

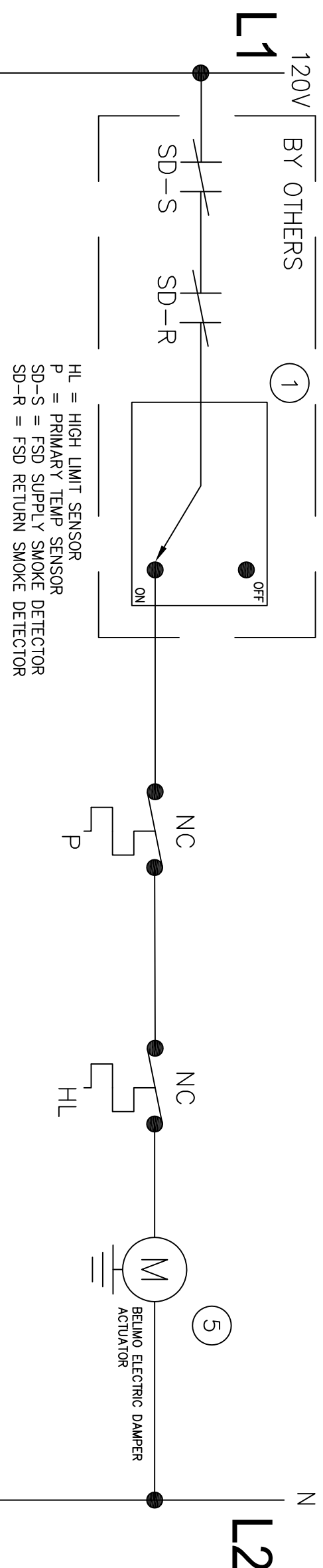
ELEVATION  
NO SCALE

FIRE AND SMOKE DAMPER DETAIL

- ITEM.
1. ELECTRICAL DISCONNECT (WITH MANUAL SWITCH)
  2. DAMPER BLADES
  3. FLEX CONDUIT (OUT OF AIRSTREAM)
  4. DAMPER FRAME
  5. BELIMO ACTUATOR (OUT OF AIRSTREAM, ON DUCT EXTERIOR)
  6. DAMPER SHAFT
  7. DAMPER SLEEVE
  8. CONVENTIONAL MOUNTING ANGLES (TYP. FOR 4)
  9. SLEEVE TO DUCT CONNECTION
  10. DAMPER POSITION INDICATOR (SEE NOTE (F)):  
ARROWS HORIZONTAL – DAMPER OPEN  
ARROWS VERTICAL – DAMPER CLOSED
  11. FIRE/SMOKE RATED WALL
  12. FIRE RATED CAULKING BETWEEN SLEEVE AND WALL
  13. HEAT DETECTOR – PER UL555S
  14. DAMPER ACCESS DOOR IN DUCT – SIZE AS SPECIFIED
  15. 24"x24" ACCESS DOOR IN CEILING TO ACTUATOR DISCONNECT

NOTES:

- A. MOUNT FIRE/SMOKE DAMPER ACTUATORS OUTSIDE DUCTWORK. CEILING ACCESS TO ALL DETECTORS AND ACTUATORS MUST BE LARGE ENOUGH TO ALLOW SERVICING REPLACEMENT AND REPAIR PER NFPA 72 SECTION 5.4.4
- B. SMOKE DETECTOR RELAYS AND DAMPER ACTUATORS SHALL BE RATED AT 120 VOLTS AND CONNECTED TO "NORMAL" POWER
- C. FIRE/SMOKE DAMPERS SHALL BE "FAIL SAFE" AND CLOSE UPON LOSS OF NORMAL POWER
- D. ALL CONDUCTORS MUST BE TERMINATED AND/OR SPLICED PROPERLY IN DEVICES AND JUNCTION BOXES WITH WIRES LABELED PER CAMPUS STANDARD 16720
- E. FOR ROUND DUCT USE ROUND FIRE/SMOKE DAMPER – RUSKIN MODEL FSDR25. INCLUDE CURVED ACCESS DOOR
- F. DAMPER SHAFT SHOULD ALSO INDICATE DAMPER POSITION WITH A RED COLORED ARROW AT THE TIP OF THE SHAFT



- HL = HIGH LIMIT SENSOR  
P = PRIMARY TEMP SENSOR  
SD-S = FSD SUPPLY SMOKE DETECTOR  
SD-R = FSD RETURN SMOKE DETECTOR

FSD WIRING DETAIL