

Mighty Therm®

Gas-Fired Water Heaters 175,000 - 5,000,000 BTU/h

Ignition Safeguard Systems

System #1: Standing pilot with thermocouple flame supervision. 100% safety shutdown on flame failure. 24VAC control circuit. Standard on sizes 175 to 400 U.S. and Canadian.

System #4: Intermittent electronic flame supervision. 115VAC control circuit. Responds in less than 0.8 second upon flame failure. Optional on natural gas sizes 500-5000 and U.S. propane sizes 500-1825.

System #9: Intermittent electronic flame supervision. Responds in less than 0.8 second upon flame failure. 24VAC control circuit. Standard on U.S. sizes 500-1825 natural and propane.

System #11: Same as System 9, with the addition of 100% lockout on trial for ignition. Standard on Canadian sizes 500-5000 natural.

System #12: Same as System 9. Optional on sizes 175 to 400 U.S. and Canadian.

System #16: Standing pilot with electronic flame supervision. Responds in less than 0.8 second upon flame failure and provides 100% safety shutdown. 24VAC control circuit. Standard on Canadian propane sizes 500-5000. Standard on U.S. propane sizes 2000-5000. Optional on natural gas 500-5000.

System #18: Same as System 9. Standard on U.S. sizes 2000-5000 natural gas.

Legend:

- S = Standard
 O = Optional
 O1 = Available on natural gas sizes 500-5000 and U.S. propane sizes 500-1825
 NA = Not available
 U = Standard in U.S., optional in Canada
 UN = Standard and only available on U.S. natural gas units
 C = Standard in Canada, optional in U.S.
 C1 = Standard in Canada and on spark ignition propane, optional otherwise
 CN = Standard and only available on Canadian natural gas units
 1 = Standard on Canadian propane 500-5000. Standard on U.S. propane 2000-5000. Available on U.S. & Canadian natural gas 500-5000.
 2 = Not available on sizes 175 & 250
 3 = Shipped loose
 4 = Standard on PH & PW models

NOTE: Certain combinations of options may not be available on some units because of size restrictions or incompatibility.

Model (Size)

	175-400	500-1825	2000-2450	2800-5000
Ignition Systems				
system 1	S	NA	NA	NA
system 4	NA	O1	O1	O1
system 9	NA	U	NA	NA
system 11	NA	CN	CN	CN
system 12	O	NA	NA	NA
system 16	NA	1	1	1
system 18	NA	NA	UN	UN
Firing Modes				
on/off firing	S	O	O	O
two-stage firing	O	S	S	S
four-stage firing	NA	O	O	O
mechanical modulation	2	O	NA	NA
motorized on/off	NA	O	O	O
motorized two-stage	NA	O	O	O
motorized modulation	NA	O	O	O
Gas Train				
manual valve	S	S	S	S
redundant safety valve	U	U	U	U
main gas regulator	S	S	S	S
manual firing valve (add'l manual valve)	C	C	C	C
additional safety valve	NA	O	O	O
motorized safety valve	NA	O	O	O
motorized safety with proof of closure	NA	O	O	O
pilot gas regulator	S	C	C	C
leak test valve	NA	O	O	O
high gas pressure switch	3	O	O	U
low gas pressure switch	3	O	O	O
normally open vent valve	NA	O	O	O
Control Components				
100% shutdown on flame failure	S	S	S	S
100% lockout	C1	C1	C1	C1
manual reset high limit	S	S	S	S
automatic reset high limit	O	O	O	U
flow switch	S	S	S	S
pump time delay (EM ²)	4	4	4	4
low water cutoff (with manual reset and test button)	O	O	O	O
alarm bell & lights	O	O	O	O
alarm contacts & lights	O	O	O	O
field-supplied controller connections	O	O	O	O
Water Ways				
copper tubes	S	S	S	S
cupro-nickel tubes	O	O	O	O
glass-lined cast iron headers	S	S	S	S
bronze headers	O	O	O	O
Codes				
ASME CSD-1	S	O	O	O
IRI	S	O	O	O
FM	S	S	S	O
Illinois School	O	O	O	O
Minnesota	S	O	O	O
California	O	O	O	O
LDS	NA	O	O	O