

Thermostats and Controls

THERMOSTATS

ELECTRONIC DIGITAL LINE VOLTAGE



CATALOG NO.	TH300024	TH36004	TH400024	TH110DPP
Action	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
120V	1500 watts	n/a	2000 watts	n/a
208V	n/a	n/a	n/a	3000 watts
240V	3000 watts	3600 watts	4000 watts	4000 watts
277V	n/a	n/a	n/a	n/a
Pilot Duty	No	No	No	No
Range (°F)	40°F to 85°F	40°F to 85°F	40°F to 85°F	40°F to 85°F
Differential	Accuracy: Within +/- 0.27°F	Accuracy: Within 1°F of setpoint	Accuracy: Within +/- 0.27°F	Accuracy: Within 1°F of setpoint
Features	Digital, non-programmable 12.5amp model delivers exceptional accuracy. Ideal for radiant ceiling panels, and baseboard. Not for fan-forced heaters.	Digital, non-programmable model delivers exceptional accuracy. Ideal for radiant ceiling panels, and baseboard. Can be used for fan-forced heaters..	Digital, programmable high capacity model delivers exceptional accuracy. Ideal for radiant ceiling panels, and baseboard. Can be used for fan-forced heaters and resistive loads.	Digital, programmable model delivers exceptional accuracy. Ideal for radiant ceiling panels, and baseboard. Can be used for fan-forced heaters.

THERMOSTATS

ELECTRONIC DIGITAL LOW VOLTAGE



CATALOG NO.	T8775A1009	T8775C1005	TH5220D1003	LT186F01
Action	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				
120V	n/a	n/a	n/a	22A
208V	n/a	n/a	n/a	22A
240V	n/a	n/a	n/a	22A
277V	n/a	n/a	n/a	19A
Pilot Duty	24VAC	24VAC	24VAC	n/a
Range (°F)	40°F to 90°F	40°F to 90°F	40°F to 90°F	40°F to 90°F
Differential	Accuracy: Within 1°F of setpoint	Accuracy: Within 1°F of setpoint	Accuracy: Within 1°F of set	Accuracy Within 1°F of setpoint
Features	Digital, non-programmable 24 volt "Round" model delivers exceptional accuracy. (Heat Only)	Digital, non-programmable 24 volt "Round" model delivers exceptional accuracy. (Heat and Cool)	Digital, 24-volt programmable 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

LINE VOLTAGE



CATALOG NO.	MS26	MD26	M601W	M602W	M601TPW	M602TPW	M611W	M612W
Action	Snap Action		Snap Action		Snap Action		Snap Action	
Type	SPST	DPST	SPST	DPST	SPST	DPST	SPST	DPST
Amp Rating	Model MD26 has Positive OFF		Model M602W has Positive OFF		Model M602TPW has Positive OFF		Model M612W has Positive OFF	
120V	22A		22A		22A		22A	
208V	22A		22A		22A		22A	
240V	22A		22A		22A		22A	
277V	18A		18A		18A		18A	
Pilot Duty	No		Yes 125VA		Yes 125VA		Yes 125VA	
Range (°F)	50°F to 80°F		45°F to 75°F		45°F to 75°F		45°F to 75°F	
Differential	+/- 5°F		+/- 4°F		+/- 4°F		+/- 2 1/2°F	
Features	These economy thermostats are the snap action type that are used in apartment construction. Good thermostat for its value. Ideal for radiant cove heaters and baseboard.		These bi-metal snap action thermostats are sensitive. Large knob allow for easy adjustment.		Same as M601W and M602W except the cover mounting cover offer tamper proof feature.		Built-in heat anticipator assures closer control of room temperature. These snap action thermostats are more sensitive that	

