

COURTHOUSE AND LEC IR SCANNING

RACINE COUNTY

COURTHOUSE AND LEC ELECTRICAL EQUIPMENT IR SCANNING

INDEX

Specification Section 26 01 26 Thermal IR Scanning	2 Sheets
Courthouse Electrical Equipment List	33 Sheets
LEC Electrical Equipment List	38 Sheets

SECTION 26 01 26 Thermal IR Scanning

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Work included.

1.2 RELATED SECTIONS

- A. Racine County General Specifications and Requirements.

1.3 REFERENCES AND REGULATORY REQUIREMENTS

- A. ANSI/NFPA 70 - National Electrical Code.
- B. NFPA 70B – Recommended Practice for Electrical Equipment Maintenance.
- C. NFPA 70E – Standard for Electrical Safety in the Workplace.
- D. OSHA – Occupational Safety and Health Standards for General Industry 29 CFR Part 1910
- E. NETA MTS – Standard for Maintenance Testing Specifications.
- F. All state and local codes.

1.4 WORK INCLUDED

- A. Perform thermal IR scan of Law Enforcement Center and Courthouse switchboards, panelboards, motor control center disconnects and starters, large distribution disconnects, generator circuit breakers and automatic transfer switches per electrical distribution equipment lists and 2023 NETA MTS testing specifications. Thermal IR scan shall include all components and connections of equipment listed. Site was walked and existing drawings studied to compile the list of equipment. In case any newer electrical items were missed, provide unit thermal IR scan pricing for a panelboard up to 42 circuits, a large distribution disconnect and an automatic transfer switch. Any additional major distribution equipment found shall have a thermal image scan done at the same time as the other equipment on the list.
- B. Electrical equipment to be inspected shall be energized and under normal load. Equipment shall be inspected to determine any unsafe conditions. If unsafe conditions are found, the unsafe conditions shall be corrected before proceeding with thermal inspection. This may include scheduling a power shutdown of equipment to correct any minor issues. Power is not to be shut off for any equipment without notifying the owner. Any major issues shall be brought to the attention of the owner. Electrical equipment enclosures shall be opened to provide line of sight access to lugs, bus, connections, circuit breakers, fuses or other components.
- C. Before submitting a bid, each bidder shall examine the documents relating to their work and shall become fully informed as to the extent and character of the work required. The Testing Contractor and any subcontractors (Electrical Contractor) shall visit the site of construction to familiarize himself with the site and existing conditions so as to become fully informed as to the extent and character of the work. Failure to provide for the cost of all contingencies in the original bid will not be accepted as an excuse for extra payment.
- D. Provide a Thermographic Survey Report per 2023 NETA MTS testing specifications. Report

shall include a description and location of the equipment tested, any discrepancies, any temperature difference between the area of concern and the reference area, probable cause of concern, areas inspected, load conditions at time of inspection, photographs and thermographs of inspected equipment and recommendations for repair. Three paper copies and PDF files of report shall be provided to owner. Final report shall be given to the owner within 30 days of starting the thermal imaging scans.

- E. Bids to include cost of all necessary equipment, transportation, parking, labor and coordination/scheduling with owner for labor for a complete thermal infrared inspection and report with recommendations.

1.5 QUALITY ASSURANCE AND WARRANTY

- A. Qualifications of installers: For the testing of the work of this section, use only thoroughly trained and experienced personnel who are completely familiar with the requirements for this work and with the testing requirements for each specific piece of testing equipment. All thermal IR technicians shall be NETA certified. Journeyman electricians may assist in the opening of equipment for thermal IR scans. Thermal IR Company shall be accredited by NETA. All thermal IR scans supervised by a NETA level 3 technician. All employees shall have a background check completed by Racine County (see Racine County Specifications and Requirements).
- B. Perform work to meet all testing standards and safety codes.

END OF SECTION

RACINE COUNTY

COURTHOUSE ELECTRICAL EQUIPMENT LIST

Electrical equipment list provided as a basis for Thermal Imaging Scans and Report. Transformers are not to be included in the thermal IR scans. Any transformers in the equipment list are only shown for reference.



Figure 1: Switchboard MSB/PA on left, USS LA on right in subbasement electrical room

Switchboard MSB/PA (Square D Power Style Switchboard, Courthouse Subbasement):

From right hand side:

480V line from 2000KVA oil filled transformer

480V, 600A Bolted Pressure Switch Unit Substation USS/LA

480V, 400 Amp fire pump fused switch unit

480V, 1600 Amp Bolted Pressure Contact Switch Switchboard MSB/PB

COURTHOUSE AND LEC IR SCANNING

480V, 800 Amp Bolted Pressure Contact Switch for left distribution section
480V, 200A Circuit #1 Panel PA2, PA5 fused switch unit
480V, 200A Circuit #2 Panel PB2, PB5 fused switch unit
480V, 200A Circuit #3 spare (off) fused switch unit
480V, 100A Circuit #4 Hoist fused switch unit
480V, 100A Circuit #5 spare (off) fused switch unit
480V, 400A Circuit #6 Panel SB PA fused switch unit
480V, 600A Circuit #7 Emergency Transfer Switch fused switch unit

Unit Substation USS LA (Square D Power Style Switchboard, Courthouse Subbasement):

From left hand side:

480 – 120/208Y 500KVA Transformer
120/208V, 1600 Amp Bolted Pressure Contact Switch Distribution section
120/208Y, 100A Spare circuit breaker
120/208Y, 100A Spare circuit breaker
120/208Y, 150A Panel 2/LA circuit breaker
120/208Y, 150A Panel 2/LB circuit breaker
120/208Y, 150A Panel 3/LA circuit breaker
120/208Y, 150A Panel 3/LB circuit breaker
120/208Y, 150A Panel 4/LA circuit breaker
120/208Y, 150A Panel 4/LB circuit breaker
120/208Y, 200A Panel 5/LA, 6/LA circuit breaker
120/208Y, 200A Panel 5/LB, 6/LB circuit breaker
120/208Y, 200A Panel B/LA circuit breaker
120/208Y, 200A Panel B/LB circuit breaker
120/208Y, 200A Panel 1/LA circuit breaker
120/208Y, 200A Panel 1/LB circuit breaker
120/208Y, 200A Spare circuit breaker
120/208Y, 200A Spare circuit breaker
120/208Y, 150A Spare circuit breaker
120/208Y, 150A Spare circuit breaker



