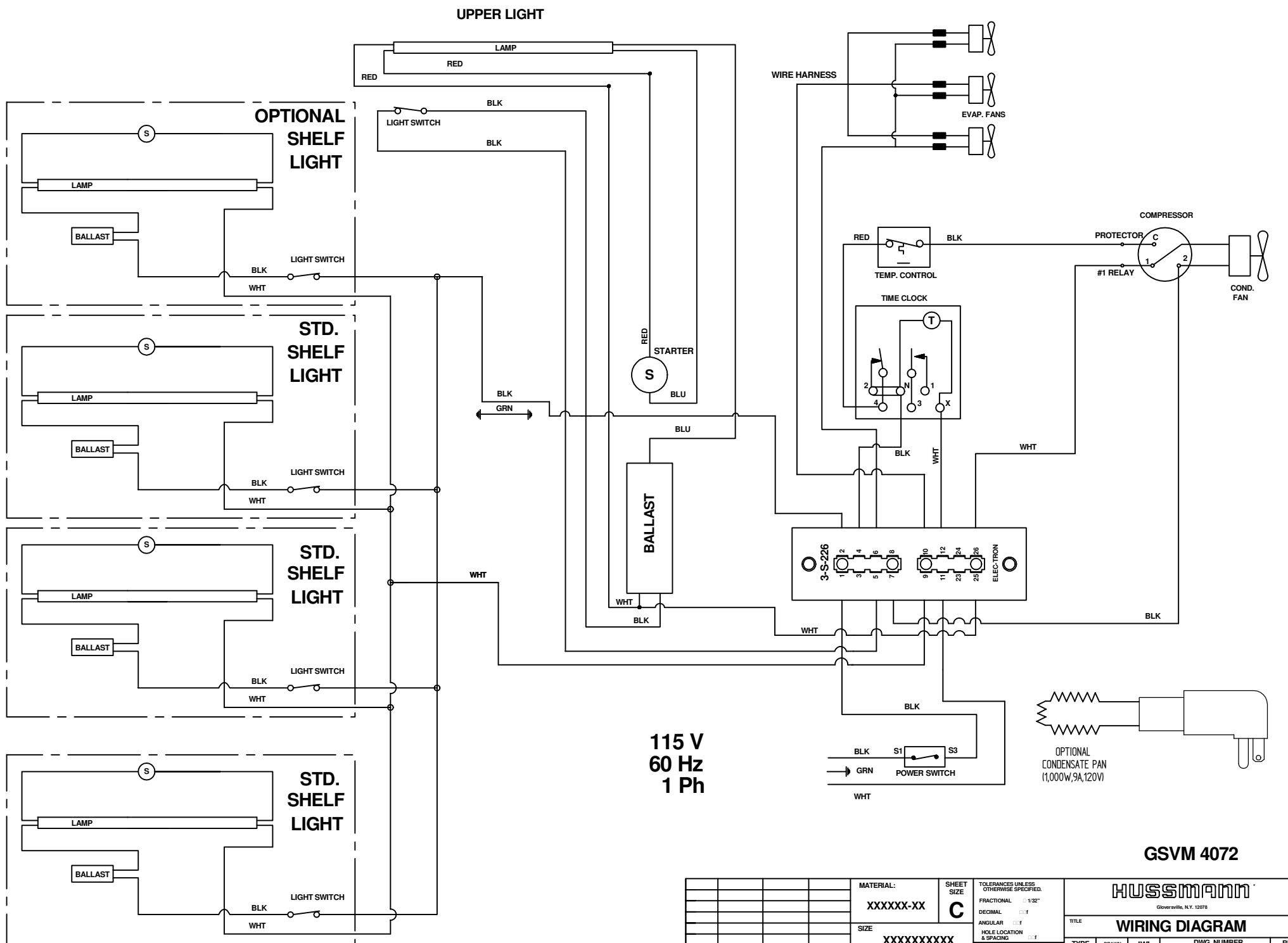


115 V
60 Hz
1 Ph

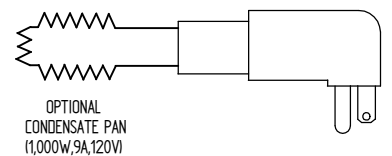
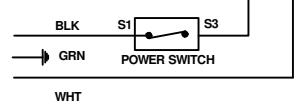
ONE LIGHTED SHELF

