

Project:
Unit: SET
Controller: Resol MX
Serial Number: 10202016

Main menu	Submenu 1	Submenu 2	Submenu 3	Submenu 4	Submenu 5	Default from Enerworks	Setting at Site
Solar	Basic Settings	System (system and variant)				1-1-1	
		Collector	Colmin (Min. collector temperature)			50 °F	
			Colem (Collector emergency temperature)			266 °F	
		Store	ΔTon (Switch-on temperature difference)			12 °R	
			ΔToff (Switch-off temperature difference)			8 °R	
			ΔTset (Set temperature difference)			20 °R	
			Stset (Set store temperature)			114 °F	
			Stmax (Maximum store temperature)			140 °F	
			HysSt (Hysteresis maximum store temperature)			4 °R	
			Rise (Rise value)			4 °R	
			tMin (Minimum runtime)			30 sec.	
			Min speed (Minimum speed)			100%	
			Store (Blocked for solar loading)			Activated	

	Opt. functions	Add new function	By pass	Collector (Collector field)		1	
				Relay (Bypass output)		R14	
				Type (Variant (pump or valve logic))		Valve	
				Inverted (Valve logic inversion)		checked	
				Sensor (Bypass sensor)		GA1	
				ΔTon (Bypass switch-on temperature difference)		12 °R	
				ΔToff (Bypass switch-off temperature difference)		8 °R	
				Funct. (Activated/Deactivation)		Activated	
			Flow rate monitoring	Sensor (Flow rate sensor selection)		Ga1	
				Ref. relay (Reference relay selection)		R1	
				Store (Store selection)		1	
				Time (Delay time)		30 sec.	
				Funct. (Activation / Deactivation)		Activated	

Arrangement	Opt. functions	Parallel Relay	Output (Output selection)			R2	
			Ref. relay (Reference relay selection)			R1	
			Delay (Delay option)			0 min	
			Funct. (Activation / Deactivation)			Activated	
HQM (heat quantity measurements)	New HQM	HQM 1	Sen. Flow (Flow sensor selection)			GA1	
			Sen. ret. (Return sensor selection)			GA2	
			Sen. flow rate (Flow rate sensor selection)			GA1	
			Fluid type (Heat transfer fluid)			Propyl	
			Concentr. (Glycol concentration)			50%	
			Funct. (Activation / Deactivation)			Activated	
Basic Settings	Language (Selection of the menu language)					English	
	Auto DST (Daylight savings time selection)					Yes	
	Date (current date)					Current	
	Time (current time)					Local time	
	Temp. Unit (Temperature unit)					°F	

	Flow Unit (Volume unit)					Gal	
	Press. Unit (Pressure unit)					PSI	
	Energy Unit					MBTU	
In-/Outputs	Inputs	Controller	S1 (Sensor input selection) (Collector)	Type (Sensor type selection)		PT1000	
				Offset (Sensor offset)		0 °F	
			S2 (Sensor input selection) (Bottom of the tank)	Type (Sensor type selection)		PT1000	
				Offset (Sensor offset)		0 °F	
			S3 (Sensor input selection) (Available)	Type (Sensor type selection)		PT1000	
				Offset (Sensor offset)		0 °F	
			S4 (Sensor input selection) (Water loop inlet)	Type (Sensor type selection)		PT1000	
				Offset (Sensor offset)		0 °F	
			S5 (Sensor input selection) (Water loop outlet)	Type (Sensor type selection)		PT1000	
				Offset (Sensor offset)		0 °F	
			Ga1 (Analogue Grundfos Direct Sensor) (Glycol flow)	Type (Grundfos-Direct-Sensor type)		VFS	

				Min (Minimum flow rate)		10 L/MIN	
				Max (Maximum flow rate (if Type = VFS))		200 L/MIN	
			Ga2 (Analogue Grundfos Direct Sensor) (Glycol Pressure)	Type (Grundfos-Direct-Sensor type)		RPS	
				Max		10 bar	
	Outputs	Controller	R1 (Relay selection) (Glycol Pump(s))	Signal		Standard	
				Min Speed		100%	
			R2 (Relay selection) (Water Pump)	Signal		Standard	
				Min Speed		100%	
			R14 (Relay selection) (By-Pass valve)	Signal		Standard	

System Set Points:

Pump Speed

Glycol Pump 1: 1 2 3 (Circle the selected speed)

Glycol Pump 2: 1 2 3 (Circle the selected speed)

Water Pump 1: 1 2 3 (Circle the selected speed)

Pressure at Heat Exchanger (Pumps ON)

Water In: --psi

Water Out: --psi

Glycol In: --psi

Glycol Out: --psi

System Pressure

Glycol loop: psi charge pressure

Expansion Tanks: psi pre-charge (can only be measured when system is empty)

Glycol Loop Design Flow

Min Design Flow: GPM

Recorded Flow: ____ GPM - ____ GPM