

INSTRUCTION MANUAL

Ovens



IF REPLACEMENTS PARTS ARE NEEDED,

be sure to give the model number when ordering, including prefix and suffix letters.

PLEASE RETAIN THIS MANUAL FOR FUTURE REFERENCE

Model # _____ Serial # _____

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Congratulations on your selection of this piece of cooking equipment. Over the years we have developed what we consider to be the finest equipment on the market today.

Please read these instructions before attempting installation. Set up and start up should be performed by a qualified service professional, electrician and someone considered a professional in the installation of such equipment or all the terms and conditions in our Limited Warranty will be rendered void. If in doubt, call lan at 1.419.625.4514 for the nearest Service Agency.

Retain this manual for future use.



FOR YOUR SAFETY

Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.



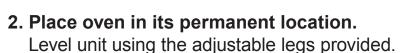
WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.

SET UP INSTRUCTIONS (All Floor Model Ovens)

1. Uncrate Oven

Check to be sure owners manual, handles and legs and brackets (required for stacked units) are packed inside. Check unit for possible damage during transit. Notify us immediately if any damage is found.



3. Leg Installation

Mount legs on the side of the unit while blocked, (refer to Figure 1). NOTE: Ovens can be lightened by removing shelves and baffles, if desired. Each leg has four mounting bolts, packed inside oven. After completing Step 1, proceed to the other two legs. (refer to Figure 2)

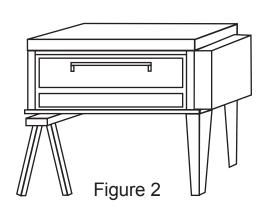


Figure 1

4. For double or triple stacks

Locate the stacking brackets and legs with each unit.



5. Minimum Clearance

6" from sides and rear from combustible and non-combustible construction.

ELECTRICAL HOOK-UP

- **1.** With oven in place, have a qualified electrician permanently wire unit.
- **2.** Each unit comes with calrod elements. Check rating plate for amperage load to determine wire size for proper installation.
- **3.** Counter models can be 120V or 220V. Floor models are 220V, single (standard) or three phase (optional).
- **4.** Access to hook-up is located on the back cover. Remove top portion to reveal terminal block for hook-up.
- **5.** Be sure to use a separate case ground.

VH SERIES OPERATING INSTRUCTIONS

BURN OFF

Please note: For the first hour of operation the "burn off" will occur. The unit will smoke considerably during this period. Burn off is oil residue and insulation break in. Allow for good ventilation during this time. There is no danger if you follow these directions and proceed with care and caution.

1. Turn on toggle switch

2. Set controller for desired temperature

Industrial 0 to 500 degrees Bake 0 to 550 degrees Pizza 0 to 650 degrees

3. Allow at least one (1) hour for preheat. A longer preheat is better for complete stabilization of your unit.

4. VH30 and VH50 Models

Your oven is equipped with a variable power control for the top deck only. Set controller for desired temperature and adjust the top to balance top and bottom decks as needed.

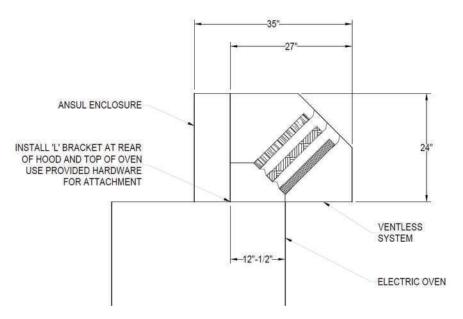
- **5.** To learn how to use this feature, start by setting the top heat control at 10 and reduce to balance.
- **6. Turn off toggle to shut down unit.** Cooling fan may run until a safe controller temperature is reached. It will then shut down automatically.

^{*} Press ENTER when setting or changing temperature

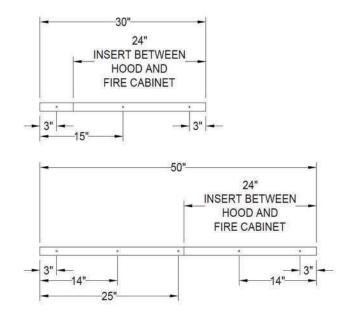
VENTLESS SYSTEM INSTALL

The Ventless System is used to allow the oven to be used as a Ventless Assembly under UL-710B

• In accordance with the system's listing, the hood system is to be mounted as follows:



• Bracket and hardware locations:



VH SERIES TROUBLESHOOTING GUIDE

| PROBLEM | CAUSE | REMEDY |
|----------------------------|---|---|
| Unit on, but will not heat | One or more elements not working | Replace bad elements |
| | Loss of one or more legs of power source | Call electrician to restore power |
| | Bad solid state relay (SSR) | Replace |
| Unit power is off | Toggle switch off | Turn on |
| | Unit in high limit shut down | Controller bad SSR stuck Replace |
| | Fan not working In Fan Limit shut down | Clean fan or replace |
| | Blown Fuses | Call service tech or electrician for assistance |
| Fan is off | Bad fan | Replace |
| | Bad fan switch | Replace |
| | Blown fuses | Call for assistance |

VH SERIES SUGGESTED MAINTENANCE

DAILY Wash all exposed cleanable areas.

MONTHLY Clean around lower front and fan for accumulation

of lint, dirt, or grease.

OVEN INTERIOR The interior of your unit is aluminized steel and must

be treated with care. Clean by using mild detergents

and a brillo type pad. Best to remove spillage immediately to avoid carbonizing of the spill. DO NOT USE CHEMICAL CLEANERS, such as "Easy Off", as this type of cleaner will damage the

aluminized coating.

OVEN EXTERIOR Wipe with dampened cloth and a mild detergent.

Do not use abrasives on oven finish or it will scratch.