Figure 2: Panelboard MDP in Courthouse basement boiler room

Panel MDP (Square D I-Line, 120/208Y, 300A MCB, Courthouse basement boiler room):

From top:

- 120/208Y, 150A, West Column Panel SB circuit breaker
- 120/208Y, 200A, Panel MCC-N circuit breaker
- 120/208Y, 30A, East Boiler #1 circuit breaker
- 120/208Y, 100A, Panel SB/LA circuit breaker
- 120/208Y, 20A, West Boiler #3 circuit breaker
- 120/208Y, 20A, West Boiler #4 circuit breaker



Figure 3: Motor Control Center MCC-N in Courthouse basement boiler room

Motor Control Center MCA-N (Square D QMB Saflex, LEC Basement Boiler Room):

From top:

Square D QMB Saflex Motor Control Center Section #1, 480V, 400A

208V, 30A Spare fused switch unit and starter

208V, 30A, Small Condensate Tank switched fuse unit and starter

208V, 30A Spare switched fuse unit and starter

208V, 30A Spare switched fuse unit and starter

208V, 30A Boiler #2 switched fused unit and starter

208V, 30A Spare switched fuse unit and starter

208V, 30A Pump #7 switched fuse unit

208V, 30A Pump #8 switched fuse unit

COURTHOUSE AND LEC IR SCANNING



Figure 4: Panelboard EP/B in subbasement maintenance shop

Panel EP/SB (Square D I-Line HCN, 480V, 3 PH, 3 W, Courthouse subbasement):

From top:

480V, 30A, Circuit 1 Domestic Booster Pumps #1, #2 circuit breaker

480V, 15A, Circuit 2 Condensate Pumps Heat Exchanger 3 circuit breaker

480V, 30A, Circuit 3 Sanitary Sewer Pump circuit breaker

480V, 30A, Circuit 4 Storm Water Pumps circuit breaker

480V, 15A, Circuit 5 Fire Pump Exhaust Fan circuit breaker

480V, 50A, Circuit 6 Jail Processed Hot Water Pump 5 circuit breaker

COURTHOUSE AND LEC IR SCANNING

480V, 15A, Circuit 7 Courthouse Domestic Hot Water Pump circuit breaker

480V, 50A, Circuit 8 Jail Processed Hot Water Pump 6 circuit breaker

480V, 15A, Circuit 9 Condensate System circuit breaker

480V, 30A, Circuit 10 Combustion Air Unit #1 circuit breaker

COURTHOUSE AND LEC IR SCANNING



Figure 5: Panelboard SB/PA in subbasement maintenance shop

Panel SB/PA (Square D I-Line HCN, 480V, 3 PH, 3 W, Courthouse subbasement):

From top:

- 480V, 15A, Circuit 1 Exhaust Garage circuit breaker
- 480V, 15A, Circuit 2 Exhaust Switchgear Room circuit breaker
- 480V, 50A, Circuit 3 Spare circuit breaker
- 480V, 30A, Circuit 4 Spare circuit breaker
- 480V, 100A, Circuit 5 Panel B/PA circuit breaker



Figure 6: Generator 700A circuit breaker (GE) in basement generator room

Courthouse 700A generator circuit breaker
Schedule IR scan of generator circuit breakers during generator test.

COURTHOUSE AND LEC IR SCANNING



Figure 7: ATS #1, Panel EP/B in basement generator room

ATS #1, 600 A, 480V

Panel EP/B (Square D I-Line HCW, Courthouse basement generator room)

ATS #2, 150 A, 480V (not shown)

Schedule IR scan of automatic transfer switches during normal and emergency power conditions.

COURTHOUSE AND LEC IR SCANNING



Figure 8: Panel EP/B, 600A Fire Pump Disconnect, 600A Panel EP/B disconnect

Panel EP/B (Square D I-Line HCW, Courthouse basement generator room)
480V, 600A Fire Pump Disconnect
480V, 600A, Panel EP/B Disconnect

COURTHOUSE AND LEC IR SCANNING



Figure 9: Courthouse Fire Pump Controller in subbasement fire protection room

Fire Protection Controller, 480V

Schedule IR scan of fire pump controller during normal and emergency power conditions.



Figure 10: Panelboard EP/B in basement generator room

Panel EP/B (Square D I-Line HCW, Courthouse basement generator room):

From top:

- 277/480V, 80A, Circuit 1 Panel EL-B Transformer circuit breaker
- 277/480V, 400A, Circuit 2 Panel EP-12 circuit breaker
- 277/480V, 15A, Circuit 3 Compressor in garage (east) circuit breaker
- 277/480V, 15A, Circuit 4 Generator room exhaust fan circuit breaker
- 277/480V, 15A, Circuit 5 Compressor in garage (west) circuit breaker
- 277/480V, 15A, Circuit 6 Generator radiator circ pump circuit breaker
- 277/480V, 15A, Circuit 7 Transformer exhaust fan circuit breaker
- 277/480V, 15A, Circuit 8 Generator cooling fan (west) circuit breaker
- 277/480V, 125A, Circuit 9 Panel EP-SB circuit breaker
- 277/480V, 15A, Circuit 10 Generator cooling fan (east) circuit breaker
- 277/480V, 150A, Circuit 11 Transformer boiler room circuit breaker
- 277/480V, blank, Circuit 12
- 277/480V, 50A, Circuit 13 Spare (off) circuit breaker
- 277/480V, blank, Circuit 14



Figure 11: Panel EL/B

Panel EL/B (Square D NQOB, 150A MCB, 42 circuit panel, basement generator room)



Figure 12: Panelboard 2/PA in first floor electrical closet

Panel 2/PA (Square D I-Line, Courthouse first floor electrical closet):

From top:

- 277/480V, 20A, Circuit 1 1-5 EBC circuit breaker
- 277/480V, 20A, Circuit 2 2-6 EBC circuit breaker
- 277/480V, 20A, Circuit 3 7-11 EBC circuit breaker
- 277/480V, 20A, Circuit 4 8-12 EBC circuit breaker
- 277/480V, 20A, Circuit 5 13-17 EBC circuit breaker

