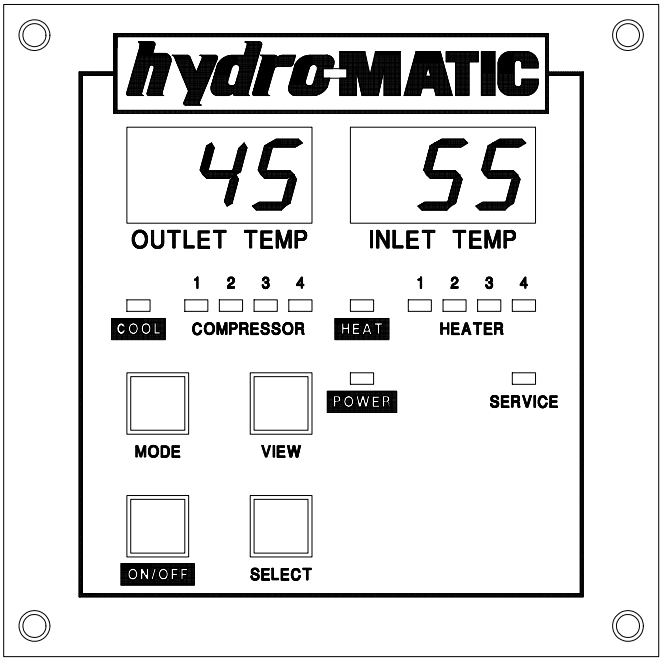
AQUA-AIR
MARINE AIR CONDITIONING SYSTEMS

CHILLER UNIT CONTROL

The Aqua-Air Hydromatic Chiller Control is a microprocessor based control system for multiple compressor chiller units. The Hydromatic control monitors the reliability of the entire chiller unit system by providing component monitoring, programmable parameters and variable levels of protection. Operator control is made easy by the improved accuracy of the systems performance and quality of the information provided.



FEATURES

- **Display** - push button monitoring of system function and continuous display of chillwater inlet and outlet temperatures.
- **Temperature Monitors** - chillwater loop temperatures and individual chiller unit condenser water temperatures are monitored and controlled.
- **Compressor Circuit Analyzers** - provisions to monitor high and low side refrigerant pressure and freeze protection switches for each compressor circuit.
- **Programs** - fourteen programmable features provide precise control of the chiller.
- **Protection** - three separate levels of programmable protection upon fault detection.
- **Sequencing** - automatic sequencing for compressors and heaters to achieve equal operating time of components.
- **Service LED** - indicates a system malfunction requiring service.
- **View Mode** - provides digital readout of temperatures from sensors, status of safety controls on each compressor and areas of compressor malfunctions.
- **Control Board** - directly replaces all control circuit thermostats, relays and timers while increasing reliability and accuracy.
- **Control Override** - switches are standard on all boards.
- **Temperature Sensors** - shielded cables improve accuracy by preventing interference.
- **Remote Display** - a second display panel can be remotely located from the chiller to provide control and monitoring in the pilothouse or engineers station.

HYDROMATIC CHILLER CONTROL SETTINGS

PROGRAM NUMBER	PARAMETER		SET VALUE	RANGE	
				MINIMUM	MAXIMUM
P-1	HEAT SET POINT			95/ F 35/ C	118/ F 48/ C
P-2	COOL SET POINT			46/ F 8/ C	58/ F 14/ C
P-3	HEAT STAGING TEMPERATURE			1/ F 1/ C	6/ F 3/ C
P-4	COOL STAGING TEMPERATURE			1/ F 1/ C	6/ F 3/ C
P-5	STAGING TIME DELAY			30 secs	200 secs
P-6	SERVICE SENSOR HIGH TEMPERATURE LIMIT			120/ F 49/ C	145/ F 63/ C
P-7	SERVICE SENSOR LOW TEMPERATURE LIMIT			25/ F -4/ C	45/ F 7/ C
P-8	FAILSAFE LEVEL	0 = minimum 1 = display only 2 = maximum failsafe		0	2
P-9	SEAWATER PUMP OPERATION	0 = continuous 1 = cycle w/ compressor		0	1
P-10	NUMBER OF HEATERS EQUIPPED *			0 (1)	4 (2)
P-11	NUMBER OF COMPRESSORS EQUIPPED *			1	4 (2)
P-12	SENSORS EQUIPPED	see program description for details		0	7
P-13	LINE VOLTAGE LIMIT	110v System		80 v	100v
		220v System		180 v	200 v
P-14	TEMPERATURE UNITS	0 = / Fahrenheit		0	1
		1 = / Celsius			

* NUMBERS IN PARENTHESES INDICATE 2 STATION HYDROMATIC SETTINGS AND RANGES

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