STAINLESS STEEL To remove normal dirt, grease, use mild detergent

applied with a sponge or cloth. Dry thoroughly.

PIZZA DECKS Pizza stones must be treated with care.

Clean with a deck brush that can be purchased from any food service equipment dealer. Wipe with a well wrung damp cloth to remove dust or residue. DO NOT

CLEAN WITH WATER! Decks will crack.



IMPORTANT

Clean your fan periodically. Dirty fans will cause shutdowns to protect the unit's controller.

VH SERIES PARTS REPLACEMENT INSTRUCTIONS

CONTROLLER Disconnect from power

Remove screws on lower front to access control

Remove controller and mount replacement

Carefully reattach wires to the proper terminals

SOLID STATE RELAY Disconnect from power

Remove back cover

Remove relay and mount replacement

Carefully reattach wires to the proper terminals

CALROD ELEMENTS Disconnect from power

Remove back cover

Remove wires from desired element

Open door, remove fasteners and remove stone

and steel deck Remove elements Reverse procedure

COOLING FAN Disconnect from power

> Remove screws on lower front to access fan Remove fan and mount replacement fan Unplug old fan and plug in new fan

Replace front

DOOR HINGE PINS Hinge assembly is fastened to door frame

Remove door weights, both sides

Remove screws and move door forward enough

to slide hinge pin clear of frame

Insert new pin and mount to frame using new

screws provided

Old units may require drilling out the screw

heads and drilling new holes

In this case, you may have to rotate hinges

VH30 ELECTRONIC MODELS PARTS LIST

| VHI1311 | Electronic controller |
|---------|--|
| VHI1312 | Toggle switch |
| VH11313 | Fuse holders |
| VHI1314 | Fuses |
| VHI1315 | Cooling Fan - 3" 220V |
| VHI1316 | Fan Guard |
| VHI1317 | Fan Control switch(PEPI C) |
| VHI1318 | Thermocouple |
| VHI1319 | SSR |
| VHI1320 | Terminal Block |
| VHI1321 | Calrod elements 220V |
| VHI1322 | 2000W Heating elements 220V |
| VHI1323 | Oven Door Complete with Handle (Stainless) |
| VHI1324 | Stainless Steel Lower Front Panel |
| VHI1325 | Door Handle |
| VHI1326 | Hinge Pin Assembly (Sold in Pairs!) |
| VHI1327 | 1/2" Pizza Decks (3 required) |
| VHI1328 | Lower Heater Holder and Baffle |
| VHI1329 | Peerless Nameplate |
| VHI1330 | Instruction Manual |
| VHI1331 | Back Cover |
| VHI1332 | 4" Legs(set of 4) |
| VH11333 | Oven Door weights |
| VH11334 | High Limit (360°) Synsys |
| VH11335 | Fan limit switch(PEPI C) |
| | |
| | |
| | · · |

VH50 ELECTRONIC MODELS PARTS LIST

| PART# | DESCRIPTION |
|---------|--|
| VHI01 | Electronic controller |
| VHI02 | Toggle switch |
| VHI03 | Fuse Holders |
| VHI04 | Fuses |
| VHI05 | Terminal Block |
| VHI06 | Calrod Heater |
| VHI07 | Cooling Fan |
| VHI08 | Fan Guard |
| VHI09 | SSR |
| VHI10 | Thermocouple for Electronic Controller |
| VHI11 | Upper SSR |
| VHI12 | Potentiometer |
| VH∣13 | Potentiometer Knob |
| VHI14-A | Fan Switch |
| VHI14-B | Fan Limit Switch |
| VH∣15 | Inside Lower Front |
| VHI16 | Lower Heater Holder and Baffles |
| VHI17 | Oven Door Complete with Handle (Stainless) |
| VHI18 | Hinge Pin Assembly (Sold in Pairs!) |
| VHI19 | Oven Door Weights |
| VHI20 | Oven Door Gasket |
| VHI21 | Oven Door Handle |
| VHI22 | Stainless Steel Lower Front Panel |
| VHI23 | 7" Legs (Set of 4) Black |
| VHI24 | 18" Legs (Set of 4) Black |
| VHI25 | 28" Legs (Set of 4) Black |
| VH∣26 | 1" Pizza Deck (1- 2Pcs. Deck) P models |
| VHI27 | Steel Deck B Models |
| VHI28 | Peerless Nameplate |
| VHI29 | Stainless Steel Front Trim |
| VHI30 | Instruction Manual |
| VHI31 | High Limit |
| VHI32 | Back Cover |

TEMPERATURE CONTROLLER

The Series Temperature Controller

ENGLISH a

Precautions

DANGER! Caution! Electric Shock!

- Do not allow dust or foreign objects to fall inside the controller to prevent it from maitunctioning.
 Naver modify or disassamble the controller.
 Insurance of the controller is an open-type unit and must be placed in an enclosure away from high temperature, humidity, dripping valer, corrosive materials, althorne dust and electric shock or vibration.
 Wall at least one minute after power is disconnected to allow capacitors to discharge, and please do not touch any internal circuit within this period.

PID mode selection: any one of 4 groups PID modes (n=0~-3) can be selected. When n=4, program will automatically select i group PID that is most useful for target temperature.

EAS PID setting: n=0

Seletc n=0~4

First PID setting: n=3

Press for , return to input type setting

when in analog output?
Press and to return to auto-tuning mode | Press and return to barget temperature.

