# **UMARK**



# Thermostats and Controls

#### **THERMOSTATS**

# L TRON

# T LLN VOLT









T LO NO	T	T	T	T PP
ction	Triac: Silent Operation	Electronic Switch	Triac: Silent Operation	Microprocessor
Type	12.5A Resistive 2 wire SPST	15 A Resistive 4 wire DPST	16.7A Resistive 2 wire SPST	16.7 A Resistive 4 wire DPST
Watt Rating	Minimum: 2 amp load	No minimum load	Minimum: 2 amp load	No minimum load
V	1500 watts	n/a	2000 watts	n/a
V	n/a	n/a	n/a	3000 watts
V	3000 watts	3600 watts	4000 watts	4000 watts
V	n/a	n/a	n/a	n/a
Pilot uty	No	No	No	No
Range (° )	40°F to 85°F	40°F to 85°F	40°F to 85°F	40°F to 85°F
ifferential	Accuracy: Within +/- 0.27°F	Accuracy: Within 1°F of setpoint	Accuracy: Within +/- 0.27°F	Accuracy: Within 1°F of setpoint
eatures	Digital, non-programmable	Digital, non-programmable	Digital, programmable high ca-	Digital, programmable
	12.5amp model delivers ex-	model delivers exceptional	pacity model delivers exceptional	model delivers exceptional
	ceptional accuracy. Ideal for	accuracy. Ideal for radiant	accuracy. Ideal for radiant ceiling	accuracy. Ideal for radiant
	radiant ceiling panels, and	ceiling panels, and base-	panels, and baseboard. Can be	ceiling panels, and base-
	baseboard. Not for fan-forced	board. Can be used for fan-	used for fan-forced heaters and re-	board. Can be used for fan-
	heaters.	forced heaters	sistive loads.	forced heaters.

#### **THERMOSTATS**

# L TRON

# T LLOW VOLT









T LO NO	) T	T	T	LT
ction	Electronic Switch	Electronic Switch	Electronic Switch	Microprocessor
Type	24 volt .015 -1.0A @ 30V 2-wire	24 volt .015 -1.0A @ 30V 2-wire	24 volt .015 -1.0A @ 30V 5-wire	Wall thermistor
Watt Rating				
V	n/a	n/a	n/a	22A
V	n/a	n/a	n/a	22A
V	n/a	n/a	n/a	22A
V	n/a	n/a	n/a	19A
Pilot uty	24VAC	24VAC	24VAC	n/a
Range (° )	40°F to 90°F	40°F to 90°F	40°F to 90°F	40°F to 90°F
ifferential	Accuracy: Within 1°F of setpoint	Accuracy: Within 1°F of setpoint	Accuracy: Within 1°F of set	Accuracy Within 1°F of setpoint
eatures	Digital, non-programmable 24 volt "Round" model de- livers exceptional accuracy. (Heat Only)	Digital, non-programmable 24 volt "Round" model de- livers exceptional accuracy. (Heat and Cool)	Digital, 24volt programma- ble 2 stage 5-7 wire heat and cool thermostat. One touch temperature control with exceptional accuracy. Ideal for plenum heaters, and HVAC systems.	Proportional and Integral non-programmable electronic room sensor thermostat with set point capability, providing exceptional accuracy. Transmits actual temperature to a LTR relay.

#### **THERMOSTATS**

## L N VOLT









T LO NO	) MS M	M W M W	M TPW M TPW	M W M W
ction	Snap Action	Snap Action	Snap Action	Snap Action
Type	SPST DPST	SPST DPST	SPST DPST	SPST DPST
mp Rating	Model MD26 has Positive OFF	Model M602W has Positive OFF	Model M602TPW has Positive OFF	Model M612W has Positive OFF
v	22A	22A	22A	22A
v	22A	22A	22A	22A
v	22A	22A	22A	22A
v	18A	18A	18A	18A
Pilot uty	No	Yes 125VA	Yes 125VA	Yes 125VA
Range (° )	50°F to 80°F	45°F to 75°F	45°F to 75°F	45°F to 75°F
ifferential	+/- 5°F	+/- 4°F	+/- 4°F	+/- 2 1/2°F
eatures	These economy thermostats are the snap action type that are used in apartment	These bi-metal snap action thermostats are sensetive. Large knob allow for easy	Same as M601W and M602W except the cover mounting cover offer	Built-in heat anticipator as- sures closer control of room temperature. These snap ac-
	construction. Good thermostat for its value. Ideal for radiant cove heaters and baseboard.	adjustment.	tamper proof feature.	tion thermostats are more sensitive that

