HEVAC

PRE PROGRAMMED SIEMENS LOGO PLC as
UNIVERSAL DUTY / FAULT C/O CONTROLLER
for PUMPS, FANS & A/C UNITS

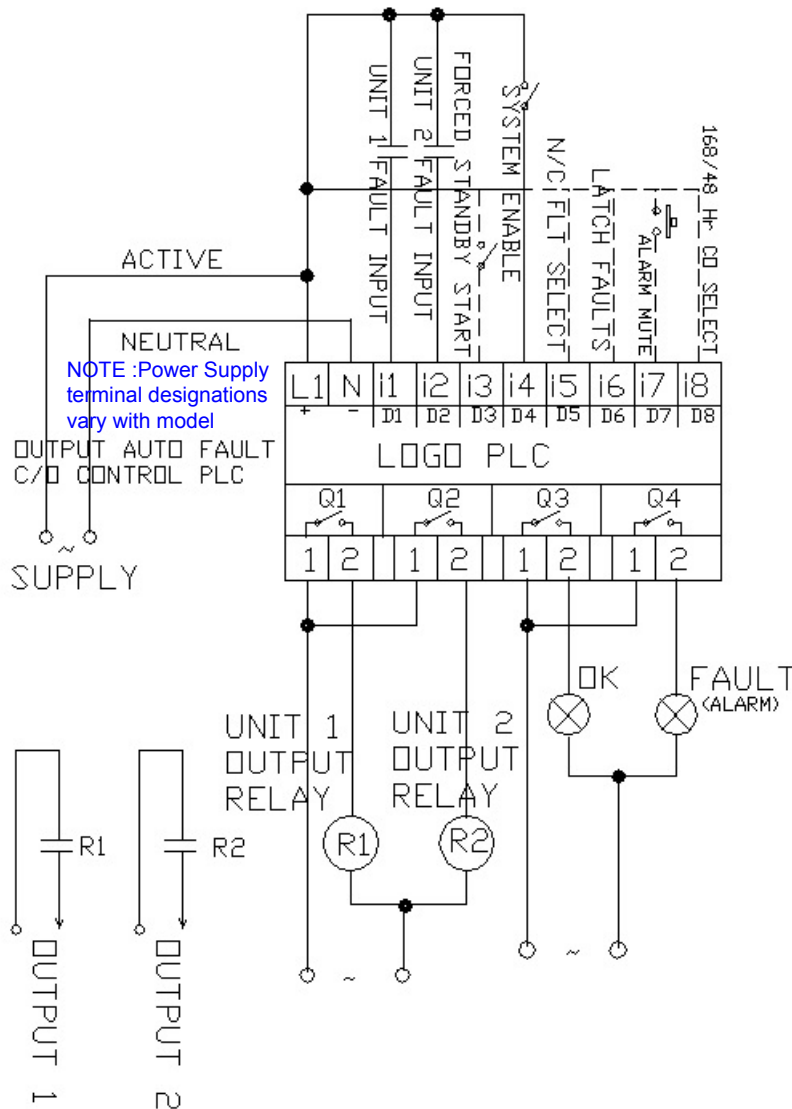UPDATED PROGRAM 01/08/19

24v or 240v Versions
8 DIGITAL INPUTS
4 RELAY OUTPUTS

- PRE-PROGAMMED WITH APPROPRIATE SETTINGS & OPTIONS FOR DUTY/FAULT C/O

- AUXILIARY INPUT TO FORCE START STANDBY UNIT (example: External Hi-temp T/stat)

- RESETTABLE TOTAL Hours RUN COUNTERS & HOURS to C/O TIMERS

- SELECTABLE AUTO C/O @ 48 Hrs (2 days) **or** 168 Hrs (1 week) run time

- FAULT INPUTS CAN BE SET AS N/O or N/C

- FAULT INPUTS CAN SET AS AUTO RESET OR LATCHED

- ALARM OUTPUT MUTEABLE BY REMOTE PUSH BUTTON

- DIN RAIL MOUNT, SUITS M.C.B ENCLOSURES

- PLAIN ENGLISH SCROLLING LCD DISPLAY SHOWING INPUT & OUTPUT STATUS

- 24v or 240vAC VERSIONS, O/P RELAYS ARE POTENTIAL FREE IN EITHER VERSION.

