

tekmar® - Data Brochure

Zone Expansion Module 325



D325

06/05

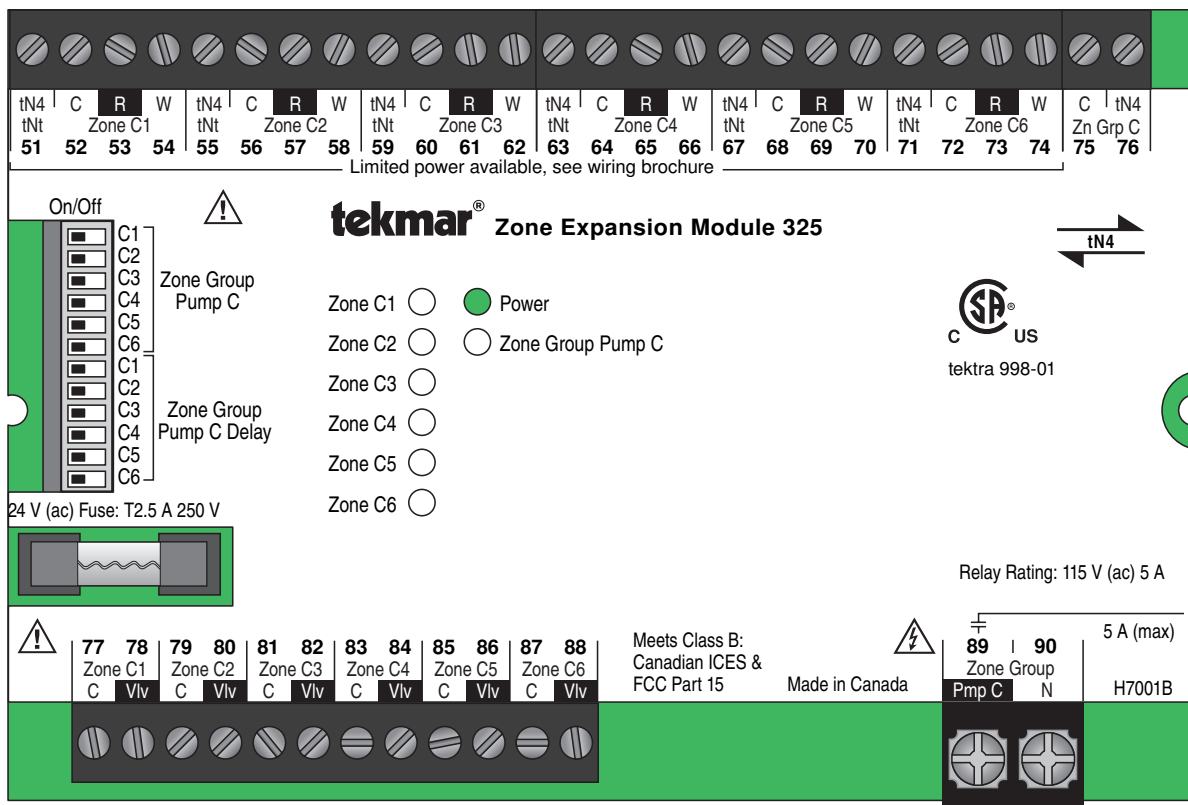
1 Information Brochure Choose controls to match application	2 Application Brochure Design your mechanical applications	3 Rough-in Wiring Rough-in wiring instructions	4 Wiring Brochure Wiring and installation of specific control	5 Data Brochure Control settings and sequence of operation	6 Job Record Record settings & wiring details for future reference
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Introduction

The Zone Expansion Manager 325 is designed to simplify the wiring between tN4 thermostats and zone valves. The 325 has an internal transformer that supplies power to the tekmarNet®4 (tN4) thermostats and connected zone valves.

Features:

- tN4 Compatible
- Internal Transformer
- Six Powered Zone Valve Outputs
- Powered Zone Group Pump Output
- Simple Wiring
- Time Delay for Thermal Motor Zone Valves
- CSA C US Certified for use in USA and Canada



Sequence of Operation

24 V (ac) Powered Outputs

The 325 has an internal transformer that provides powered outputs for up to six 24 V (ac) zone valves and six thermostats.

The internal transformer has limited power available. Refer to the Job Records to determine the load on the transformer. If the load is too large for the transformer, refer to the Wiring Brochure to add additional power to the system.