#### **THERMOSTATS**

# L N VOLT









T LO NO	O M MTP	M S	T	T	WR	WR
ction	Modulation (2 stage)	Simultaneous switching (double ckt)	Snap Action with	Heat Anticipator	Creep (Hyd	raulic) Action
Type	DPST		SPST	DPST	SPST	DPST
Watt Rating						
V	22A	22A	22.	A	2	2A
V	22A	22A	22.	A	2	2A
V	22A	22A	22.	A	2	2A
V	18A	18A	18.	A	1	na
Pilot uty	Yes 125VA	Yes 125VA	Yes 12	25VA	1	No
Range (° )	50°F to 80°F	50°F to 80°F	50°F to 90°F		40°F to 85°F	
ifferential	Accuracy: Within 3°F of setpoint	point Accuracy: Within 3°F of setpoint +/- 2 1/2°F		+/	- 2°F	
eatures	One thermostat controls two separate heating circuits and reduces	Simultaneous control of two heating loads. Used where the	Line voltage thermostat with			ve element in senses radiant

One thermostat controls two separate heating circuits and reduces input during light load periods.

Second stage activates when temperature drops to approx. 1

1/2°F below the first stage turnON temperature.

Simultaneous control of two heating loads. Used where the total load slightly exceeds capacity of a single switch, where two thermostats are impractical. Both switches are calibrated to operate at approx. the same temperature. Line voltage thermostat with everything; Performance, reliability, durability, and a large knob. Built-in heat anticipation assures close temperature regulation. Large knob for easy rotation. Extra-sensitive element in control knob senses radiant heat as well as air temperature for ultimate control. May cause slight radio or television interference in outlying fringe areas.

### T L T RMOST TS N ONTROLS

	S R S	0	L R W LL	SM LL W LL	SM LL W LL	R ST R W LL	TO SP	
T R TYP	SKS	SOR	W LL T R	W LL T R	W LL T R	W LL T R	T R	
eater Series	Series	5 O K	W	W S	R	R Q	QTS	
cuter beries	QM		W	ws	S	n Q	QIS	
	QM		L T	** 5	&			
Refer to the	See Note 1		See Note 2	See Note 3	See Note 4		See Note 6	
Notes Section								
where specified								
•		Ther	mostats below are	electronic w	ith digital display			
TH110DPP	Yes	Yes	The electronic	No	See model	See model	Yes	
TH300024	Yes	Yes	thermostats are not	No	selection	selection	No	
TH36004	Yes	Yes	recommended	No	chart.	chart.	Yes	
TH400024	Yes	Yes	for this heater	No			Yes	
TH522D1003	No	No		No			No	
	Thermostats lis	ted below are	e of mechanical ty	pe and want	to control temper	ature setting m	anually	
MS26	Yes	Yes	See model	No	See model	See model	Yes	
MD26	Yes	Yes	selection chart for	No	selection	selection	Yes	
M601W	Yes	Yes	the recommended	Yes	chart.	chart.	Yes	
M601TPW	Yes	Yes	thermostat	Yes			Yes	
M602W	Yes	Yes		No			Yes	
M602TPW	Yes	Yes		No			Yes	
M611W	Yes	Yes		No			Yes	
M612W	Yes	Yes		No			Yes	
M600S			ere are two elements to		age operation			
M600MTP		ting type. Not no	ormally used for above p	products.				
T100	Yes	Yes	See model	Yes	See model	See model	Yes	
T200	Yes	Yes	selection chart for	No	selection	selection	Yes	
WR651	Yes	Yes	the recommended	No	chart.	chart.	Yes	
WR661	Yes	Yes	thermostat	No			Yes	
1	Thermostats belo				t normally used or		plications	
WT11A	No	Yes	See model	No	No	No	No	
WT12A	No	Yes	selection chart for	No	No	No	No	
WR80	Yes	Yes	the recommended	No	No	No	No	
WR80EP	No	No	thermostat	No	No	No	No	
	<u>'</u>	<b>Thermostats</b>	below are low vol	tage ( to	volts) See note #	below		
T8775A1009	Yes	Yes	No	No	No	No	No	
T8775C1005	Yes	Yes	No	No	No	No	No	
		lectro	onic transformer r	elays with b	uilt in transforme	r		
LTR1120								
LTR208240	ш		C		Ω Λ			
LTR1277	Н		S	,	S A			
LTR2240								
LT186F01	Yes	Yes	Yes	Yes		Yes	Yes	