"1 Scale = 2.8uA = 1.3mV for tuning output value

Initial Setting Mode Stop bit setting

666

Operation Mode

Activity Regulate upper-limit of analog

Regulation Mode

when in analog output)*

[-1.a] Regulate tower-limit of analog output vakue (The setting is displayed

output value (The setting is displayed

m Display, LED & Pushbuttons



OVITIONTS: Output LED

Select & solup keys

F. R. Celsius & Fahrenhalt LED

ALM - ALMS: Afarr output LED

T. S. Digil adjustment keys AT: Auto-funing LED PV: Present value SV: Set value

Ordering Information

DTB (1/2)(3)(4) (5)(6) (7)-(8)

| DTB Series | OTB: Delta B Series Temperature Controller | |
|---------------------|--|--|
| <u>जाश</u> ुन | # 4824: 1/32 DIN W48 × H24mm | # 4896; 1/3 DIN W48 × HS6mm |
| Panel size (W×H) | # 4848: 1/16 DIN W48 × H48mm | * 9696; 1/4 DIN W96 × H96mm |
| | R. Relay output, SPDT (SPST: 1/16 DIN and 1/32 DIN size), 250VAC, 5A | 32 D(N size), 250VAC, 5A |
| 6 1" output aroun | V: Voltage pulse output, 14V +10%20% (Max. 40mA) | x. 40mA) |
| selection | C: DC current output, 4 - 20mA | |
| | L: Linear voltage output, 0 ~ 5V, 0 ~ 10VDC | |
| (S) 2" output group | R: Relay output, SPDT (SPST, 1/16 DIN and 1/32 DIN size), 250VAC, 5A | 2 DIN size), 250VAC, 5A |
| selection | V: Voltage pulse output, 14V +10% ~ -20% (Max. 40mA) | x. 40mA) |
| | None: No EVENT input, No CT (Current transformer) | THE STATE OF THE S |
| D EVENT inputs / CT | E: EVENT input is provided, No CT (Current transformer) | stormer) |
| function (optional) | T. CT (Current transformer) is provided, No EVENT input | NT input |
| | V: Valve control, | |
| [6 | The state of the s | |
| 191 Power supply | None: AC 100 - 240V; D; DC24V | Tith couldn't |

Note 1: DTB4824 series; no optional function provided and no extra aliam output supported, but user can set 2nd output as alarm mode. Note 2: DTB4848 series; only exe alarm unchus, when optional function supported, but user can set 2nd output as 2nd alarm output. Note 3: "Valve control" with feedback selection is only available for DTB48080RRV, DTB8696RRV.

Specifications

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| | 80HZ; [| 7-segm | Red, S | , T. E. | D: Ptt0 | 200 |
| | Office Hz; C | er 7-segm | V): Red, | J.T.E. | CTD: Ptt0 | 5/ 0-1 |
| | 50/60Hz; C | cler 7-segm | PV): Red, S | K, J, T, E, A | RTD: Ptt0 | 25/0-1 |
| | V, 50/60Hz; C | acter 7-segm | (PV): Red, | K, J, T, E, A | m RTD: Ptt0 | 0 ~ 5 / 0 ~ 0 |
| | OV, 50/60Hz; C | aracter 7-segm | ue (PV): Red; S | ole: K, J, T, E, A | Num RTD: Ptt0 | 0 ~ 20 0 - 0 - |
| | MOV, 50/60Hz; C | character 7-segm | afue (PV): Red, S | uple: K, J, T, E, A | finum RTD: Pt10 | 1 - U 75 - U - U |
| ******* | - 240V, 50/60Hz; C | character 7-segm | value (PV): Red, 9 | couple: K, J, T, E, A | latinum RTD: Pt10 | 1 - U /5- U - U |
| | 1 - 240N, 50/60Hz; C | c 4 character 7-segm | ss value (PV): Red; s | occupie: K, J, T, E, A | Platinum RTD: Pt10 | incest 0 ~ 5V 0 ~ 1 |
| A to the state of | 00 - 240V, 50/60Hz; C | a x 4 character 7-segm | ess value (PV): Red, 9 | mocouple: K, J, T, E, A | e Platinum RTD: Pt10 | 20 July 0 ~ 5V 0 ~ 1 |
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| A CAMPAND AND A CONTRACTOR OF MERCANDINA AND A CONTRACTOR OF THE PERCANDINA AND A CONT | (C100 - 240V, 50/60Hz; C | line x 4 character 7-segm | rocess value (PV): Red; s | hermocouple: K, J, T, E, h | -wire Platinum RTD: Pt10 | חשונים (חומה). חיי בות טיי נ |
| THE STANFORM OF THE PRINCE OF THE PROPERTY OF THE PRINCE O | AC100 - 240W, 50/60Hz; D | 2 line x 4 character 7-segment LEE | Process value (PV): Red; Set point (SV); Green | Thermocouple: K, J, T, E, N, R, S, B, L, U, TXK | 3-wire Platinum RTD: Pt10 | Analon innett 0 ~ 5V 0 ~ 1 |
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| 一年,在我们的有效的,我们还是不是一个人,我们也会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会会 | AC100 - 240V, 50/60Hz; DC24V±10% | 2 line x 4 character 7-segment LED display | Process value (PV): Red, S | Thermocouple: K, J, T, E, N | 3-wire Platinum RTD: Pt10 | Analon (next) 0 ~ 5V 0 ~ 1 |
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| THE PROPERTY OF THE PARTY OF TH | Proportion band se | | ng display is the example operation of | ACCE Select actual step No. when program control is executing | ECUTI Edit time of step No.0 of pattern CLTET Set additional execution cycle No.0, Unit human mumber (0-99) Set step No. 07 in order SCOTT Edit temperature of step No.7 the program end. | Press Kello return |
|--|--------------------|---------------------------------------|---|---|--|--|
| Charles Charles Charles and a second | 01 | (GET) Integral deviation setting; n=0 | Pattern and step editing selection; edit. Match. in ECLE. parameter. The following display is the example operation of pattern No. 0. | GEGG Edit tempe of pattern No.0 | | Switch to STEE and continue to set. No.0 Press (2) o set actual step No. |
| | | Press (may | Pattern and step editing selection; edit is pattern No. 0, | PRED Select desired editing pattern number | Press (Risk yellen number Exit patienn and step editing selection | Switch to \overline{M} and continue to set |