COURTHOUSE AND LEC IR SCANNING

277/480V, 20A, Circuit 6 14-18 EBC circuit breaker

277/480V, 20A, Circuit 7 19-23 EBC circuit breaker

277/480V, 30A, Circuit 8 20-24 EBC circuit breaker

COURTHOUSE AND LEC IR SCANNING



Figure 13: Panelboard 2/PB in second floor electrical closet

Panel 2/PB (Square D I-Line HCN, 480V, 225A, Courthouse second floor electrical closet):

From top:

480V, 20A, Circuit 1 EBC circuit breaker

480V, 20A, Circuit 2 EBC circuit breaker

480V, 20A, Circuit 3 EBC circuit breaker

480V, 20A, Circuit 4 EBC circuit breaker

480V, 20A, Circuit 5 EBC circuit breaker



Figure 14: Panelboard 5/PA in fifth floor electrical closet

Panel 5/PA (Square D I-Line HCN, 480V, 225A, Courthouse fifth floor electrical closet):

From top:

480V, 20A, Circuit 1 EBC circuit breaker

480V, 20A, Circuit 2 EBC circuit breaker

480V, 20A, Circuit 3 EBC circuit breaker



Figure 15: Panelboard 5/PB in fifth floor electrical closet

Panel 5/PB (Square D I-Line HCN, 480V, 225A, Courthouse fifth floor electrical closet):

From top:

- 480V, 20A, Circuit 1 EBC circuit breaker
- 480V, 20A, Circuit 2 EBC circuit breaker
- 480V, 20A, Circuit 3 EBC circuit breaker
- 480V, 20A, Circuit 4 EBC circuit breaker
- 480V, 20A, Circuit 5 EBC circuit breaker
- 480V, 20A, Circuit 6 EBC circuit breaker
- 480V, 20A, Circuit 7 EBC circuit breaker



Figure 16: Panelboard 10/PA in tenth floor electrical closet

Panel 10/PA (Square D I-Line HCN, 480V, 100A, Courthouse tenth floor electrical closet):

From top:

- 480V, 15A, Circuit 1 EBC circuit breaker
- 480V, 15A, Circuit 2 EBC circuit breaker
- 480V, 15A, Circuit 3 Reheat Box circuit breaker
- 480V, 15A, Circuit 4 Reheat Box circuit breaker
- 480V, 15A, Circuit 5 Reheat Box circuit breaker
- 480V, 50A, Circuit 6 Existing circuit breaker



Figure 17: Panelboard 10/PB in tenth floor electrical closet

Panel 10/PB (Square D I-Line HCN, 480V, 100A, Courthouse tenth floor electrical closet):

From top:

- 480V, 15A, Circuit 1 EBC circuit breaker
- 480V, 15A, Circuit 2 EBC circuit breaker
- 480V, 15A, Circuit 3 Reheat Box circuit breaker
- 480V, 15A, Circuit 4 Reheat Box circuit breaker
- 480V, 15A, Circuit 5 EBC circuit breaker
- 480V, 15A, Circuit 6 Reheat Boxes circuit breaker
- 480V, 15A, Circuit 7 EBC circuit breaker
- 480V, 70A, Circuit 8 Spare circuit breaker



Figure 18: Switchboard MSB/PB in Twelfth Floor Electrical Room

Switchboard MSB/PB (Square D Power Style Switchboard, Twelfth Floor Electrical Room):

From right hand side:

- 480V, 1600A feeder from Switchboard MSB/PA in subbasement
- 480V, 1600A Bolted Pressure Switch Unit Switchboard MSB/PB Main
- 480V, 400 Amp Chiller fused switch unit
- 480V, 600A Circuit #1 USS/LB fused switch unit
- 480V, 200A Circuit #2 Elevator fused switch unit
- 480V, 200A Circuit #3 Panel PA/12 fused switch unit
- 480V, 200A Circuit #4 spare (off) fused switch unit
- 480V, 100A Circuit #5 Panel PB/10 fused switch unit
- 480V, 100A Circuit #6 Panel PB/10 fused switch unit
- 480V, 60A Circuit #7 Panel CPC/A fused switch unit
- 480V, 60A Circuit #8 Spare (off) fused switch unit



Figure 19: Unit Substation USS LB in Twelfth Floor Electrical Room

Unit Substation USS LB (Square D Power Style Switchboard, Twelfth Floor Electrical Room):

From left hand side:

480 – 120/208Y 300KVA Transformer

120/208V, 1200 Amp Bolted Pressure Contact Switch for I-Line circuit breaker distribution section

120/208Y, 100A Spare circuit breaker

120/208Y, 200A Panel 12 RP circuit breaker

120/208Y, 100A Panel LA/12 circuit breaker

120/208Y, 200A Spare circuit breaker

120/208Y, 100A Panel 11/LB circuit breaker

120/208Y, 200A Panel 9/LB, 10/LB circuit breaker

120/208Y, 200A Panel 7/LB, 8/LB circuit breaker

120/208Y, 100A Panel 11/LA circuit breaker

120/208Y, 200A Panel 9/LA, 10/LA circuit breaker

120/208Y, 200A Panel 7/LB, 8/LB circuit breaker



Figure 20: Panel 12/EP in Twelfth Floor Electrical Room

Panel 12/EP (Square D I-Line HCM, 480V, 400A, Courthouse twelfth floor electrical closet):

From top:

- 480V, 15A, Circuit 1 SF-2 Stair Fan circuit breaker
- 480V, 15A, Circuit 2 SF-1 Stair Fan circuit breaker
- 480V, 20A, Circuit 3 Elevator Relay Panel circuit breaker
- 480V, 20A, Circuit 4 Ref 1 circuit breaker
- 480V, 30A, Circuit 5 Hot Water Heating Pump circuit breaker

COURTHOUSE AND LEC IR SCANNING

480V, 40A, Circuit 6 Ref 2 circuit breaker
480V, 60A, Circuit 7 AC-1 circuit breaker
480V, 80A, Circuit 8 Transformer circuit breaker
480V, 250A, Circuit 9 Elevator Emergency Power circuit breaker
480V, 70A, Circuit 10 AC-2 circuit breaker
480V, 150A, Circuit 11 MDP-1 circuit breaker
480V, 30A, Circuit 12 Hot Water Heating Pump 2 circuit breaker
480V, 50A, Circuit 13 New AC LEIBERT circuit breaker
480V, 15A, Circuit 15 New ACCU-1 Roof Unit LEIBERT circuit breaker

