



Technical Information

MFC-1 Multi-function Controller

A11-03.1.2-PB-V3 - Jan 2013

Product Parts

The basic MFC-1[3S&SD] kit shown to right includes the following components:

- MFC-1 Controller
- 7 x Screws
- 2 x Wire clamps
- 1 x PT-1000 high temperature sensor
- 2 x PT1000 low temperature sensors
- 1 x Mounting bracket
- 3 x Plastic wall plugs
- 1 x 4GB SD card

Product code MFC-1[5S&SD] kit also available that includes the full 5 sensors.

Applications

The Apricus MFC-1 multi-function controller can manage a wide range of solar thermal and HVAC systems for both domestic and commercial applications. A variety of software packs allow the controller to be programmed to meet a wide range of applications. Custom software is available upon request.

Features

- Backlit LCD display with clear plain text
- Direct display of key system data (temperatures, energy etc)
- PT1000 temperature sensors
- Variable speed and standard relay outputs
- Up to 4 dry contact signal inputs
- Data-logging (SD card)
- Rear and bottom punch-outs for conduit or cable glands
- Quick hang wall mounting bracket
- Software packs to suit various applications
- Manual, Auto or Off mode for easy relay management
- End User mode limits access to only basic functions

Technical Data

Housing: ABS plastic

Dimensions: 199 x 100 x 54mm

Power Supply: AC 110-240V 50/60Hz (Max 8 Amp)

Standby Power Consumption: 4W

Inputs:

- 1 x PT1000 sensor (-40°C~220°C / -40°F~428°F)
- 4 x PT1000 sensors (-20°C~105°C / -4°F~221°F)
- 3 x dry contact signal inputs
- Grundfos VFS flow and temperature sensor input

Outputs:

- 1 x 4 Amp variable speed semiconductor relay
- 3 x 5 Amp standard relays

Expansion: RS232 plug (for future expansion hardware)

Data Logging: SD card (4GB provided as standard)

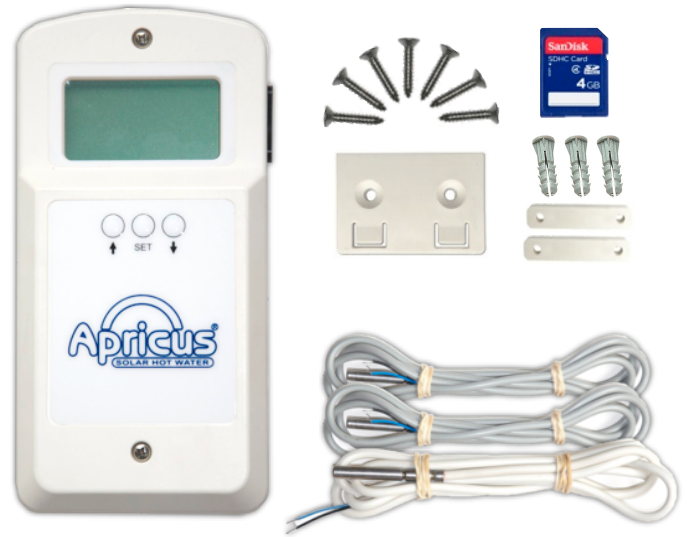
Ambient Temperature: 0°C~40°C / 32°F~104°F

Protection Type: IP 20

Protection Class: I

Certifications:

- ETL: UL 873, CSA C22.2 No. 23-93
- CE: EMC 2004/108/EC, LVD 2006/95/EC



Main Display Screens

08:26	☀	☼	☽	☾	☿	♁	♂	♀
T1 140°F	R1	50%						
T2 120°F	R2 Boost	☐						
T3 125°F	R3 Flow	☐						
T4 138°F	R4 2nd	☐						
T5 150°F	V-F	1.86gpm						
V-T 138°F	MODE: AUTO							

MODE: MANUAL		
T1 140°F	R1	50%
T2 120°F	R2 On	☐
T3 125°F	R3 Off	☐
T4 138°F	R4 Off	☐
T5 150°F	V-F	1.86gpm
V-T 138°F	EXIT	

ENERGY OUTPUT	
Today	11kWh
7 days	65kWh
30 days	320kWh
365 days	2200kWh
Total	5600kWh
Day Average	7.2kWh

ERRORS	
E10: NONE	
E11: 05/03/2012 10:24 02	
CLEAR ALL ERRORS	

AVERAGE TEMPS			
	1hour	24hour	Total
T1	140°F	110°F	115°F
T2	120°F	120°F	120°F
T3	125°F	125°F	125°F
T4	138°F	138°F	138°F
T5	150°F	150°F	150°F

RELAY ACTIVITY			
	1hour	24hour	Total
R1	25m	4h	290h
R2	15m	2h	45h
R3	5m	8h	90h
R4	0m	0h	0h



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