M Alarm Outputs

There are up to three groups of alerm outputs and each group allows bindeen alerm types in the initial setting mode. The marm output is activated whenever the process temperature value (PV) is gatting higher or lower than the set point of alarm firmt. Set value

| anna race | | Akarm type | | |
|------------|---|---|--|-------------------------------------|
| 0 | Alarm function disabled | | | |
| njere | Deviation upper- and lower-limit | . 2000 | | |
| 0 | Deviation upper-fimit | | | |
| 3 | Deviation lower-limit | | | |
| 4 | Reverse deviation upper- and lower-limit | OWER-EIGHT | | |
| 40 | Absolute veiue appect and lower-limit | Se General | | and the second second second second |
| ယ | Absolute value upper-limit | | | |
| 1 | Absolute value lower-firmit | | | |
| a 5 | Deviation upper- and lower-limit with standby sequence | I with standby seq | | |
| 137 | Deviation upper-fimit with standby sequence | by sequence | | |
| 10 | Deviation tower-firm with standby sequence | by sequence | | : . |
| 400 | Hysterosis upper-limit alarm output | | A STATE OF THE PARTY OF THE PAR | |
| 12 | Hysteresis lower-fimit alarm output | | | |
| 5 | CT alarm output | to a finite description of the state of the | A THE RESENTANT OF THE PARTY OF | |
| \$ | When program control is end status, alarm output is ON. | alus, alarm output | | |
| 15 | When RAMP UP status happens to PID program control, alarm output is ON. | mergand Gird of si | control, atarm ou | m output is ON. |
| 16 | When RAMP DOWN status happens to PID program control, afarm output is ON. | ypens to PID progr | am control, alam | n output is ON. |
| 11 | When SOAK status happens to PID program control, alarm output is ON. | PID program cont | roi, alarm output | SON |
| | | | | |

| ay accuracy | 0 or 1 digit to the right of the decimal point (selectable) |
|-----------------|--|
| ling rate | Analog input: 150 msect per scan. Thermocouple or Platinum RTD: 400 msectper scan. |
| ant temperature | |
| we humidity | 35% = 80% (non-condensing) |

Operation

| for exerce from 3 see | Initi | Mode | Initial Setting Mode | | Press TV | (Not display when in analog input) | Parde | Set fower-limit of lamonshine | range | 5 - 810 Select heapto/conling or dual | loop output control | Alarm 1 mode satting | THE | MELLIN Alam 2 mode setting | | REST Alarm 3 mode settino | | Entrat Set system alarm | enable/disable | [SI ASCII, RTU communication | formats selection [| Date Communication band rate | Setting | LEn Data length setting | Contract of the contract of th | Strong and Exited |
|----------------------------|--------------|--------------|----------------------|-----------------------------------|----------------------------------|--|---------------------------------------|-------------------------------|---|---------------------------------------|-----------------------|-----------------------------------|---|--|---|---------------------------|--|---------------------------|-----------------------------|---------------------------------------|--|--|--|--|--|-------------------|
| Pressa | Operation | Plode Press | Operation Mode | temperature set point | Control setting RUN or STOP | State and the same | (PID program control and STES Time | setting. | Selection Rt. 18 Upper-limit alarm 1 | State Lower-limit alarm 1 | | Election Upper-limit atarm 2 | | MANAGE LOWER-WITH BIBIT 2 | | RESE Upper-limit alarm 3 | | Missis Lower-land alarm 3 | MINISTER SEGULES AND GROUPS | of adjust output value | of 1st output group OUE Display and adjust output value | of 2" output group G displays the current value being | measured by CT, if the control output is | ON FELLE Valve output with feedback | U.P. DA value feedback of valve | |
| Prinss for less than 3 sec | Regulation 4 | Press Street | RE Auto-tuning | (Set in PID control and RUN mode) | CLOO 4 groups PID modes (n=0-3). | When n=4, PID control is auto regulated. R405 PD control offset serving | (When PID control is ON and Ti=6, set | the value of PdoF.) | (Set in ONOFF control mode) | (Set in OM/OFF control mode) | control cycle setting | RUPAl Control cycle setting of 2" | output group | today begins only to the second second | P value of 2 rd output group=(P value of | 1" output group x COEF | (Set in Dual Loop output control mode) | signal of value | feedback value | URSE Time setting for valve from full | close to full open | 2-31 Upper-limit regulation of valve | output with feedback to controller | U-Lo Lower-imit regulation of valve | CPOR Requiste temperature deviation | ei des |

m Ko-seo communication

Supporting transmission speed; 2,400, 4,800, 9,600, 19,200, 38,400bps
 Communication protocol: Modifus (ASCRI or RTU)
 Function code: 03H to read the contents of register (Max. 8 words), 06H to write 1 (one) word into register, 02H to read the bits data (Max. 16 bits), 05H to write 1 (one) bit into register.