ATS, 250 Amp for Elevator Control (not shown) is no longer used. IR scan not required.
Elevator #1 Fused Disconnect (not shown), mechanical penthouse
Elevator #1 Controller (not shown), mechanical penthouse
Elevator #2 Fused Disconnect (not shown), mechanical penthouse
Elevator #2 Controller (not shown), mechanical penthouse
Elevator #3 Fused Disconnect (not shown), mechanical penthouse
Elevator #3 Controller (not shown), mechanical penthouse



Figure 21: Panel 12/PA in Twelfth Floor Electrical Room

Panel 12/PA (Square D I-Line HCM, 480V, 225A, Courthouse twelfth floor electrical closet):

From top:

480V, 15A, Circuit 1 PRV-2 circuit breaker

480V, Blank filler

480V, 15A, Circuit 3 EF-1 circuit breaker

480V, 20A, Circuit 4 CHP #1 circuit breaker

480V, 40A, Circuit 5 Spare circuit breaker

COURTHOUSE AND LEC IR SCANNING

480V, 20A, Circuit 6 CHP #2 circuit breaker

480V, 40A, Circuit 7 Chiller pump 1 circuit breaker

480V, 30A, Circuit 8 Spare circuit breaker

480V, 70A, Circuit 9 Chiller Pump 2 circuit breaker

480V, 70A, Circuit 10 Spare circuit breaker

COURTHOUSE AND LEC IR SCANNING



Figure 22: MDP-1 Distribution (Cutler-Hammer PRL2A, 277/480Y, 225A)

Panel MDP-1: Cutler-Hammer PRL2A, 277/480Y, 225A, MLO, 42 circuit
480V, 80A, Circuit 1 UPS input (LIEBERT) circuit breaker
480V, 70A, Circuit 2 Bypass Transformer TR-1 circuit breaker



Figure 23: UPS1 Distribution

UPS Maintenance Bypass Panelboard MBP-1(Liebert - GE):

From top:

120/208V, 150A Maintenance isolation breaker

120/208Y, 150A Maintenance bypass breaker

120/208Y, 150A Bypass isolation breaker

COURTHOUSE AND LEC IR SCANNING

Branch circuit Panelboards:

Subbasement:

Panel SB/LA: Square D NQOB, 120/208V, 200A, MLO, 42 circuit

Panel SB: Square D QO, 120/208V, 100A, MLO, 20 circuit

Panel SB/A: Square D QO, 120/208V, 100A, MLO, 18 circuit

Basement:

Panel B/LA: Square D NQOB double tub, 120/208V, 225A, MLO, 30 circuit each

Panel CF1, CF2 (B/LB): Square D NQOB double tub, 120/208V, 225A, MLO, 30 circuit each

First Floor:

Panel 1/LA left, right: Square D NQOB double tub, 120/208V, 225A, MLO, 42 circuit each

Panel 1/LB left, right: Square D NQOB double tub, 120/208V, 225A, MLO, 42 circuit each

Second Floor:

Panel 2/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 2/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Third Floor:

Panel 3/LA: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Panel 3/LB: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Panel 3/EL: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Fourth Floor:

Panel 4/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 4/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Fifth Floor:

Panel 5/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 5/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Sixth Floor:

Panel 6/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 6/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 6/EL: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Seventh Floor:

Panel 7/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 7/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

COURTHOUSE AND LEC IR SCANNING

Eighth Floor:

Panel 8/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 8/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Ninth Floor:

Panel 9/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 9/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 9/EL: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Tenth Floor:

Panel 10/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 10/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Eleventh Floor:

Panel 11/LA: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 11/LB: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 11/EL: Square D NQOB, 120/208Y, 100A, MLO, 12 circuit

Panel UA1: Cutler-Hammer PRL-1A double tub, 120/208Y, 225A, MLO, 42 circuit each

Panel UA2: Cutler-Hammer PRL-1A, 120/208Y, 225A, MLO, 42 circuit

Panel CPC/A: 120/208Y, 225A, MLO, 42 circuit

Twelfth Floor:

Panel RP/12: Square D NQOB, 120/208Y, 225A, MLO, 42 circuit

Panel 12/LA: Square D NQOB, 120/208Y, 225A, MLO, 30 circuit

Panel 12/EL: Square D NQOB, 120/208Y, 100A, MCB, 28 circuit

Panel UA: Cutler-Hammer PRL-1A, 120/208Y, 225A, MLO, 42 circuit



Figure 24: Courthouse Roof Top Chiller CH-1 and CH-2 Disconnects

Chiller #1 Square D 400 Amp disconnect

Chiller #2 Square D 400 Amp disconnect

COURTHOUSE AND LEC IR SCANNING



Figure 25: Courthouse Roof Top Chiller CH-1 and CH-2 Control Panels

Chiller #1 Control Panel
Chiller #2 Control Panel

COURTHOUSE AND LEC IR SCANNING



Figure 26: Courthouse Roof Top Liebert Unit

Liebert Unit Control Panel

Liebert Unit Disconnects

RACINE COUNTY

LEC ELECTRICAL EQUIPMENT IR SCANNING

Electrical equipment list provided as a basis for Thermal Imaging Scans and Report. Transformers are not to be included in the thermal IR scans. Any transformers in the equipment list are only shown for reference.



Figure 1: Switchboard MSB A (left side) in basement electrical room

Switchboard MSB A (GE Switchboard, LEC Basement high voltage room):

From left hand side:

480V, 1200 Amp circuit breaker feeds PMB in LEC basement main electrical room

480V, 2000 Amp circuit breaker feeds MSB B in the courthouse

480V, 800 Amp circuit breaker feeds PME in LEC basement main electrical room

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 1600 Amp circuit breaker feeds PMA in LEC basement electrical room
480V, 3000 Amp circuit breaker (2000 KVA transformer secondary)



Figure 2: Switchboard PMA in basement electrical room

Switchboard PMA (Square D QMB Saflex, LEC Basement):

From right hand side:

480V, 60 Amp fire pump fused switch unit wired before main switch.

