SOREL TDC4 SOLAR THERMAL CONTROLLER WITH VFS

User-friendly solar thermal controllers for residential and commercial applications...

The SOREL TDC4 differential temperature controller sets a new standard in solar thermal differential control.
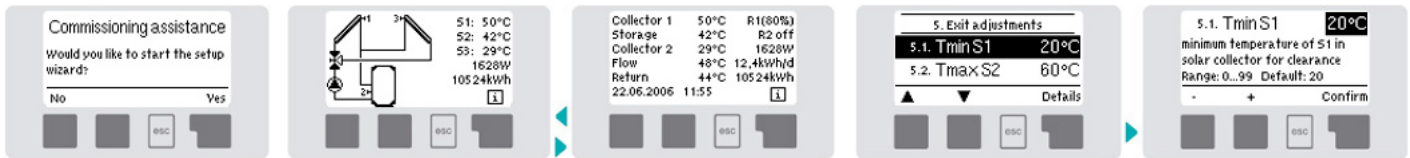
Combining practical design with a feature rich, crystal clear operator guidance system, SOREL can offer sophisticated control in an extremely user-friendly package. Users are presented with programming and operational information, in graphical or plain written text formats in one of many user selectable languages*.

The TDC4 offers all of the features and functionality of the SOREL TDC3 controller, with the added benefit of an additional pair of inputs to facilitate real time flow monitoring using a Grundfos VFS sensor.
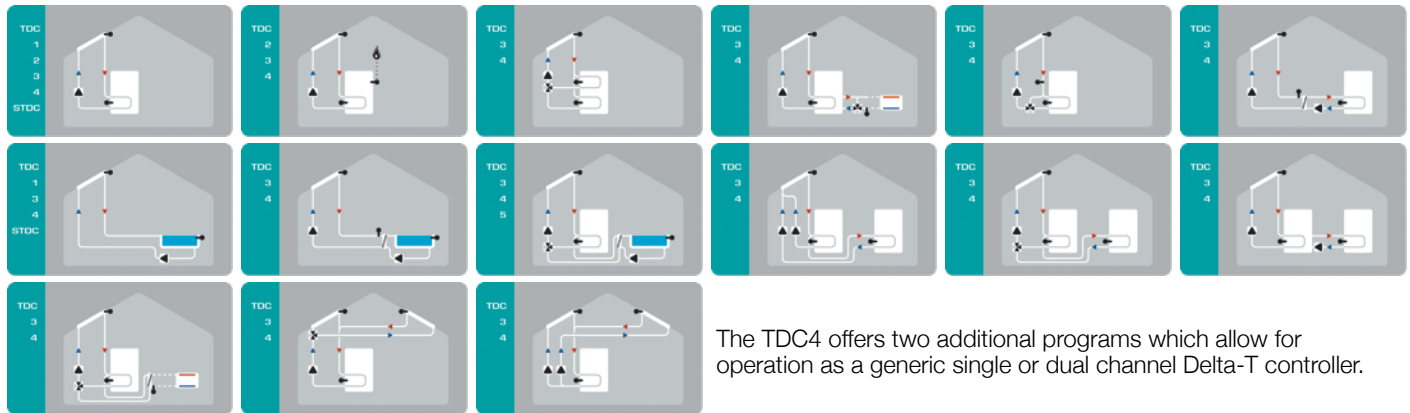
Quiet and efficient variable speed pump control of wet rotor type circulators (up to 140watt) is also possible using the TDC4's internal triac based speed control circuitry. In addition, every SOREL TDC series controller is capable of logging operational, and averaged solar performance data for up to 5 years**.

ITEM # 10400

MADE IN GERMANY
SINCE 1991

TEXT & GRAPHICS

PROGRAMS

The TDC4 offers two additional programs which allow for operation as a generic single or dual channel Delta-T controller.

SPECIFICATIONS

Temperature Sensor Inputs	**4**	SD-CARD Based Data Logging	**NO**
VFS Sensor (Flow + Temperature) Inputs	**1**	Ethernet Networking Capable	**NO**
120VAC Relay Outputs	**1**	CAN-Bus Networking Capable	**NO**
Dry Contact Relay Outputs	**NO**	Fahrenheit / Celsius Temperature Conversion	**YES**
Variable Speed Triac Outputs	**1**	Simple Heat Metering	**YES**
Analog 0-10V / PWM Pump Speed Output	**NO**	Internal Data Logging**	**YES**
Real Time Clock / Thermostat	**NO**	Anti - Legionella for Solar	**YES**
Programs / Schemas	**15**	Anti - Legionella for Heating	**NO**
Multi-Language Text*	**YES**	Approved to CSA / UL Standards (cLCus)	**YES**

* North America specific models feature English, Spanish and French languages as standard. Additional languages may be implemented based on locale, and memory limitations. Please contact SOREL GmbH Mikroelektronik regarding alternate language availability. ** Standard data logging functionality is limited to on screen viewing of text and graphical data. Data export is not possible. Averaged historical data is available based on hourly, daily, weekly, monthly and yearly intervals. Granular data is not stored. *** Please visit the SOREL website for complete up to date product information.