115 V (ac) Powered Outputs

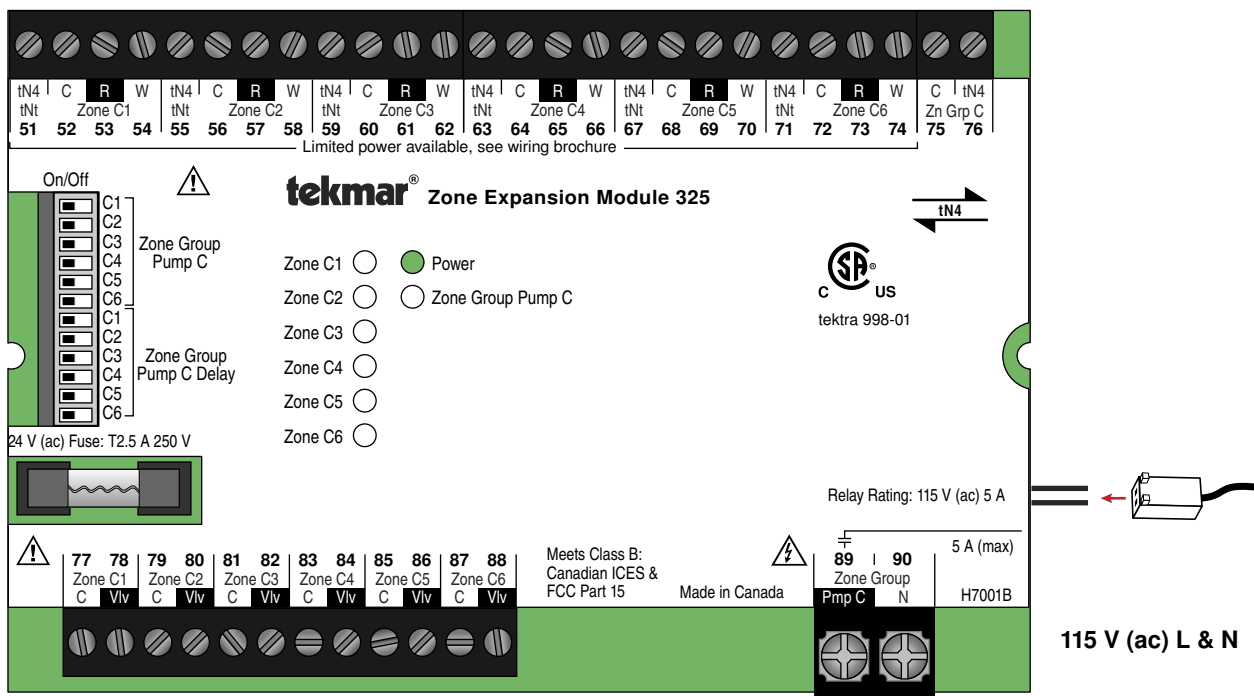
The 325 has an internal relay that provides a powered output for a zone group pump.

Refer to the Job Records to determine the allowable loads for this relay.

Sequence of Operation

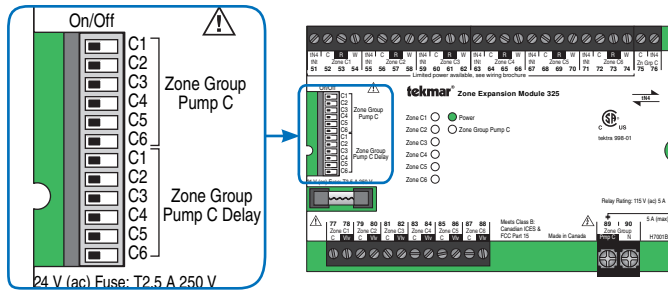
When a thermostat calls for heat, the Zone LED turns on and power is supplied to the zone valve.

- If the Zone Group Pump DIP switch is set to On and the Zone Group Pump Delay DIP switch is set to Off, the Zone Group Pump LED and relay turn on.
- If the Zone Group Pump DIP switch is set to On and the Zone Group Pump Delay DIP switch is set to On, the Zone Group Pump LED and relay turn on three minutes after the zone valve is powered.
- If the Zone Group Pump DIP switch is set to Off, the Zone Group Pump LED and relay are not turned on.



DIP Switches

DIP Switch Settings



The DIP switches are found on the left hand side of the 325.

Zone Group Pump

Each zone has a corresponding Zone Group Pump DIP switch.

Zone Group Pump DIP switch set to On:

- The Zone Group Pump turns on when the zone calls for heat.

Zone Group Pump DIP switch set to Off:

- The Zone Group Pump does not turn on when the zone calls for heat.

Zone Group Pump Delay

Each zone has a corresponding Zone Group Pump Delay DIP switch.

Note: The Zone Group Pump Delay only operates if the Zone Group Pump DIP switch is set to On.

Zone Group Pump Delay DIP switch set to On:

- The Zone Group Pump turns on 3 minutes after the zone calls for heat
- The Zone Group Pump turns off 15 seconds after the zone stops calling for heat.

Zone Group Pump Delay DIP switch set to Off:

- The Zone Group Pump turns on when the zone calls for heat.
- The Zone Group Pump turns off when the zone stops calling for heat.