480V, 1600 Amp Bolted Pressure Contact Switch (may have ground fault sensing element)

480V, 600A Circuit #1 Chiller fused switch unit

480V, 400A Circuit #2 Electric Boiler fused switch unit

480V, 400A Circuit #3 Main Equipment Room Panel MCA-N fused switch unit

480V, 200A Circuit #4 112.5KVA Transformer primary switched fuse unit

480V, 100A Circuit #5 Panel LB District Attorney switched fuse unit

480V, 100A Circuit #6 Panel LF Courts switched fuse unit

480V, 100A Circuit #7 Panel LP 3-A switched fuse unit

480V, 100A Circuit #8 Spare switched fuse unit

480 – 120/208Y 112.5KVA Transformer

120/208Y, 600A main fused switch (transformer secondary)

COURTHOUSE AND LEC THERMAL IR SCANNING

120/208Y, 200A Panel GF Courts

120/208Y, 60A Panel QAB Main Equipment Room fused switch unit

120/208Y, 60A Spare fused switch unit

120/208Y, 100A Panel GB District Attorney fused switch unit

120/208Y, 100A Spare fused switch unit



Figure 3: Switchboard PMB in basement main electrical room E-1

COURTHOUSE AND LEC THERMAL IR SCANNING



Figure 4: Left side of Switchboard PMB in basement main electrical room E-1



Figure 5: Right side of Switchboard PMB in basement main electrical room E-1

COURTHOUSE AND LEC THERMAL IR SCANNING

Switchboard PMB (Square D QMB Saflex, LEC Basement):

From right hand side:

480V, 200A Panel P/A fused switch unit
480V, 400A Panel LK switched fuse unit
480V, 60A Spare switched fuse unit
480V, 60A Return Air Fan #8 switched fuse unit

480V, 100A Circuit #13 Panel LA switched fuse unit
480V, 100A Circuit #14 ? switched fuse unit
480V, 100A Circuit #15 Panel LD switched fuse unit
480V, 100A Circuit #16 Panel LC switched fuse unit
480V, 100A Circuit #17 Panel LL switched fuse unit
480V, 100A Circuit #18 Panel LN switched fuse unit
480V, 1200 Amp Bolted Pressure Contact Switch (may have ground fault sensing element)

480V, 600A Transformer primary fused switch unit
480V, 400A Circuit #20 Panel MCP-N Elevator Equipment Room 5th Floor switched fuse unit
480V, 200A Circuit #21 Panel MCB-N switched fuse unit
480V, 200A Circuit #22 Panel LK switched fuse unit
480V, 60A Circuit #23 Elevator #3 Delivery Freight switched fuse unit
480V, 60A Circuit #24 Elevator #6 Courts switched fuse unit
480V, 60A Circuit #25 Elevator #5 Juvenile Court switched fuse unit
480V, 60A Circuit #26 Elevator #4 Huber switched fuse unit

480 – 120/208Y 225KVA Transformer

120/208Y, 1200A main fused switch (transformer secondary)
120/208Y, 200A Panel GK fused switch unit
120/208Y, 200A Panel GC fused switch unit
120/208Y, 100A Panel GA fused switch unit
120/208Y, 100A Panel GD fused switch unit

120/208Y, 200A Panel P fused switch unit
120/208Y, 200A Panel L fused switch unit
120/208Y, 200A Panel B fused switch unit
120/208Y, 200A Panel A fused switch unit
120/208Y, 100A Panel G fused switch unit
120/208Y, 100A Spare fused switch unit
120/208Y, 60A Panel C fused switch unit
120/208Y, 60A Spare fused switch unit



Figure 6: Switchboard PME in basement main electrical room E-1

Switchboard PME (Square D QMB Saflex, LEC Basement):

From left hand side:

Left Square D Power-Style Switchboard section #1, 480V, 800A

480V, 200A Panel MCP-E fused switch unit

480V, 800 Amp Bolted Pressure Contact Switch (with ground fault sensing element), 600A fuses

Square D Power-Style Switchboard section #2, 480V, 800A

480V, 100A Elevator machine room panel transformer primary fused switch unit

480V, 100A Supply Air Fan #1 60 HP, 8 Unit AHU fused switch unit

480V, 30A Sump Pump HSD fused switch unit

480V, 60A New Elevator Motor Human Services fused switch unit

480V, 600A Emergency Generator Transfer Switch

Square D QMB Saflex Switchboard section #3, 480V, 800A

480V, 100A Circuit #4 Panel LEA Basement Hallway switched fuse unit

480V, 100A Circuit #5 Panel LEB District Attorney switched fuse unit

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 100A Circuit #6 Panel LEC Hall by Central Control switched fuse unit
480V, 100A Circuit #7 Panel LED Sherrif's Staff switched fuse unit
480V, 100A Circuit #8 Panel LEF Courts switched fuse unit
480V, 100A Circuit #9 Panel LEG Northeast switched fuse unit
480V, 100A Circuit #10 Panel LEH Southeast switched fuse unit
480V, 100A Circuit #11 Panel LEJ Southwest switched fuse unit
480V, 100A Circuit #12 Panel LER Northeast switched fuse unit
480V, 100A Circuit #13 Panel LES switched fuse unit
480V, 100A Circuit #14 ? switched fuse unit
480V, 100A Circuit #15 Panel MCA-E main basement electrical room switched fuse unit
480V, 600A Circuit #16 Transformer primary fused switch unit

480 – 120/208Y 225KVA Transformer

Square D QMB Power-Style Switchboard section #4, 120/208Y, 1200A
120/208Y, 1200A main fused switch (transformer secondary), 800A fuses
120/208Y, 200A Panel GEJ-P 2-A, 3-A fused switch unit
120/208Y, 200A Panel GEH-N 2-B,3-B fused switch unit