SOREL ACCESSORIES FOR STDC / TDC / XTDC CONTROLLERS

User-friendly solar thermal controllers for residential and commercial applications...

TEMPERATURE SENSORS

SOREL temperature sensors utilize 1000 Ohm platinum sensing elements to ensure precise measurements along with long term reliability and accuracy.

Sensors are available in various length and cable jacket configurations suitable for temperatures up to 300 degrees C / 570 degrees F. Sensing head option options include well type, pipe mount, and surface mount.

Temperature sensors are compatible with all SOREL solar thermal controller models.

MODEL #	ITEM #	DESCRIPTION	CABLE	LENGTH	MAX TEMP
TT/P4	1004	6mm Diameter Standard Temp Well Sensor	PVC	4m / 155"	95C / 200F
TT/S2	1005	6mm Diameter High Temp Well Sensor	SILICONE	2m / 77"	180C / 350F
TT/S4	1006	6mm Diameter High Temp Well Sensor	SILICONE	2m / 155"	180C / 350F
TT/T2.5	1007	6mm Diameter Ultra High Temp Well Sensor	SPECIAL	2.5m / 98"	300C / 570F
TR/S1.5	1008	Round Pipe High Temp Sensor	SILICONE	1.5m / 59"	180C / 350F
TR/P4	1009	Round Pipe Standard Temp Sensor	PVC	4m / 155"	95C / 200F
TF/S2	1010	Flat Surface High Temp Sensor	SILICONE	2m / 77"	180C / 350F
TD/P4	1011	Tertiary Sensor Standard Temp	PVC	4m / 155"	95C / 200F
TA/52	1012	Wall Mount Ambient Air Temp Sensor (1 Output)	-	-	95C / 200F
TA/53	1013	Wall Mount Ambient Air Temp Sensor (3 Output)	-	-	95C / 200F

FLOW SENSORS

SOREL / Grundfos VFS Vortex Flow sensors combine high accuracy flow and temperature sensing into one compact and reliable device. Utilizing state of the art vortex shedding technology, VFS sensors can measure flow in wet, aggressive environments with no moving parts. Ideal for solar thermal applications.

Sensors are available in various flow rate configurations to meet individual applications. 0-5 Volt linear analog voltage output. VFS Sensors are compatible with the TDC4 and XTDC models only.

MODEL #	ITEM #	DESCRIPTION	FLOW RANGE	TEMP RANGE
VFS1-12	12401	VFS Sensor 1-12LPM - Stainless Body 3/4" NSPM	1-12LPM / 0.25-3GPM	0-100C / 32-212F
VFS2-40	12402	VFS Sensor 2-40LPM - Stainless Body 3/4" NPSM	2-40LPM / 0.50-10GPM	0-100C / 32-212F
VFS5-100	12403	VFS Sensor 5-100LPM - Stainless Body 1" NPSM	5-100LPM / 1.25-25GPM	0-100C / 32-212F
VFS10-200	12404	VFS Sensor 10-200LPM - Plastic Body 1-1/4" NPSM	10-200LPM / 2.50-50GPM	0-100C / 32-212F

OTHER ACCESSORIES

SOREL offers a variety of mounting and installation accessories designed to integrate perfectly with SOREL STDC, TDC and XTDC series solar thermal controllers.

RC Series thermostat + setpoint modules are specifically designed for space heating applications using the XTDC series controller. Flush mounting kit is compatible with the TDC series controllers only.

MODEL #	ITEM #	DESCRIPTION	TEMP RANGE
RC-21	1021	Room Temperature Thermostat / Setpoint Module	0-100C / 32-212F
RC-22	1022	Room Temperature Thermostat / Setpoint / Humidistat Module	0-100C / 32-212F
PMKIT1	12100	TDC Series Flush Mounting Kit for NEMA Rated Electrical Enclosures	0-100C / 32-212F

* Accessories may not be compatible with all models. Please consult the controller user guide and or operational manual to verify compatibility, and suitability for your specific application.