- † For infrared type heaters, controls may be different for the type of element used. Contact Technical Services for recommendation.
- Note 1: Electronic thermostats have amperage minimums and each model has different voltage requirements, please check catalog thermostat specifications.
- Note 2: AWH, CWH, LFK Series models require the removal of the internal thermostat and wire wall thermostat in its place for proper fan operation. See THERMOSTAT MODEL SELECTION (page 6) for specific thermostat.
- Note 3: CWHDSAG and CWHDS Series models require the removal of the internal thermostat from unit. Wire wall thermostat for proper fan operation. See THERMOSTAT MODEL SELECTION (page 6) for specific thermostats.
- Note 4: CRA, SED, 1235, and 2400 Series models require the removal of the internal thermostat from unit. Wire wall thermostat for proper fan operation. See THERMOSTAT MODEL SELECTION (page 6) for specific thermostats.
- Note 5: Low voltage thermostats operate in conjuction with low voltage control systems using relays. Compatible with all standard 24V two wire thermostats.
- Note 6: The 1100 watt units can use either single pole or double stats. The higher wattage, 1500watt, must use a double pole stat. (3 conductors from stat to heater) See website for further details.
- Note 7: CDF and EFF Series models require different thermostats based on internal wiring. Wire wall thermostat for proper fan operation. See THERMOSTAT MODEL SELECTION (page 6) for specific thermostats. Can not use digital thermostat with this unit.
- Note 8: Due to the complexity of wiring variations for remote wall thermostats with these products, we recommend that you contact Technical Services for assistance.
- Note 9: Remove internal thermostat and wire wall thermostat in its place for proper fan operation.
- Note 10: Thermostat wire to the two white wires on the heater.
- Note 11: Wire wall thermostats as directed in the Installation Manual for proper fan operation.

Technical Services ontact nformation

Phone: 800-452-4328

email: meptechsupport@marleymep.com

	NT			LUM NUM			RP RS	
L N	UN T	UN T	PL NUM	N ST L	ov	P	N R R	N USTR L
T R	T R	T R	T R	ONV TORS	R NT	R NT	T RS	R NT
	MU	U	MSP	Il Series	R	P	RP & RS	M N and L
	U							
Q								
See note 7	See note 8			See note 8				
		Thermost	tats below are	e electronic with	digital displ	ay		
See model	Contact	Yes	No	Contact	Yes	Yes	†	†
selection	Tech Services	No	No	Tech Services	Yes	Yes	†	†
chart.	for assistance	Yes	No	for assistance	Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		No	Yes		No	No	†	†
Ther	mostats listed l	below are of	mechanical ty	pe and want to	control temp	oerature settin	g manually	
See model	Contact	No	No	Contact	Yes	Yes	†	†
selection	Tech Services	No	No	Tech Services	Yes	Yes	†	†
chart.	for assistance	Yes	No	for assistance	Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
See model	Contact	Yes	No	Contact	Yes	Yes	†	†
selection	Tech Services	Yes	No	Tech Services	Yes	Yes	†	†
chart.	for assistance	No	No	for assistance	Yes	Yes	†	†
		No	No		Yes	Yes	†	†
Therm	ostats below ar	e more comn	nercial ndu	strial and not no	rmally used	on residentia	l applications	
Yes	Contact	Yes	No	Contact	No	Yes	†	†
No	Tech Services	Yes	No	Tech Services	No	Yes	†	†
Yes	for assistance	Yes	No	for assistance	Yes	Yes	†	†
No		No	No		No	No	†	†
	The	rmostats belo	w are low vo	ltage ( to vo	olts) See note	e# below		
	No	Yes	No	Yes	Yes	Yes	†	†
No		Yes	Yes	Yes	Yes	Yes	†	†
No No	No	ies	105					