Square D QMB Power-Style Switchboard section #5, 120/208Y, 800A
120/208Y, 100A Panel X HSD large basement electrical room fused switch unit
120/208Y, 100A Panel Kitchen Panel by AHU #5 and #6 fused switch unit
120/208Y, 100A Panel GEA basement hallway fused switch unit
120/208Y, 100A Panel GEK Kitchen fused switch unit
120/208Y, 100A Panel GER 4-C fused switch unit
120/208Y, 100A Panel GES 4-B fused switch unit
120/208Y, 100A Panel GEF Courts fused switch unit
120/208Y, 100A Panel GEG 2-C, 3-C fused switch unit
120/208Y, 100A Panel GEC hall by central control fused switch unit
120/208Y, 100A Panel GED Sheriff Admin. fused switch unit
120/208Y, 100A Panel GEB District Attorney fused switch unit
120/208Y, 100A Panel QEB large equipment room fused switch unit



Figure 7: Panel P/A in basement main electrical room E-1

Panel P/A (Square D I-Line, 600A, LEC Basement Electrical Room E-1):

- 277/480Y, 50A, A/C Comp Room circuit breaker
- 277/480Y, 20A, Electric Unit Heater #1 Office West circuit breaker
- 277/480Y, 20A, Air Comp B65 circuit breaker
- 277/480Y, 20A, Electric Unit Heater #2 Office East circuit breaker
- 277/480Y, 20A, HWP 3 B65 circuit breaker
- 277/480Y, 20A, Electric Unit Heater #3 Stair Well circuit breaker
- 120/208Y, 20A, Air Cond Roof circuit breaker

COURTHOUSE AND LEC THERMAL IR SCANNING

120/208Y, 20A, Electric Unit Heater #4 Day Reporting Lobby

120/208Y, 20A, Electric Booster Coil 102 circuit breaker

120/208Y, 15A, PRU 1 104

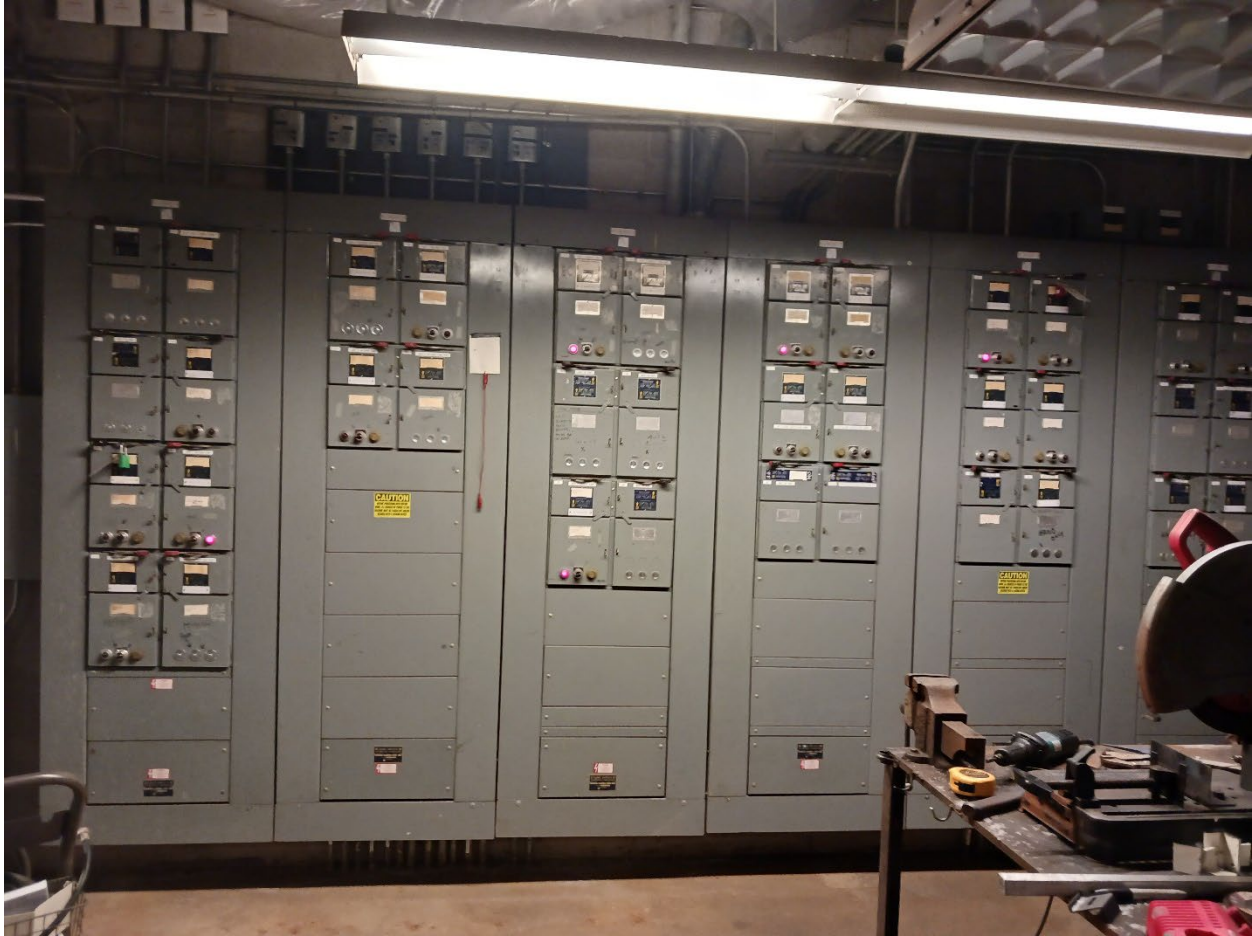


Figure 8: Motor Control Center MCA-N in basement boiler room

Motor Control Center MCA-N (Left Three Sections Square D Saflex, LEC Basement Boiler Room):
From left hand side:

Square D QMB Saflex Motor Control Center Section #1, 480V, 400A
480V, 30A Spare fused switch unit and starter
480V, 30A, Old Jail Sump Pump switched fuse unit and starter
480V, 30A Spare switched fuse unit and starter
480V, 30A Spare switched fuse unit and starter
480V, 30A Chilled Water Pump 2 East switched fused unit and starter
480V, 30A AHU 1 Return Fan switched fuse unit and starter
480V, 30A AHU 1 Supply Fan switched fuse unit and starter
480V, 30A AHU 2 Supply Fan switched fuse unit and starter