GSVM 4060

				MATERIAL:	SHEET SIZE:	TOLERANCES UNLESS OTHERWISE SPECIFIED.		HUSSMANN <small>Gloversville, N.Y. 12078</small>		
				XXXXXX-XX	C	FRACTIONAL	1/32"			
				SIZE	XXXXXXXXXX	DECIMAL	0.031"	TITLE TYPE CODE DRAWN: JWL DATE: 2/11/94 DWG. NUMBER: M100-1938 CHECKED: XXX REV. X		
REV.	DATE	BY	E.C.N.	DIE NO.	XXXX-XXXX	ANGULAR	10			
						HOLE LOCATION & SPACNG	1/64"	FINISH: XXXXXXXXXXXX		

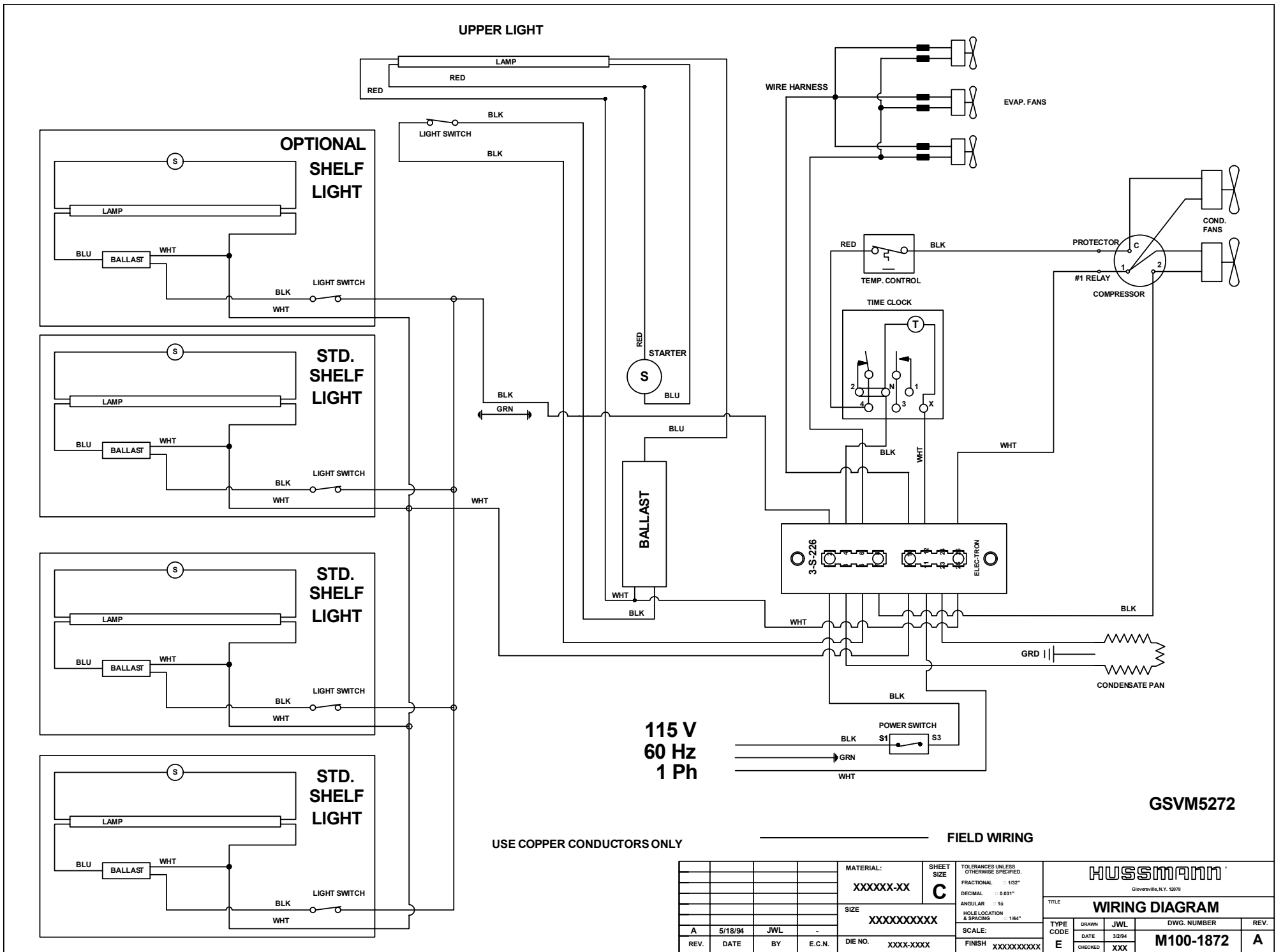


115 V
60 Hz
1 Ph



GSVM 4072

				MATERIAL: XXXXXX-XX		SHEET SIZE: C		TOLERANCES UNLESS OTHERWISE SPECIFIED: FRACTIONAL 1/32" DECIMAL .015 ANGULAR .015 HOLE LOCATION & SPACING .015		HUSSMANN Gloversville, N.Y. 12078									
				SIZE: XXXXXXXXXXX		SCALE:		FINISH: XXXXXXXXXXXX		TITLE: WIRING DIAGRAM									
REV. A		DATE 11/7/95		BY JWL		E.C.N. -		DIE NO. XXXX-XXXX		TYPE CODE: X		DRAWN: JWL		DATE: 2/11/94		DWG. NUMBER: M100-1935-1		REV.	
												CHECKED: XXX							