# T RMOST TMO LS L T ON From Notes 2, 3, 4 and 7 (see page 4)

TR	W LL	TR	W LL
MO L	T RMOST T	MO L	T RMOST T
FRC1512	M601W	VFK151	M602W
FRC3180	M601W	VFK204	M602W
FRC4020	M601W	VFK304	M602W
FRC4024	M601W	VFK404	M602W
FRC4027	M601W	VFK484	M602W
FRC3027	M601W	NOT : See note 1	
FRC4820	M601W	SED1012C	TH400024, TH300024, M601W, M611W, T100, WR651
FRC4824	M601W	SED1024C	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
FRC4827	M601W	SED1512	TH400024, TH300024, M601W, M611W, T100, WR651
FRC40203	NA	SED2024	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
FRC40243	NA	ECP1024	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
NOT : See note 10		ECP1524	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1012DSAG	M601W	CRA1512IF	TH400024, M601W, M611W, T100, WR651
SRA1512DSAG	M601W	CRA2028IF	M602W, M612W, T200, WR661
SRA1812DSAG	M601W	CRA2024IF	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2024DSAG	M601W	CRA2224IF	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2027DSAG	M601W	CRA1512T2	TH400024, M601W, M611W, T100, WR651
SRA1527DSAG	M601W	CRA2024T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2020DSAG	M601W	CRA2224T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
NOT : See note 10		1235	TH400024, M601W, M611W, T100, WR651
SRA1012DS	M601W	1235P	TH400024, M601W, M611W, T100, WR651
SRA1512DS	M601W	2435	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1812DS	M601W	2435P	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2024DS	M601W	FFCH548	MS26, M601W
SRA2027DS	M601W	FFCH542	TH400024, MS26, M601W
SRA1527DS	M601W	FFCH547	MS26, M601W
SRA2020DS	M601W	FFCH558	MS26, M601W
NOT : See note 10		FFCH552	MS26. M601W
FRA1512	M602W	FFCH557	MS26, M601W
FRA1812	M602W	NOT : See note 1	
FRA4024	M602W	OFF1500	TH400024, MS26, M601W
FRA4027	M602W	QFF3007	MS26, M601W
FRA3027	M602W	QFF4008	MS26, M601W
FRA4020	M602W	OFF4004	TH400024, MS26, M601W
FRA4824	M602W	OFF4007	MS26, M601W
FRA4827	M602W	OFF4804	MS26, M601W
FRA4820	NA	OFF4807	MS26, M601W
NOT : See note 10		NOT : See note 1	
GFR1500	TH400024, M601W, M611W, T100, WR651	QCH1101	TH400024, TH300024, M601W, MS26
GFR2004	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	OCH1151	TH400024, M601W, MS26
GFR2404	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	OCH1202	TH400024, TH300024, M601W, MS26
GFR1500T2	TH400024, M601W, M611W, T100, WR651	QCH1207	TH400024, TH300024, M601W, MS26
GFR2004T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	NOT : See note 1	2, pg. 4.
GFR2404T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
QFG1512IFM	TH400024, M601W, M611W, T100, WR651		
QFG2024IFM	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
QFG2224IFM	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
QFG2228IF	M602W, M612W, T200, WR661		
QFG1512T2M	TH400024, M601W, M611W, T100, WR651		
QFG2024T2M	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
QFG2224T2M	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
-			

6 **QMark Heating Products** www.qmarkmep.com

# SP LTY ONTROLS









CAT. NO.	VOLT	AMPS
L R1120	120	22A
L R208240	208/240	22A
L R1277	277	19A

		_		
T LO NO	) WR	WR P	WT WT	LTRS R S
ction	Snap Action Switch	Snap Action Switch	Positive snap action switch	Electronic Relays
Type	SPST	SPST	SPDT	Microprocessor base design
mp Rating			Nema 4X rated	These electronic relays have been
$\mathbf{v}$	25A	25A	25A n/a	designed for silent control of high
V	22A	22A	25A	voltage resistive loads from a low
V	22A	22A	25A	voltage control circuit. Inductive
$\mathbf{V}$	18A	18A	22A	motor loads can also be controlled
Pilot uty	Yes 125VA	Yes 125VA	Yes 125VA	(120V to 240V only). Compatible
Range (° )	40°F to 90°F	40°F to 90°F	40°F to 110°F	with 24V thermostats and accepts
ifferential	+/- 3°F	+/- 3°F	+/- 2 1/2°F	analog signal of 0-10V DC.
eatures	Rugged design for garages, factories, warehouses and sim- ilar commercial and industrial installations. The WR80 can control several heaters by using an external contactor.	This explosion proof room thermostat is suitable for Class 1, Group D and Class II, Groups E, F, and G locations.	Nema 4X weatherproof enclosure. The control has a SPDT output and can be used for heating or cooling (ventilation) Multi-positional mounting offers flexibility in new or existing installations.	The relays can be used with model LT186F01 electronic room sensor, providing proportional and integral control. Also can be tied to building management systems.

# SP LTY ONTROLS







T LO N	O LTR	T	M T W M T
ction	Dual Silent Relay	Enclosure protection for thermostats.	M600THW -White thermostat
Type Watt Rating	2 single pole switches. Resistive Inductive	Material: Impact resistant poly- carbonate. Clear. Dimensions	cover with built-in thermome- ter. For M600 Series stats.
v	N/A	are: 7"L X 4.28"H X 2.75" D	ton I of Maddo Bornes statist
$\mathbf{V}$	25A 1HP, 8.8A		M600THB - Beige thermostat
$\mathbf{V}$	25A 1HP, 8A	Thermostat enclosure kits are de-	cover with built-in thermome-
$\mathbf{V}$	N/A	signed to protect the thermostat.	ter. For M600 Series stats.
Pilot uty	Yes 125VA	Circulating slots allow airflow	
Range (° )	Can be operate in 20 to 140°F	for proper operation. Guards are	Minimum 50pcs
ifferential	Accuracy: Within 1.5°F of setpoint	lockable and a key is provided to	Allow 4 weeks.
eatures	This dual level temperature relay may be used to operate two separate heating loads by means of a single low voltage thermostat. Relay is mounted in an enclosure.	maintain security.	