

dara-4g²

by Data Aire, Inc.

The Next Evolution of Data Aire Relay AutoChangeover Controller

Dara-4g² is the next evolution of Relay AutoChangeover controllers from Data Aire. The dara-4g² delivers the same, dependable data center monitoring and control capabilities as its predecessor, DARA-4, but now offers numerous enhanced features and benefits for streamlined programming; zone temperature control options; and fail-safe prevention.



Features & Benefits:

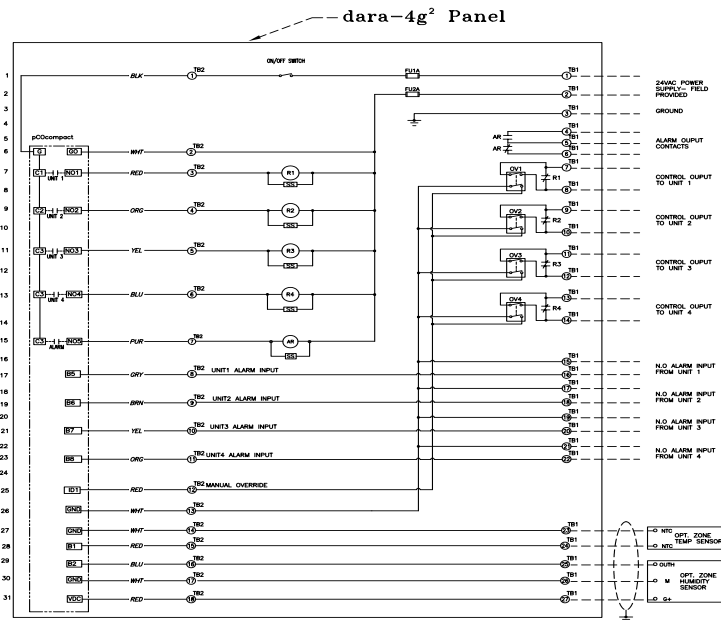
Whether a Data Aire unit or other manufacturer unit, the dara-4g² controls up to four precision cooling units using a set of dry relay contacts. The key features of the new dara-4g² include.

- **Unit rotation** — A main function of the dara-4g² is to ensure a balance of runtimes across all units. The rotation duration can be set for 4, 8, 12 or 24 hours; or 7, 14 or 30 days. All information is projected on an easy-to-read 4-row, 22-character liquid crystal display (LCD).
- **Back-up capability** — A critical component of any computer room is the back-up capabilities. The dara-4g² offers three different standby logics:
 - Turn-Off – the controller will turn off any unit with an alarm and bring on an equal number of stand-by units
 - Stay-on – the controller keeps the unit running, even if there is an alarm
 - Conditional – if there is a standby unit the controller will turn off the unit with the alarm and activate the standby

unit, however if there is no stand-by unit the controller will keep the unit with the alarm on.

- **Fail-Safe Switching** — To ensure a cool data center, the dara-4g² is equipped with a “fail safe” design. Typically, when the controller receives an alarm, all contacts are closed, which makes all cooling units operational. With the fail-safe option, should the controller fail, all units would be placed in operation ensuring the data center remains cool.
- **Zone temperature control** (optional) — The addition of a temperature sensor the dara-4g² can be programmed to control the temperature in the room to a desired set point. This feature allows you to only operate the number of units necessary to maintain the desired temperature, resulting in the most efficient operation possible.
- **Easy Programming** — dara-4g²'s LCD control panel with 4-row, 22-character display, makes programming a breeze. Programming the controller is similar to Data Aire's state-of-the-art dap4 micro-processor controller. The display also incorporates soft buttons and provides a user-friendly menu to navigate through the menu system and be ready to function. This controller also has an audio alarm with selectable sound patterns, to alert you to any potential problems.
- **BMS Capability** — dara-4g² can be equipped with an optional network communication card that allows for an interface with BMS or BAS systems using Modbus RTU, Modbus TCP/IP, BACnet MSTP, and BACnet IP.

WIRING



For complete wiring instructions and Operations Manual, visit www.dataaire.com.

Additional Design Features:

- Fuses protected 24 VAC power input
- Built-in LCD with system status
- Power On/Off slide switch
- 4 control relays with 8 amp non-power control contacts
- Audible alarm with selectable sound patterns
- A form C summary alarm contacts for remote alarm status monitoring
- Force rotation menu for rotation pattern selections
- Four alarm inputs dry contacts
- Units manual bypass switches
- Soft buttons for programming
- Menus driven to program
 - Number of units connected
 - Number of units on
 - Lead unit selection
- Optional zone temperature sensor for monitoring and control
- High zone temperature setpoint
- Manual diagnostic test
- Two levels passwords for security
- Date & time display with real time clock
- Rotation schedule display
- Current units status with lead unit indicator
- Historical data for alarm history and units' runtimes
- Silence alarm button to reset alarm units
- Units on fail-safe
- USB port for firmware upgrade
- Optional BACnet MSTP, BACnet IP and Modbus RTU network card for BMS interface

| SPECIFICATIONS | |
|----------------------------------|---|
| Power Requirements | 24 VAC @ 50/60 Hz, 1A |
| Remote Alarm Contacts rating | 10 Amps maximum @ 24VAC |
| Power supply Fuse F1, F2 | 2 Amps @250 V, 5X20 mm fast-acting miniature fuse |
| Control Output Contacts rating | 8 Amp @ 24 VAC |
| Alarm Inputs | DI-None Power Contacts |
| Connection | Miniature screw-type terminals |
| Wiring | 18 AWG |
| Dimensions (L x W x H) in inches | 14" x 9" x 2.5" |
| Shipping Weight | 8 lbs |