THERMOSTATS

LINE VOLTAGE



CATALOG NO.	M600MTP	M600S	T100	T200	WR651	WR661
Action	Modulation (2 stage)	Simultaneous switching (double ckt)	Snap Action with Heat Anticipator		Creep (Hydraulic) Action	
Type	DPST		SPST	DPST	SPST	DPST
Watt Rating						
120V	22A	22A	22A	22A	22A	22A
208V	22A	22A	22A	22A	22A	22A
240V	22A	22A	22A	22A	22A	22A
277V	18A	18A	18A	18A	na	na
Pilot Duty	Yes 125VA	Yes 125VA	Yes 125VA		No	
Range (°F)	50°F to 80°F	50°F to 80°F	50°F to 90°F		40°F to 85°F	
Differential	Accuracy: Within 3°F of setpoint	Accuracy: Within 3°F of setpoint	+/- 2 1/2°F		+/- 2°F	
Features	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 turn-ON 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.	

DIGITAL THERMOSTATS AND CONTROLS

HEATER TYPE	2500 SERIES BASEBOARD	HBB/OBD BASEBOARD	LARGE WALL HEATER	SMALL WALL HEATER	SMALL WALL HEATER	REGISTER WALL HEATER	TOE SPACE HEATER
Heater Series	2500 Series QMKC	HBB CBD	AWH CWH LFK	CWHDSAG CWHDS	CRA SED 1235 & 2400	GFR, QFG	QTS
Refer to the Notes Section where specified	See Note 1		See Note 2	See Note 3	See Note 4		See Note 6
Thermostats below are electronic with digital display.							
TH110DPP	Yes	Yes	The electronic thermostats are not recommended for this heater	No	See model selection chart.	See model selection chart.	Yes
TH300024	Yes	Yes		No	See model selection chart.	See model selection chart.	No
TH36004	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
TH400024	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
TH522D1003	No	No		No	See model selection chart.	See model selection chart.	No
Thermostats listed below are of mechanical type and want to control temperature setting manually.							
MS26	Yes	Yes	See model selection chart for the recommended thermostat	No	See model selection chart.	See model selection chart.	Yes
MD26	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
M601W	Yes	Yes		Yes			Yes
M601TPW	Yes	Yes		Yes			Yes
M602W	Yes	Yes		No			Yes
M602TPW	Yes	Yes		No			Yes
M611W	Yes	Yes		No			Yes
M612W	Yes	Yes		No			Yes
M600S	These stats are used when there are two elements to control. Two-stage operation and modulating type. Not normally used for above products.						
M600MTP	These stats are used when there are two elements to control. Two-stage operation and modulating type. Not normally used for above products.						
T100	Yes	Yes	See model selection chart for the recommended thermostat	Yes	See model selection chart.	See model selection chart.	Yes
T200	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
WR651	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
WR661	Yes	Yes		No	See model selection chart.	See model selection chart.	Yes
Thermostats below are more commercial / Industrial and not normally used on residential applications.							
WT11A	No	Yes	See model selection chart for the recommended thermostat	No	No	No	No
WT12A	No	Yes		No	No	No	No
WR80	Yes	Yes		No	No	No	No
WR80EP	No	No		No	No	No	No
Thermostats below are low voltage (18 to 26 volts) See note #6 below.							
T8775A1009	Yes	Yes	No	No	No	No	No
T8775C1005	Yes	Yes	No	No	No	No	No
Electronic transformer relays with built-in transformer.							
LTR1120							
LTR208240							
LTR1277							
LTR2240							
LT186F01	Yes	Yes	Yes	Yes		Yes	Yes

Highlighted items are "Subject to Stock Availability"

† 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 conjunction 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 Contact Information

Phone: 800-452-4328

email: meptechnsupport@marleymep.com

CEILING HEATER	CABINET UNIT HEATER	UNIT HEATER	PLENUM HEATER	ALUMINUM AND STEEL CONVECTORS	COVE RADIANT	CP RADIANT	RP & RS INFRARED HEATERS*	INDUSTRIAL RADIANT
CDF EFF QCH	MUH IUH	CU900	MSPH	All Series	RCC	CP	RP & RS	M, N, and L

See note 7

See note 8

See note 8

Thermostats below are electronic with digital display.

