

Master Control Systems, Inc.
Engineering Bulletin

Date: 2000.12.11
To: All M.C.S. Representatives
CC: Wm. F. Stelter, D. P. Carrier, J. Nasby, K. Meyer, B. Urbanik
From: Lorenzo Di Maso, Product Design Engineer
Re.: New Models **SRAP and DRAP** -- Fire Pump Controller Alarm Sets.

This is a field service, sales and application bulletin.

We are pleased to introduce two new series of Alarm Sets for use with our Diesel and Electric Fire Pump Controllers. Namely:

- Model SRAP - Single A.C. Power (Mains) Input Remote Alarm Panel
- Model DRAP - Dual A.C. Input Power (Mains) Input Remote Alarm Panel

The SRAP series will replace the extant RAP alarm set series, while the DRAP series will replace the current MCAP and MCAP-1 series.

Both of these new models feature the following:

- 1) Full repetitive alarm circuitry. Every alarm will re-activate the audible alarm.
- 2) Isolated low voltage alarm circuitry. Nominal 24 Vdc alarm input circuitry to simplify wiring and reduce A.C. line interference.
- 3) Reed Relay control circuitry for high reliability and long life.
- 4) Modular plug-in circuit boards to ease field replacement.
- 5) Both models are available from 1 to 15 alarms.
- 6) U.L. Listing (Panel Builder's Listing) on all units.
- 7) Large bright incandescent pilot lights for alarms and power indication.
- 8) Door mounted lamp sockets make the units "Re-Lampable" from the outside.
- 9) Both Primary and Secondary fusing.
- 10) Fuses replaceable from the outside.
- 11) Continued use of Heavy Duty #16 gauge steel hinged and gasketed enclosures.
- 12) Baked Enamel Fire Pump Red paint finish.
- 13) Heavy duty S.P.D.T. (Form "C") Alarm Output contacts.
- 14) Large Heavy duty wiring terminals bars accommodate solid, stranded or ring-lug wiring.
- 15) Modest alarm contact current draw allows the same long wiring (run) lengths.
- 16) Rugged low impedance alarm input circuits avoid overly sensitive alarm circuit problems.

Engineering Bulletin -- cont'd

We created a new family of customer drawings for this new version transfer switch circuitry. Copies of the following drawings are attached.

- 15??? -- External Wiring, SRAP-3 to DCFRA/DCMRA Fire Pump Controller
- 15??? -- Schematic Diagram, SRAP-4 to DCFRA/DCMRA Fire Pump Controller
- 15??? -- External Wiring, SRAP-4 to DCFRA/DCMRA-0 Fire Pump Controller
- 15??? -- Schematic Diagram, SRAP-4 to DCFRA/DCMRA-0 Fire Pump Controller

- 12??? -- External Wiring, DRAP-3 to EC* Single Source Fire Pump Controller
- 12??? -- Schematic Diagram, DRAP-4 to EC* Single Source Fire Pump Controller
- 12??? -- External Wiring, DRAP-5 to EC*T Dual Source Fire Pump Controller
- 12??? -- Schematic Diagram, DRAP-4 to EC*T Dual Source Fire Pump Controller

- 14??? -- External Wiring, DRAP-3 to MC* Single Source Fire Pump Controller
- 14??? -- Schematic Diagram, DRAP-4 to MC* Single Source Fire Pump Controller
- 14??? -- External Wiring, DRAP-5 to MC*T Dual Source Fire Pump Controller
- 14??? -- Schematic Diagram, DRAP-4 to MC*T Dual Source Fire Pump Controller

- 112?? -- External Wiring, DRAP-3 to MC* Single Source Fire Pump Controller
- 112?? -- Schematic Diagram, DRAP-4 to MC* Single Source Fire Pump Controller

The above drawings are illustrative only. Either model alarm set can be used with any fire pump controller. Another common configuration is SRAP-8 for DCFRA or DCMRA with Option "7" (Individual Alarms) -or- SRAP-15 for DCFRA or DCMRA with both Option "7" and Option "0" (Pump House Trouble Alarms). The 15 alarms are the basic eight Engine and Controller Alarms plus six "0" Pump House Alarms plus the Switch Off (Switch Not In "Auto") alarm.

On EC** series controllers equipped with Option "O" (Pump Room alarms) or one or more Option "Q" (Individual Alarm Contacts) or any of the Mod. 17 or Mod 31 alarms can be wired to DRAP alarm sets having up to 15 alarm inputs (DRAP-15).

We're well pleased with these new designs. Our Product Designer, Karl Meyer, was the lead designer of these new units. The modularity, reliability and aesthetic design are the result of substantial work and many revisions prior to the release of these new product lines.

As always, replacement parts, instruction manuals and support are available for all of our previous version Alarm Sets. Also, don't hesitate to contact us if you have questions on these new models.