| 200 | and the state of t | Concessed. |
|------------|--|--|
| Address | Content | Collegeland |
| | | And the first in the second se |
| 10001 | Process value (PV) | Measuring unit is 0.1, updated one time in 0.4 second |
| 1001H | Set point (SV) | Unit is 0.1, "C or "F |
| ******* | The formation of the state of the second second | The data content should not be higher than the temperature |
| 10001 | מאליבה בייניים ומיוולים ומיוולים ומיוולים | ප්රාව්ය |
| 1003H | Lower-limit of temperature range | The data content should not be lower than the temperature range |
| 1005H | Control method | 0: PID, 1: ON/OFF, 2: manual tuning, 3: PID grogram control |
| 10061 | Heating/Cooling control selection | 0: Healing, 1: Cooling, 2: Healing/Cooling, 3: Cooling/Healing |
| 1007H | 1st group of Heating/Cooking control cycle | 0 ~ 99, 0.0.5 sec |
| 1008H | 2nd group of Heating/Cooling control cycle | 0 - 99, 0.0.5 sec |
| 100954 | PB Proportional band | 0,1 999.9 |
| TODAM | Ti Integral time | 5666-0 |
| 100BH | Td Derivative time | 0 - 9,999 |
| 1012H | Output value read and write of Output 1 | Write operation is valid under manual turning mode only. |
| HE101 | Output value read and write of Output 2 | Write operation is valid under manual tuning mode only. |
| 1016H | Temperature regulation value | -999 - +999, unit: 0,1 |
| 102AH | Reed LED status | b0 : Alm3, b1: Alm2, b2; °F, b3: °C, b4: Alm1, b5: OUT2, b6: |
| | | OUTT, 57: AT |
| 1028H | Read pushbutton slatus | b0: Set, b1: Select, b2: Up, b3: Down. 0 is to push |
| 102CH | Selfing tock status | 0 : Normal, 1. All setting lock, 11: Lock others than SV value |
| 102DH | | Unit: 0.1A |
| Address an | id Content of Bit Register. (First bit of reading w | Address and Content of Bit Register. (First bit of reading will put into LSB, White data = FF09H for bit set, 0000H for bit clear) |
| 081114 | Temperature unit dispiay selection | *Chinear input (default); 1, "F: 0 |
| 0813H | AT setting | OFF: 0 (default), ON: 1 |
| 0814H | Control RUN/STOP setting | 0: STOP, 1: RUN (default) |
| 0815H | STOP setting for PID program control | C: RUN (default), 1: STOP |
| 0816H | ntroi | 0: RUN (default), 1: Temporarily STOP |

a Panel Cutout

| | W. | | A | |
|-------------|-----------|---|---------------------------------------|-------------|
| | | | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| | , | | | |
| Model (W*H) | 45mm*22mm | 45mm * 45mm | 44.5mm * 91.5mm | 91mm * 91mm |
| Pane | 4 | 4 | | φn |
| | | | | |
| | | *************************************** | | ! |
| Model | 4824 | 4848 | 4896 | 9696 |

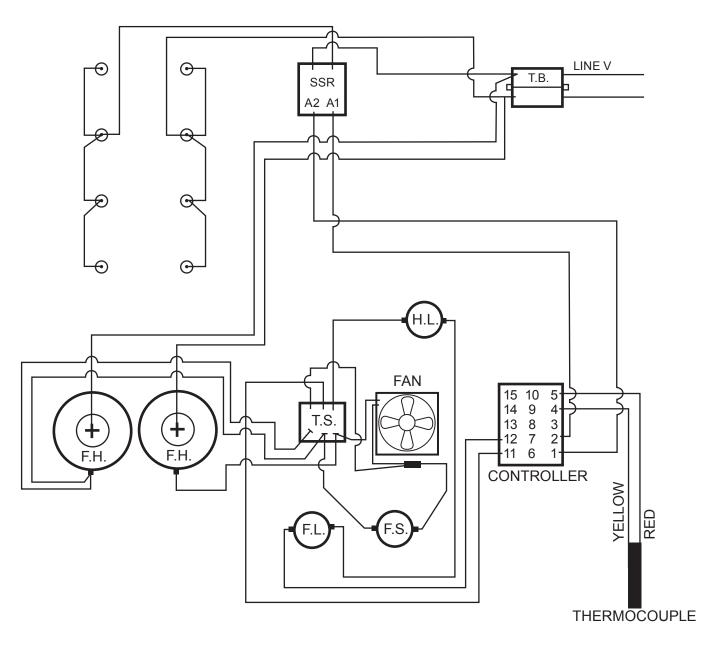
m How to Set Up Current Input

An internal 249D precision resistor for the current input is built-in.

For normal input

Forcurrent input (4 - 20mA, 0 - 20mA) POR NEADER Download detailed operation instruction from Delta's website www.delta.com.hwilndustriolautomation