See model selection chart.	Contact Tech Services for assistance	Yes	No	Contact Tech Services for assistance	Yes	Yes	†	†
		No	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		No	Yes		No	No	†	†

Thermostats listed below are of mechanical type and want to control temperature setting manually.

See model selection chart.	Contact Tech Services for assistance	No	No	Contact Tech Services for assistance	Yes	Yes	†	†
		No	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†

See model selection chart.	Contact Tech Services for assistance	Yes	No	Contact Tech Services for assistance	Yes	Yes	†	†
		Yes	No		Yes	Yes	†	†
		No	No		Yes	Yes	†	†
		No	No		Yes	Yes	†	†

Thermostats below are more commercial / Industrial and not normally used on residential applications.

Yes	Contact Tech Services for assistance	Yes	No	Contact Tech Services for assistance	No	Yes	†	†
No		Yes	No		No	Yes	†	†
Yes		Yes	No		Yes	Yes	†	†
No		No	No		No	No	†	†

Thermostats below are low voltage (18 to 26 volts) See note #6 below.

No	No	Yes	No	Yes	Yes	Yes	†	†
No	No	Yes	Yes	Yes	Yes	Yes	†	†

Electronic transformer relays with built-in transformer.

Yes	Yes	Yes	No	Yes	Yes	Yes	†	†
-----	-----	-----	----	-----	-----	-----	---	---

THERMOSTAT MODEL SELECTION

From Notes 2, 3, 4 and 7 (see page 4)

HEATER MODEL	WALL THERMOSTAT	HEATER MODEL	WALL THERMOSTAT
FRC1512	M601W	VFK151	M602W
FRC3180	M601W	VFK204	M602W
FRC4020	M601W	VFK304	M602W
FRC4024	M601W	VFK404	M602W
FRC4027	M601W	VFK484	M602W
FRC3027	M601W		
FRC4820	M601W		
FRC4824	M601W		
FRC4827	M601W		
FRC40203	NA		
FRC40243	NA		
NOTE: See note 10, pg. 4.		NOTE: See note 10, pg. 4.	
SRA1012DSAG	M601W	SED1012C	TH400024, TH300024, M601W, M611W, T100, WR651
SRA1512DSAG	M601W	SED1024C	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1812DSAG	M601W	SED1512	TH400024, TH300024, M601W, M611W, T100, WR651
SRA2024DSAG	M601W	SED2024	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2027DSAG	M601W	ECP1024	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1527DSAG	M601W	ECP1524	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2020DSAG	M601W	CRA1512IF	TH400024, M601W, M611W, T100, WR651
NOTE: See note 10, pg. 4.		CRA2028IF	M602W, M612W, T200, WR661
SRA1012DS	M601W	CRA2024IF	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1512DS	M601W	CRA2224IF	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1812DS	M601W	CRA1512T2	TH400024, M601W, M611W, T100, WR651
SRA2024DS	M601W	CRA2024T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA2027DS	M601W	CRA2224T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
SRA1527DS	M601W	1235	TH400024, M601W, M611W, T100, WR651
SRA2020DS	M601W	1235P	TH400024, M601W, M611W, T100, WR651
NOTE: See note 10, pg. 4.		2435	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
FRA1512	M602W	2435P	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661
FRA1812	M602W	FFCH548	MS26, M601W
FRA4024	M602W	FFCH542	TH400024, MS26, M601W
FRA4027	M602W	FFCH547	MS26, M601W
FRA3027	M602W	FFCH558	MS26, M601W
FRA4020	M602W	FFCH552	MS26, M601W
FRA4824	M602W	FFCH557	MS26, M601W
FRA4827	M602W	NOTE: See note 11, pg. 4.	
FRA4820	NA	QFF1500	TH400024, MS26, M601W
NOTE: See note 10, pg. 4.		QFF3007	MS26, M601W
GFR1500	TH400024, M601W, M611W, T100, WR651	QFF4008	MS26, M601W
GFR2004	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	QFF4004	TH400024, MS26, M601W
GFR2404	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	QFF4007	MS26, M601W
GFR1500T2	TH400024, M601W, M611W, T100, WR651	QFF4804	MS26, M601W
GFR2004T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	QFF4807	MS26, M601W
GFR2404T2	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	NOTE: See note 12, pg. 4.	
QFG1512IFM	TH400024, M601W, M611W, T100, WR651	QCH1101	TH400024, TH300024, M601W, MS26
QFG2024IFM	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	QCH1151	TH400024, M601W, MS26
QFG2224IFM	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661	QCH1202	TH400024, TH300024, M601W, MS26
QFG2228IF	M602W, M612W, T200, WR661	QCH1207	TH400024, TH300024, M601W, MS26
QFG1512T2M	TH400024, M601W, M611W, T100, WR651	NOTE: See note 12, pg. 4.	
QFG2024T2M	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		
QFG2224T2M	TH110DPP, TH400024, TH300024, M602W, M612W, T200, WR661		