UPPER LIGHT

OPTIONAL SHELF LIGHT

STD. SHELF LIGHT

STD. SHELF LIGHT

STD. SHELF LIGHT

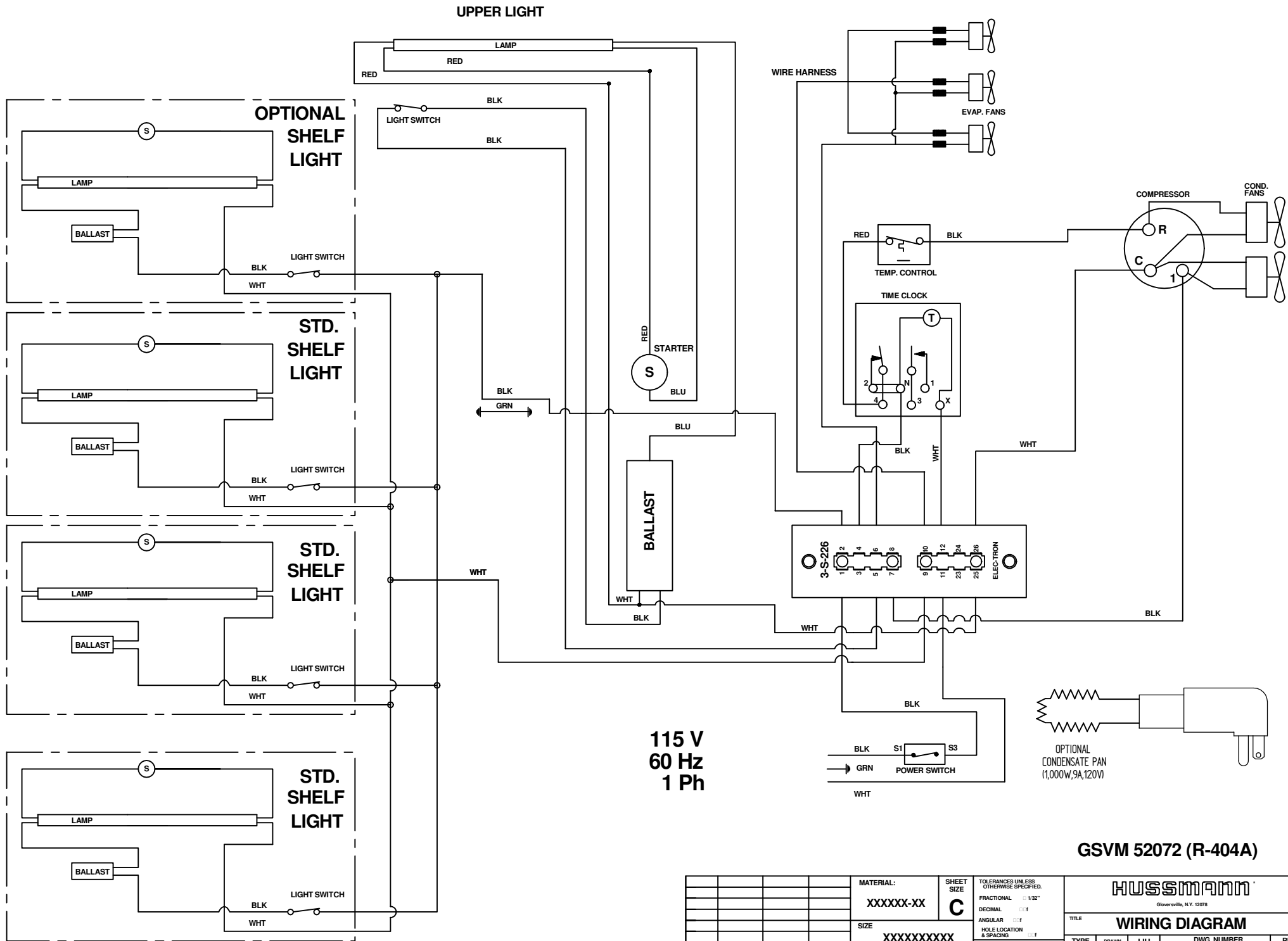
**115 V
60 Hz
1 Ph**

USE COPPER CONDUCTORS ONLY

FIELD WIRING

GSVM5272

				MATERIAL: XXXXXX-XX	SHEET SIZE C	TOLERANCES UNLESS OTHERWISE SPECIFIED. FRACTIONAL: 1/32" DECIMAL: 0.031" ANGULAR: 1/16" HOLE LOCATION & SPACING: 1/64"	HUSSMANN <small>Gloversville, N.Y. 12078</small>			
				SIZE XXXXXXXXXX		SCALE:	WIRING DIAGRAM			
A	5/18/94	JWL	-	DIE NO. XXXX-XXXX	FINISH XXXXXXXXXX		TYPE CODE E	DRAWN JWL	DWG. NUMBER M100-1872	REV. A
REV.	DATE	BY	E.C.N.				CHECKED XXX			



115 V
60 Hz
1 Ph

GSVM 52072 (R-404A)

		MATERIAL: XXXXXX-XX		SHEET SIZE C		TOLERANCES UNLESS OTHERWISE SPECIFIED. FRACTIONAL 1/32" DECIMAL 0.1 ANGULAR 0.1 HOLE LOCATION & SPACING 0.1		HUSMANN Governsville, N.Y. 12078		
		SIZE XXXXXXXXXX		SCALE: XXXXXXXXXX		TITLE WIRING DIAGRAM			TYPE CODE X	
REV. A	DATE 11/7/95	BY JWL	E.C.N. -	DIE NO. XXXX-XXXX	FINISH XXXXXXXXXXXX	DWG. NUMBER M100-2185-1		REV.		