VH30 1 PHASE 220V WIRING DIAGRAM

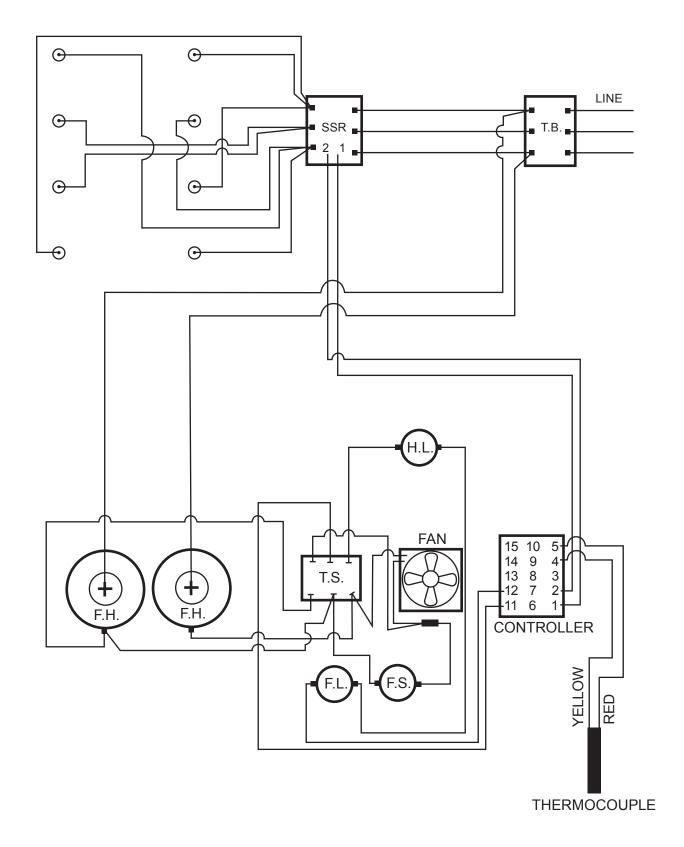


SSR RELAY

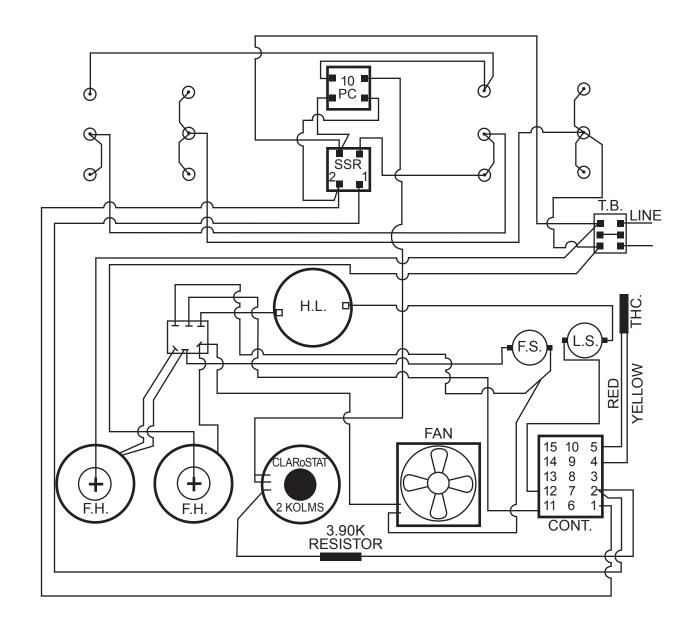
T.B. TERMINAL BLOCK

H.L. HIGH LIMIT
F.H. FUSE HOLDER
T.S. TOGGLE SWITCH
CONT. CONTROLLER
L.S. LIMIT SWITCH
F.S. FAN SWITCH

VH30 220V 3 PHASE WIRING DIAGRAM



VH50 1 PHASE 220V WIRING DIAGRAM



10 PC RELAY SSR RELAY

T.B. TERMINAL BLOCK

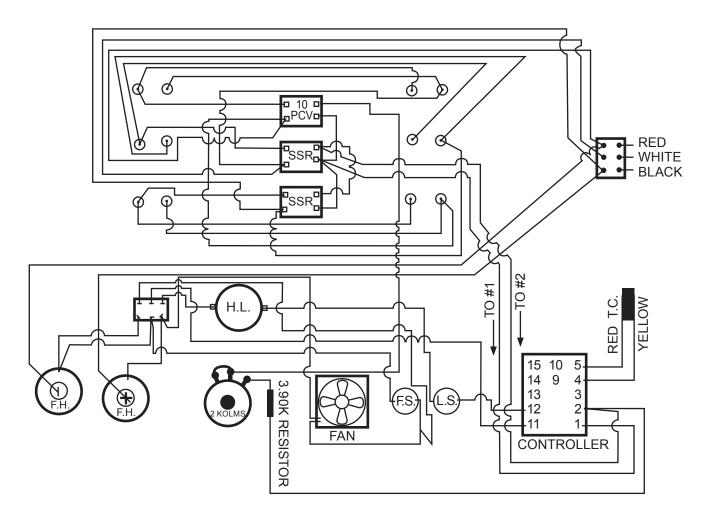
H.L. HIGH LIMIT

T.S. TOGGLE SWITCH F.H. FUSE HOLDER

CLAROSTAT

CONT. CONTROLLER THC THERMOCOUPLE

VH50 3 PHASE WIRING DIAGRAM



TERMS AND CONDITIONS OF SALE

THESE TERMS AND CONDITIONS OF SALE ("TERMS") CONTAIN VERY IMPORTANT INFORMATION REGARDING YOUR PURCHASE, AS WELL AS CONDITIONS, LIMITATIONS, AND EXCLUSIONS THAT APPLY TO YOU AND YOUR PURCHASE. PLEASE READ THEM CAREFULLY. YOUR PURCHASE IS EXPRESSLY LIMITED TO AND MADE CONDITIONAL UPON THE EXCLUSIVITY OF THESE TERMS. ANY PROPOSAL FOR DIFFERENT TERMS OR ANY ATTEMPT TO VARY, IN ANY DEGREE, ANY OF THESE TERMS IS EXPRESSLY REJECTED.