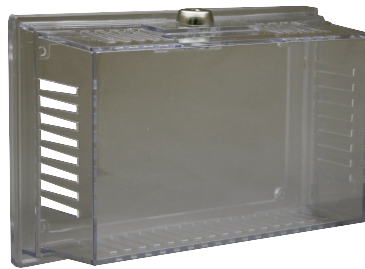
SPECIALTY CONTROLS



CAT. NO.	VOLT	AMPS
LTR1120	120V	22A
LTR208240	208/240V	22A
LTR1277	277V	19A

CATALOG NO.	WR80	WR80EP	WT11A	WT12A	LTR SERIES
Action	Snap Action Switch	Snap Action Switch	Positive snap action switch		Electronic Relays
Type	SPST	SPST	SPDT		Microprocessor base design
Amp Rating			Nema 4X rated		These electronic relays have been designed for silent control of high voltage resistive loads from a low voltage control circuit. Inductive motor loads can also be controlled (120V to 240V only). Compatible with 24V thermostats and accepts analog signal of 0-10V DC.
120V	25A	25A	25A	n/a	
208V	22A	22A	25A		
240V	22A	22A	25A		
277V	18A	18A	22A		
Pilot Duty	Yes 125VA	Yes 125VA	Yes 125VA		The relays can be used with model LT186F01 electronic room sensor, providing proportional and integral control. Also can be tied to building management systems.
Range (°F)	40°F to 90°F	40°F to 90°F	40°F to 110°F		
Differential	+/- 3°F	+/- 3°F	+/- 2 1/2°F		
Features	Rugged design for garages, factories, warehouses and similar commercial and industrial installations. The WR80 can control several heaters by using an external contactor.	This explosion proof room thermostat is suitable for Class I, 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.		

SPECIALTY CONTROLS



CATALOG NO.	LTR2240	TC1	M600THW	M600THB
Action	Dual Silent Relay	Enclosure protection for thermostats.	M600THW - White thermostat cover with built-in thermometer. For M600 Series stats.	
Type	2 single pole switches.	Material: Impact resistant polycarbonate. Clear. Dimensions are: 7"L X 4.28"H X 2.75" D	M600THB - Beige thermostat cover with built-in thermometer. For M600 Series stats.	
Watt Rating	Resistive Inductive			
120V	N/A			
208V	25A 1HP, 8.8A			
240V	25A 1HP, 8A			
277V	N/A			
Pilot Duty	Yes 125VA	Thermostat enclosure kits are designed to protect the thermostat. Circulating slots allow airflow for proper operation. Guards are lockable and a key is provided to maintain security.		
Range (°F)	Can be operate in 20 to 140°F			
Differential	Accuracy: Within 1.5°F of setpoint		Minimum 50pcs Allow 4 weeks.	
Features	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.			