This pre-programmed Siemens Logo PLC has been primarily programmed for use as a PUMP, FAN or A/C UNIT Automatic Duty / Fault change over control module. With no faults the module will automatically swap the programmed output relays Q1 & Q2 after either 48 or 168 selectable hours of respective run time. I/O status, C/O timer "remaining run hours" & "total run time" are displayed on the LCD screen. Fault inputs can be set as N/O or N/C and also as either auto reset or latched inputs. If auto reset faults is selected, when a fault condition occurs in relation to the duty output, after 15 seconds the standby output will also energise, when the fault clears the outputs will return to the previous run state. If latched faults are selected, on fault the duty output is inhibited and locked out and the standby output energises, to reset a latched fault condition either break & remake the system enable input "i4" or power recycle this module. Fault conditions are only recognised when an output is called to be running. An auxiliary input (i3) is also available to force into operation the standby unit - typical use is to force on the standby A/C unit due to high temperature (via a connected on/off thermostat) in a computer rooms where the primary A/C unit isn't coping with the load. The Q3 relay activates as a common run & enabled indication output when either Q1 or Q2 relays are energised & Q4 relay activates as a common fault output. The fault output Q4 can be forced off (mute function) by either pressing buttons on the modules fascia (ESC & V buttons together) or via a momentary input into "i7".

ACTIVE

NEUTRAL

NOTE :Power Supply terminal designations vary with model

OUTPUT AUTO FAULT C/O CONTROL PLC

SUPPLY

UNIT 1 FAULT INPUT
UNIT 2 FAULT INPUT
FORCED STANDBY START
SYSTEM ENABLE
N/C FLT SELECT
LATCH FAULTS
ALARM MUTE
168/48 Hr C/O SELECT

| L1 | N | i1 | i2 | i3 | i4 | i5 | i6 | i7 | i8 |
| + | − | D1 | D2 | D3 | D4 | D5 | D6 | D7 | D8 |

LOGO PLC

| Q1 | | Q2 | | Q3 | | Q4 | |
| 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |

UNIT 1 OUTPUT RELAY

UNIT 2 OUTPUT RELAY

OK

FAULT (ALARM)

R1

R2

(R1)

(R2)

OUTPUT 1

OUTPUT 2

1.) OUTPUTS AUTOMATICALY C/O AFTER EITHER 48 OR 168 HOURS OF RUN TIME, SELECT BY A LINK IN "I8" – IN=168 hours

2.) STANDBY OUTPUT ENERGISES AUTOMATICALY 15 SECONDS AFTER FAULT INPUT ON DUTY UNIT.

3.) ACTIVE ON "I4" ENABLES OPERATION

4.) ACTIVE ON "I5" SETS FAULT INPUTS AS NORMALLY CLOSED INSTEAD OF NORMALLY OPEN, FAULTS ARE ONLY RECOGNISED IF OUTPUT IS BEING CALLED TO OPERATE.

5.) ACTIVE ON "I6" SETS FAULT INPUTS TO LATCH ON FAULT. IF "I6" OPEN FAULTS AUTO RESET. LATCHED FAULTS CAUSE THE RESPECTIVE O/P TO TURN OFF, AUTO RESET LEAVES O/P ENABLED TO ALLOW AUTO RESET ON FAULT CLEAR. TO CLEAR LATCHED FAULTS EITHER BREAK & MAKE THE "I4" ENABLE INPUT OR RECYCLE POWER TO THIS MODULE.

6.) OUTPUT RELAYS ARE INDEPENDANT & VOLTAGE FREE RATED AT 10A res.

7.) PRESSING BOTH THE "ESC" & THE "DOWN" ARROW BUTTONS TOGETHER DISABLES THE FAULT INDICATION OUTPUT Q4 & IS INTENDED AS A SIREN MUTE ABILITY- SAME AS "I7" ACTION.

8.) O/P 1 HRS RUN COUNTER & C/O TIMER CAN BE RESET BY PRESSING THE "ESC" BUTTON & THE LEFT ARROW BUTTON TOGETHER

O/P 2 HRS RUN COUNTER & C/O TIMER CAN BE RESET BY PRESSING THE "ESC" BUTTON & THE LEFT ARROW BUTTON TOGETHER

9.) ACTIVE CONNECTION INTO I/P "i3" FORCES "ON" STANBY UNIT.

10.) PRESSING THE "ESC" & THE "UP" ARROW BUTTONS TOGETHER WILL CAUSE BACL LIGHT TO ILLUMINATE FOR 10 MINUTES.

11.) TO SELECT THE AUTOMATIC C/O OVER RUN PERIOD LEAVE INPUT "I8" OPEN FOR 48 Hr (2 DAYS) C/O OVER OR INSERT LINK TO CHOOSE 168 Hr (WEEKLY) RUN TIME C/O.

LCD DISPLAY

RESET COUNTER 1

LIGHT

RESET COUNTER 2

MUTE

ESC

OK

PRESS BUTTON WITH 'ESC' BUTTON

98 (1/2 to 4/2)
90.0

45.0

12

13
12
16
26
55
60

90.0