Square D QMB Saflex Motor Control Center Section #2, 480V, 400A
480V, 30A AHU 2 Return Fan VFD switched fuse unit and starter
480V, 30A, AHU 7 Return Fan switched fuse unit and starter
480V, 30A AHU 3 Return Fan switched fuse unit and starter

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 30A AHU 4 Return Fan switched fuse unit and starter

Square D QMB Saflex Motor Control Center Section #3, 480V, 400A

480V, 30A AHU 3 Supply Fan switched fuse unit and starter

480V, 30A, AHU 4 Supply Fan switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter

480V, 30A, AHU 7 Supply Fan switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter



Figure 9: Motor Control Center MCA-E in basement boiler room

Motor Control Center MCA-E (Right Three Sections Square D Saflex, LEC Basement Boiler Room):
From left middle section:

Square D QMB Saflex Motor Control Center Section #1, 480V, 400A
480V, 30A Hot Water Pump 1 switched fuse unit and starter
480V, 30A, Hot Water Pump 2 switched fuse unit and starter
480V, 30A, Hot Water Pump 3 switched fuse unit and starter
480V, 30A, Hot Water Pump 4 switched fuse unit and starter
480V, 60A, Spare switched fused unit and starter
480V, 60A, Water Booster Pump Panel switched fuse unit and starter

Square D QMB Saflex Motor Control Center Section #2, 480V, 400A
480V, 30A, Hot Water Pump 5 switched fuse unit and starter
480V, 30A, Hot Water Pump 6 switched fuse unit and starter
480V, 30A, Supply Fan 1 Kitchen Mechanical Room switched fuse unit and starter
480V, 30A, Primary Vault Exhaust Fan switched fuse unit and starter
480V, 30A, Spare switched fuse unit and starter

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 30A, Spare switched fuse unit and starter

Square D QMB Saflex Motor Control Center Section #3, 480V, 400A

480V, 30A, Sewage Ejector Pump 2 switched fuse unit and starter

480V, 30A, Sewage Ejector Pump 1 switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter

480V, 30A, AHU 8 Chilled Water Pump switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter

480V, 30A, Spare switched fuse unit and starter



Figure 10: LEC Fire Pump Controller in basement

Fire Protection Controller, 480V



Figure 11: Motor Control Center MCB-N in Kitchen mechanical room

Motor Control Center MCB-N, 480V, 225A (Square D Saflex, Kitchen mechanical room):
Square D QMB Saflex Motor Control Center Section #1, 480V, 200A
480V, 30A, AHU 5 Return Fan switched fuse unit and starter
480V, 30A, AHU 5 Supply Fan switched fuse unit and starter
480V, 30A, Spare switched fuse unit and starter
480V, 30A, Spare switched fuse unit and starter
480V, 30A, AHU 6 Return Fan switched fused unit and starter

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 30A, Spare switched fuse unit and starter

480V, 30A, AHU 6 Supply Fan switched fused unit and starter

480V, 30A, Spare switched fuse unit and starter

COURTHOUSE AND LEC THERMAL IR SCANNING



Figure 12: Panel MCP-N in mechanical penthouse

Motor Control Center MCP-N, 480V, 200A (Square D Saflex, mechanical penthouse):

480V, 30A, Exhaust Fan #3 switched fuse unit and starter

480V, 30A, Exhaust Fan #8 switched fuse unit and starter

480V, 100A, Cooling Tower Fan switched fuse unit and starter

480V, 100A, Cooling Tower Fan switched fuse unit and starter



Figure 13: Panel MCP-E in mechanical penthouse

Motor Control Center MCP-E, 480V, 200A (Square D Saflex, mechanical penthouse):

- 480V, 30A, Exhaust Fan #1 switched fuse unit and starter
- 480V, 30A, Exhaust Fan #4 switched fuse unit and starter
- 480V, 30A, Exhaust Fan #6 switched fuse unit and starter
- 480V, 30A, Exhaust Fan #2 switched fuse unit and starter
- 480V, 60A, Elevator #1 switched fuse unit
- 480V, 60A, Elevator #2 switched fuse unit



Figure 14: Switchboard MSB B in LEC D Wing basement electrical room

Switchboard MSB B/MDP (GE Switchboard, LEC D Wing Basement Electrical Room):

Section #1 (MSB B):

480V, 3000 Amp circuit breaker (2000 KVA transformer secondary)

Section #2 (MSB B):

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 2000 Amp circuit breaker for tie from MSB A

480V, 800 Amp circuit breaker feeds ATS/2

Section #3 (GE, MDP, 277/480Y, 3000A):

480V, 400 Amp circuit breaker feeds Panel 1/LK2

480V, 400 Amp circuit breaker feeds ATS/XHA

480V, 800 Amp circuit breaker set to 500A feeds Chiller 3

480V, 800 Amp circuit breaker set to 500A feeds Chiller 1

480V, 800 Amp circuit breaker set to 500A feeds Chiller 2

480V, 600 Amp spare circuit breaker

480V, 450 Amp circuit breaker feeds Panel 1-LA (MSB LA) 300 KVA transformer

480V, 200 Amp circuit breaker feeds Panel BHA

480V, 200 Amp circuit breaker feeds ATS/XHB



Figure 15: 800 Amp ATS in LEC D Wing basement electrical room



Figure 16: Panel MDP 480 in LEC D Wing basement electrical room



Figure 17: Panel MDP 480 in LEC D Wing basement electrical room

GE CCB, MDP, 277/480Y, 800A:
480V, 400 Amp circuit breaker
480V, 400 Amp circuit breaker feeds MDP 208 transformer
480V, 800 Amp circuit breaker feeds DP/4A



Figure 18: Panel MDP 208 in LEC D Wing basement electrical room

COURTHOUSE AND LEC THERMAL IR SCANNING

GE CCB, MDP, 120/208Y, 800A (fed by MDP 480V panel thru 300 KVA transformer):

