

# tekmar® - Data Brochure Addendum

## Snow Detector & Melting Control 664

D 664A

06/04

The tekmar Snow Detector & Melting Control 664 has been modified to include the following features:

- Temporary Idle
- Adjustable Warm Weather Shut Down
- View Mix Target Temperature

The changes are included in controls starting with Lot 17. The date code and lot number is listed on the right hand side of the 664.

### Added Features

Features listed below have been added to the 664 Snow Detector & Melting Control. The sections in this addendum now supplement the D 664 brochure dated 07/01.

### Section A: Temporary Idle (TMPY IDL)

The temporary idle allows the control to enter the idle state for a set amount of time. If the snow ice detector does not detect snow during the temporary idle period, the control then leaves the idle state and returns to the OFF state. This is useful in applications where there is the possibility of snow and the slab can be pre-heated in order to have a short heat up time if snow is detected.

To enable a temporary idle, the *Temporary Idle* setting in the ADJUST menu must be set from OFF to the length of the temporary idle. The DIP Switch must be set to IDLE DEMAND and the IDLE 1 or IDLE 2 setting must be set to a temperature. To activate a temporary idle, a voltage between 24 and 240 V (ac) must be applied across the *Melt/Idle Demand* terminals for at least 4 seconds.

When a temporary idle is selected, the control has three available states: OFF, Temporary Idle, and Melting. The table below describes the action of the control:

Control State	Action	Result
OFF	External Idle Demand	Temporary Idle
OFF	Manual or Auto Melt Start	Melting
Melting	External Idle Demand	Melting
Melting	Manual or Auto Melt Start	Melting
Melting	Manual or Auto Melt Stop	OFF
Temporary Idle	Temporary Idle Expires	OFF
Temporary Idle	Manual or Auto Melt Start	Melting
Temporary Idle	Manual Melt Stop	OFF

### Section B: Warm Weather Shut Down (WWSD)

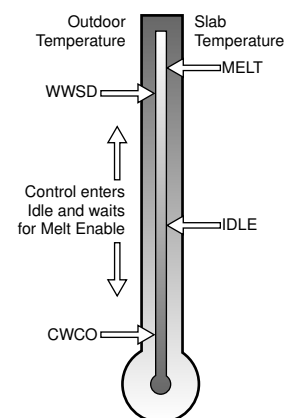
The control has a warm weather shut down for each zone that prevents the control from entering the melt or idle modes in order to conserve energy. While in WWSD, the word WWSD is displayed in the STATUS 1 or STATUS 2 items in the VIEW menu and the WWSD pointer is on the display. The WWSD item in the ADJUST menu can be be either set to Automatic or it can be set to a temperature.

#### AUTOMATIC (AUTO)

There is a warm weather shut down for each zone. When both the slab temperature of a zone and the outdoor temperature exceed the zone's *Melt* temperature setting by more than 2°F (1°C), the zone enters into WWSD. While a zone is in WWSD, the word WWSD is displayed in the STATUS item of the appropriate zone in the VIEW menu. When both zones enter WWSD, the 664 turns on the WWSD pointer in the display.

#### ADJUSTABLE WWSD

When the WWSD is set to a temperature, the WWSD occurs when the outdoor air temperature exceeds the WWSD setting by 1°F (0.5°C) and when the slab temperature of a zone exceeds 34°F (1°C). The zone exits WWSD when the outdoor temperature falls 1°F (0.5°C) below the WWSD setting or if the slab temperature of the zone falls below 34°F (1°C). This allows the *Melting Temperature* setting to be set higher than the WWSD. This is useful where high slab temperatures are required to melt the snow or ice. A good example of this is installations using paving bricks on top of sand and concrete layers.



## Section C: Mixing Target (MIX TRG)

The mixing target temperature is the supply fluid temperature calculated by the control. The control will operate the snow melt system so that the mix supply temperature reaches the mixing target except while providing boiler return protection for the boiler.

The following items have been added to the menus of the D 664 brochure dated 07/01.

### 664 View Menu (1 of 1)

Item Field	Section	LTD	USER	INST	ADV	Description	Range
STATUS 1		●	●	●	●	<b>Status 1</b> Operating status of zone 1.	STRT, STOP, IDLE, EXT, 0:00 to 23:59 hr, ---, INF, WWSD, CWCO, DET, IDLE
STATUS 2		●	●	●	●	<b>Status 2</b> Operating status of zone 2.	STRT, STOP, IDLE, EXT, 0:00 to 23:59 hr, ---, INF, WWSD, CWCO, DET, IDLE
MIX TRG	C			●		<b>Mix Target</b> The current mix target temperature as calculated by the control.	---, -25 to 248°F (---, -32 to 120°C)

### 664 Adjust Menu (1 of 1)

Item Field	Section	LTD	USER	INST	ADV	Description	Range	Actual Setting
TMPLY IDL	A			●		<b>Temporary Idle</b> Time for which the temporary idle is active.	OFF, 0:30 to 40:00 hr Default = OFF	
WWSD	B		●	●		<b>WWSD</b> Warm Weather Shut Down. Slab must exceed 34°F to enter WWSD.	AUTO, 32 to 95°F (AUTO, 0 to 36°C) Default = AUTO	



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