LED Status Indicators

Power LED

Green:

- Normal operation.

Amber:

- Power is present but the fuse for the internal 24 V (ac) transformer is blown.

Off:

- No power to the Power Input of the Zone Expansion Module.

Zone LEDs

Green:

- The zone is on.

Off:

- The zone is off.

Zone Group Pump LED

Green:

- The Zone Group Pump relay is on.

Off:

- The Zone Group Pump relay is off.

Zone Expansion Module 325

Zone C1	●	●	Power
Zone C2	●	●	Zone Group Pump C
Zone C3	●		
Zone C4	●		
Zone C5	●		
Zone C6	●		

Eight LEDs to provide the status of the 325's outputs.

Cleaning the Control

The control's exterior can be cleaned using a damp cloth. Moisten the cloth with water and wring out prior to wiping the control. Do not use solvents or cleaning solutions.

Limited Warranty and Product Return Procedure

Limited Warranty *The liability of tekmar under this warranty is limited. The Purchaser, by taking receipt of any tekmar product ("Product"), acknowledges the terms of the Limited Warranty in effect at the time of such Product sale and acknowledges that it has read and understands same.*

The tekmar Limited Warranty to the Purchaser on the Products sold hereunder is a manufacturer's pass-through warranty which the Purchaser is authorized to pass through to its customers. Under the Limited Warranty, each tekmar Product is warranted against defects in workmanship and materials if the Product is installed and used in compliance with tekmar's instructions, ordinary wear and tear excepted. The pass-through warranty period is for a period of twenty-four (24) months from the production date if the Product is not installed during that period, or twelve (12) months from the documented date of installation if installed within twenty-four (24) months from the production date.

The liability of tekmar under the Limited Warranty shall be limited to, at tekmar's sole discretion: the cost of parts and labor provided by tekmar to repair defects in materials and/or workmanship of the defective product; or to the exchange of the defective product for a warranty replacement product; or to the granting of credit limited to the original cost of the defective product, and such repair, exchange or credit shall be the sole remedy available from tekmar, and, without limiting the foregoing in any way, tekmar is not responsible, in contract, tort or strict product liability, for any other losses, costs, expenses, inconveniences, or damages, whether direct, indirect, special, secondary, incidental or consequential, arising from ownership or use of the product, or from defects in workmanship or materials, including any liability for fundamental breach of contract.

The pass-through Limited Warranty applies only to those defective Products returned to tekmar during the warranty period. This Limited Warranty does not cover the cost of the parts or labor to remove or transport the defective Product, or to reinstall the repaired or replacement Product, all such costs and expenses being subject to Purchaser's agreement and warranty with its customers.

Any representations or warranties about the Products made by Purchaser to its customers which are different from or in excess of the tekmar Limited Warranty are the Purchaser's sole responsibility and obligation. Purchaser shall indemnify and hold tekmar harmless from and against any and all claims, liabilities and damages of any kind or nature which arise out of or are related to any such representations or warranties by Purchaser to its customers.

The pass-through Limited Warranty does not apply if the returned Product has been damaged by negligence by persons other than tekmar, accident, fire, Act of God, abuse or misuse; or has been damaged by modifications, alterations or attachments made subsequent to purchase which have not been authorized by tekmar; or if the Product was not installed in compliance with tekmar's instructions and/or the local codes and ordinances; or if due to defective installation of the Product; or if the Product was not used in compliance with tekmar's instructions.

THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, WHICH THE GOVERNING LAW ALLOWS PARTIES TO CONTRACTUALLY EXCLUDE, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, DURABILITY OR DESCRIPTION OF THE PRODUCT, ITS NON-INFRINGEMENT OF ANY RELEVANT PATENTS OR TRADEMARKS, AND ITS COMPLIANCE WITH OR NON-VIOLATION OF ANY APPLICABLE ENVIRONMENTAL, HEALTH OR SAFETY LEGISLATION; THE TERM OF ANY OTHER WARRANTY NOT HEREBY CONTRACTUALLY EXCLUDED IS LIMITED SUCH THAT IT SHALL NOT EXTEND BEYOND TWENTY-FOUR (24) MONTHS FROM THE PRODUCTION DATE, TO THE EXTENT THAT SUCH LIMITATION IS ALLOWED BY THE GOVERNING LAW.

Product Warranty Return Procedure All Products that are believed to have defects in workmanship or materials must be returned, together with a written description of the defect, to the tekmar Representative assigned to the territory in which such Product is located. If tekmar receives an inquiry from someone other than a tekmar Representative, including an inquiry from Purchaser (if not a tekmar Representative) or Purchaser's customers, regarding a potential warranty claim, tekmar's sole obligation shall be to provide the address and other contact information regarding the appropriate Representative.



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