- 1. Acceptance. These Terms govern any purchase made from North American Kitchen Solutions, Inc. ("NAKS"). These Terms, the Manual in which they are contained, installation and maintenance instructions, the applicable invoice, and any documents incorporated or referred to herein or therein, including any future paper or electronic releases issued by NAKS, constitute the "Order." The Order is the entire contract between you, the buyer, and NAKS, the seller, for products purchased from NAKS. These Terms apply to the Order unless expressly modified or waived by an officer of NAKS. These Terms prevail over any of your general terms and conditions of purchase regardless whether or when you submitted the purchase order or such terms. Fulfillment of your order does not constitute acceptance of any of your terms and conditions and does not serve to modify or amend these Terms. An Order may only be cancelled by you upon payment of reasonable cancellation charges for expenses incurred or commitments made by NAKS. Captions in these Terms are for convenience only.
- 2. **Pricing.** The price for NAKS' goods, material, equipment, or items ("**Products**") is complete, and no deductions, credits, or offsets may be made without NAKS's express written consent. Prices are subject to change and surcharges in the event of cost increases in materials and transportation. All complete component accessory material manufactured by others and furnished with Products such as motors, drives, vibration equipment, controls, or other completely assembled component structures, are subject to adjustment to the price at time of shipment regardless of the date of original order entry.
- 3. <u>Sales and Similar Taxes</u>. NAKS' prices do not include sales, use, excise, or similar taxes. Present or future sales, use, excise, or other similar tax applicable to the sale of Products shall be paid by you, unless an acceptable tax exemption certificate is provided to NAKS.
- 4. Payment. NAKS reserves the right to require full or partial payment in advance of any order if, in NAKS' judgment, your financial condition does not justify continuation of manufacture or shipment. NAKS may require full or partial payment in advance. Pro-rata payments are due as shipments are made. Each shipment or delivery shall constitute a separate sale, and the default of any shipment or delivery shall constitute a separate sale, and the default of any shipment or delivery shall not vitiate the contract as to other shipments or deliveries. Except as otherwise provided, all payments shall be due within 7 days of receipt of the Products. You shall pay interest on any late payments at the lesser of the rate of 1.5% per month or the highest rate permissible under applicable law, calculated daily and compounded monthly.
- 5. Return Policy ALL SALES ARE FINAL. Because we custom manufacture our hoods to each customer's specifications, ALL SALES ARE FINAL. We may accept the return of non-custom goods at our discretion, but a restocking fee of 30% will apply and all shipping costs are the responsibility of the purchaser or end user. No merchandise may be returned without a Return Goods Authorization (RGA). Items returned for warranty replacement or exchange will not be eligible for credit if not received within 14 days of the issuance of a Return Goods Authorization.
- 6. <u>Free Shipping</u>. Free shipping offers are limited to standard shipping to the 48 contiguous United States.

- 7. <u>Delivery.</u> Shipping and delivery dates are estimates only. No delay in delivery will subject NAKS to any costs, damages or fees for late delivery. Delivery of Products is made F.O.B. point of shipment, unless otherwise stated. NAKS shall not be liable for delay due to causes beyond its reasonable control (i.e., force majeure events). In the event of such a delay, the date of delivery shall be extended for a period equal to the time lost by reason of the delay.
- 8. <u>Changes</u>. NAKS may make changes, including improvements and additions, in the technical requirements, specifications, designs, materials, packaging, and place of delivery, method of transportation, quantities, or delivery schedules of the Products by notifying you. x
- 9. <u>Safety</u>. The Products may be designed to serve multiple applications. NAKS offers a range of safety equipment, including guards and other devices, as may be required to meet customer specifications. Without exception, NAKS recommends that all orders include applicable safety devices; provided that NAKS disclaims any liability with respect to any specific recommendations for safety equipment for any particular Products. Use of Products ordered without applicable safety devices is your sole responsibility. You warrant that you have determined and acquired any and all safety devices required for the Products. Weather covers and guards for motor and V-belt drives, couplings, shafts and bearings, along with inlet and outlet screens, are optional accessories noted in the price list.
- 10. <u>Title</u>. Title and right of possession of Products remains with NAKS until all payments (including deferred payments whether evidenced by notes or otherwise) shall have been received to the satisfaction of NAKS and you agree to do all acts necessary to perfect and maintain such title and right in NAKS and not to subject any Products to any liens or encumbrances until such payment is made in full.
- 11. <u>Governing Law.</u> This Order shall be governed by and construed according to the laws of the State of Ohio (excluding the conflict of law provisions thereof). At NAKS' discretion, any action relating directly or indirectly to the Order shall be brought exclusively in the Common Pleas Court of Cuyahoga County, Ohio or the United States District Court for the Northern District of Ohio, Eastern Division, and you irrevocably waive any objection to the jurisdiction of, or venue in, either of these courts and agree that the acceptance of the Order constitutes doing business in the State of Ohio.
- 12. <u>Compliance with Law</u>. You shall comply with all applicable laws, regulations and ordinances related to the Products, and you shall maintain in effect all the licenses, permissions, authorizations, consents and permits that you need with respect to the receipt, use and operation of the Products.
- 10. <u>Title</u>. Title and right of possession of Products remains with NAKS until all payments (including deferred payments whether evidenced by notes or otherwise) shall have been received to the satisfaction of NAKS and you agree to do all acts necessary to perfect and maintain such title and right in NAKS and not to subject any Products to any liens or encumbrances until such payment is made in full.
- 11. <u>Governing Law</u>. This Order shall be governed by and construed according to the laws of the State of Ohio (excluding the conflict of law provisions thereof). At NAKS' discretion, any action relating directly or indirectly to the Order shall be brought exclusively in the Common Pleas Court of Cuyahoga County, Ohio or the United States District Court for the Northern District of Ohio, Eastern Division, and you irrevocably waive any objection to the jurisdiction of, or venue in, either of these courts and agree that the acceptance of the Order constitutes doing business in the State of Ohio.
- 12. <u>Compliance with Law</u>. You shall comply with all applicable laws, regulations and ordinances related to the Products, and you shall maintain in effect all the licenses, permissions, authorizations, consents and permits that you need with respect to the receipt, use and operation of the Products.

- 13. Force Majeure. NAKS shall not be liable or responsible to you, nor be deemed to have defaulted or breached these Terms, for any failure or delay in fulfilling or performing any terms herein, when and to the extent such failure or delay is caused by or results from acts or circumstances beyond the reasonable control of NAKS including, without limitation, acts of God, flood, fire, earthquake, explosion, governmental actions, war, invasion or hostilities (whether war is declared or not), terrorist threats or acts, riot, or other civil unrest, national emergency, revolution, insurrection, outbreak of disease, lockouts, strikes or other labor disputes (whether or not relating to either party's workforce), or restraints or delays affecting carriers or inability or delay in obtaining supplies of adequate or suitable materials, materials or telecommunication breakdown or power outage.
- 14. <u>Waiver</u>. No waiver by any party of any of the provisions hereof shall be effective unless explicitly set forth in writing and signed by the party so waiving. No failure to exercise, or delay in exercising, any right, remedy, power, or privilege arising from this Agreement shall operate or be construed as a waiver thereof; nor shall any single or partial exercise of any right, remedy, power, or privilege hereunder preclude any other or further exercise thereof or the exercise of any other right, remedy, power, or privilege.
- 15. <u>Arbitration</u>. At NAKS' discretion, any dispute arising under or in connection with any Order may be submitted to binding arbitration administered by the American Arbitration Association under its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof. The dispute shall be resolved by one neutral arbitrator who shall have no affiliation with either you as the buyer or with NAKS and shall be selected by the American Arbitration Association office, and held in, Cleveland, Ohio.

WARNING. NAKS' Products are designed and manufactured to provide reliable performance, but they are not guaranteed to be 100% free of defects. Even reliable products will experience occasional failures and this possibility should be recognized by you and all end users. If Products are used in life support ventilation systems where failure could result in loss or injury, you and all end users should provide adequate back-up ventilation, supplementary natural ventilation or failure alarm system, or acknowledge willingness to accept the risk of such loss or injury. DO NOT USE IN HAZARDOUS ENVIRONMENTS where fan's electrical system could provide ignition to combustible or flammable materials unless unit is specifically built for hazardous environments. Comply with all local and national safety codes including the National Electrical Code (NEC) and National Fire Protection Act (NFPA).

CAUTION. Guards must be installed when fan is within reach of personnel or within eight (8) feet (2.5 m) of working level or when deemed advisable for safety.

DISCLAIMER. NAKS has made a diligent effort to illustrate and describe the Products accurately in all materials; however, such illustrations and descriptions are for the sole purpose of identification and do not express or imply any warranty.

LIMITED WARRANTY

WARRANTY AND DISCLAIMER. This limited warranty extends to you the original purchaser only with proof of purchase. NAKS warrants that Products shall be free from original defects in workmanship and materials for one year from date of shipment provided the Products have been properly handled, stored, installed, serviced, maintained, and operated. This warranty shall not apply to Products which have been altered or repaired without NAKS' express authorization, or altered or repaired in any way so as, in NAKS' judgment, to affect performance or reliability, nor which have been improperly installed or subjected to misuse, negligence, or accident, or incorrectly used in combination with other substances. You assume all risks and liability for results of use of all Products.

LIMITATION OF REMEDY AND DAMAGES. All claims under this warranty must be made in writing and delivered by U.S. Mail to:

North American Kitchen Solutions 172 Reaser Court Elyria, OH 44035 Attn: WARRANTY CLAIMS DEPARTMENT

All Product claims must be made within 15 days after discovery of the defect and prior to the expiration of one year from the date of shipment. Claims made beyond that period are barred. Within 30 days after receipt of a timely claim, NAKS shall have the option either to inspect the Product at its location or request its return to NAKS at your expense. NAKS shall replace, or at its option repair, free of charge, any Product it determines to be defective, and it shall ship the repaired or replacement product to you F.O.B. point of shipment; provided, however, if in NAKS' judgment circumstances are such to prohibit repair or replacement to remedy the warranted defects, your sole and exclusive remedy shall be a refund of any part of the invoice price, paid to NAKS, for the defective Product or part.

NAKS is not responsible for the cost of removal of the defective Product or part, damages due to removal, or any expenses incurred in shipping the Product, or the installation of the repaired or replaced Product or part.

The warranties set forth above do not apply to any components, accessories, parts or attachments manufactured by other manufacturers; such being subject to the manufacturer's warranty, if any. To the extent not prohibited by the manufacturer's warranty, NAKS shall pass to you such manufacturer's warranty.

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No employee, agent, dealer, or other person is authorized to give any warranties on behalf of NAKS or to assume for it any other liability in connection with any of its products except in writing and signed by an officer of NAKS.

LIMITATION OF LIABILITY. NAKS' cumulative liability to you and any other persons for all claims in any way relating to or arising out of the Products, including, but not limited to, any cause of action sounding in contract, tort, or strict liability, shall not exceed the total amount of the purchase price paid for those Products which are the subject of any such claim. This limitation of liability is intended to apply without regard to whether other provisions of this agreement have been breached or have proven ineffective even if NAKS has been advised of the possibility of such claims or demands. In no event shall NAKS be liable to you or any other person for any loss of profits or any incidental, special, exemplary, or consequential damages for any claims or demands brought by you or such other persons. BECAUSE SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THIS LIMITATION MAY NOT APPLY TO YOU.

NAKS' maximum liability to you and to any end user is as set forth above. NAKS makes no warranty to anyone for any products not manufactured by it and shall have no liability for any use or installation of any products (whether manufactured by NAKS or other manufacturers) not specifically authorized by this sale. You acknowledge various warnings by NAKS regarding the Products and its installation and use. If NAKS incurs any claims, lawsuits, settlements, or expenses (including attorney fees) for any loss, injury, death or property damage including, but not limited to, claims arising out of your or any end user's installation or use of the Products, you agree to indemnify and hold NAKS harmless.

REPLACEMENT PARTS. If replacement parts are ordered, you warrant that the original components in which these replacement parts will be placed are in satisfactory working condition, and when said replacement parts are installed, the resultant installation will operate in a safe manner, at speeds and temperatures for which the original product was purchased.

TECHNICAL ADVICE AND RECOMMENDATIONS, DISCLAIMER. Notwithstanding any past practice or dealings or any custom of the trade, sales shall not include the furnishing of technical advice or assistance or system design. Any such assistance shall be at NAKS' sole option and may be subject to additional charge(s).

NAKS assumes no obligation or liability on account of any recommendations, opinions, or advice as to the choice, installation or use of Products. Any such recommendations, opinions or advice are given and shall be accepted at your and the end-user's risk and shall not constitute any warranty or guarantee of such Products or their performance.

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