120/208Y, 400A Panel ? circuit breaker
120/208Y, 100A Panel Laundry circuit breaker
120/208Y, 100A Panel B/W circuit breaker
120/208Y, A Panel 4/Q circuit breaker
120/208Y, 150A Temp Panel circuit breaker (off)
120/208Y, 150A Panel 3/N circuit breaker
120/208Y, 150A Panel 4/P circuit breaker
120/208Y, 150A Panel 3/M circuit breaker
120/208Y, 150A Spare circuit breaker
120/208Y, 150A Panel 2/K circuit breaker
120/208Y, 150A Panel 2/J circuit breaker
120/208Y, 150A Panel 1/E circuit breaker (off)
120/208Y, 150A Panel 1/B circuit breaker (off)
120/208Y, 150A Panel B/A circuit breaker
120/208Y, 150A Panel 1/G circuit breaker (off)
120/208Y, 1000A main circuit breaker



Figure 19: 1200 Amp MSB/LA in LEC D Wing basement LE06 electrical room

COURTHOUSE AND LEC THERMAL IR SCANNING

Switchboard MSB/LA (GE Spectra Series Switchboard, LEC D Wing Basement LE06 Electrical Room):

120/208Y, 1200A main circuit breaker
120/208Y, 400A Panel 1/LD circuit breaker
120/208Y, 200A Spare circuit breaker
120/208Y, 150A Panel 3/LB circuit breaker
120/208Y, 100A Panel 1/LC circuit breaker
120/208Y, 100A Panel 3/LA circuit breaker
120/208Y, 100A Spare circuit breaker
120/208Y, 200A Panel 1/LB circuit breaker
120/208Y, 150A Panel 2/LB circuit breaker
120/208Y, 100A Panel BLA circuit breaker
120/208Y, 100A Panel 1/LA circuit breaker
120/208Y, 100A Panel 2/LA circuit breaker

COURTHOUSE AND LEC THERMAL IR SCANNING



Figure 20: ATS XHA, MDP/XHA, B/ELA in LEC D Wing basement LE07 electrical room



Figure 21: Panel MDP/XHA in LEC D Wing basement LE07 electrical room

GE Spectra Series, MDP/XHA, 277/480Y, 400A:
480V, 100 Amp Panel MP/BXHA circuit breaker
480V, 100 Amp Spare circuit breaker
480V, 200 Amp Spare circuit breaker
480V, 110 Amp Transformer T/TB circuit breaker

COURTHOUSE AND LEC THERMAL IR SCANNING

480V, 225 Amp Panel MP/3XHA circuit breaker

480V, 400 Amp Main circuit breaker

LEC Basement 120/208Y Panelboards:

Panel A, Square D NQOB, 225A, 84 circuit double tub, surface, Room E-1

Panel B, Square D NQOB, 225A, 42 circuit, Room LJP

Panel D, Square D NQOB, 225A, 30 circuit, surface, Kitchen Mechanical Room

Panel X, Square D NQOB, 225A, 42 circuit, surface, Room E-1

Panel QAB, Square D NQOB , 18 circuit, surface, next to MCA-N in basement boiler room

Panel QEB, Square D NQOB, 18 circuit, surface, next to MCA-E in basement boiler room

Panel GA, Square D NQOB, 100A, 30 circuit, recessed, basement hallway

Panel GEA, Square D NQOB, 225A, 42 circuit, recessed, in basement hallway

Panel GK, Square D NQOB, 42 circuit, recessed

Panel GEK, Square D NQOB, 30 circuit, recessed

Panel P, Square D NQOB, 225A, 84 circuit double tub, Room LJR

Basement LEC D Wing 120/208Y Panelboards:

Panel B/ELE2, GE Series A, 125A, 18 circuit, surface, Room LE02

Panel B/LA, GE, 225A, 42 circuit, surface, next to MCA-N in basement boiler room, Room LE06

Panel GK2 double tub, GE Series A, 400A, 42 circuit each, surface, Room LB04

Panel B/ELA, GE A Series, 125A, 30 circuit, surface, room LE07

Panel B/UPS, GE A Series, 110 MCB, Room LE08

Panel B/XLA, GE Series A, 225 MCB, 42 Circuit, Surface, Room LE07

Panel B/XHB, GE Series A, 225A, 42 circuit, surface, Room LE07

Basement 277/480Y Panelboards:

Panel LA, Square D NEHB , 100A, 30 circuit, in basement hallway

Panel LEA, Square D NEHB, 100A, 30 circuit, in basement hallway

Panel LK, Square D NEHB, 225A, 42 circuit, recessed

Basement LEC D Wing 277/480Y Panelboards:

Panel B/HA, GE A Series, 225A, 42 circuit, surface, Room LE06

Panel MP/BXHA, GE Series A, 600A, 84 circuit (double tub), surface, emergency electrical room LE07

Circuit breaker B/EB, 480V, 70A, single circuit breaker enclosure, surface, room LE07

Panel LK2, GE A Series, 400A, 48 circuit, surface, Room LB04

Panel B/W

Panel B/A

First Floor 120/208Y Panelboards:

Panel GEB, Square D NQOB , 100A, 30 circuit, recessed

Panel GB, Square D NQOB, 100A, 30 circuit, recessed

Panel GF, Square D NQOB, 225A, 42 circuit, court hall area

COURTHOUSE AND LEC THERMAL IR SCANNING

Panel GEF, Square D NQOB, 225A, 42 circuit, recessed, court hall area
Panel GC, Square D NQOB, 225A, 42 circuit, recessed, control room hall area
Panel GEC, Square D NQOB, 225A, 42 circuit, recessed, control room hall area
Panel GD, Square D NQOB, 225A, 42 circuit, recessed
Panel GED, Square D NQOB, 225A, 42 circuit, recessed
Panel L, Square D NQOB, 225A, 84 circuit double tub, Room LC121
Panel EM, Square D NQOB, 100A, 30 circuit, Room LC103

First Floor LEC D Wing 120/208Y Panelboards:

Panel 1/LA, GE A Series, 125A, 30 circuit, surface, room 1E39
Panel 1/LB, GE A Series, 225A, 60 circuit (double tub), surface, room 1E39
Panel 1/LC, GE A Series, 125A, 30 circuit, surface, room 1D08
Panel 1/LD, GE A Series, 400A, 82 circuit (double tub), surface, room 1D08
Panel 1/XLA, GE A Series, 125A, 60 circuit (double tub), surface, room 1E39
Panel 1/ELA, GE A Series, 125A, 30 circuit, surface, room 1E39
Panel 1/ELB, GE A Series II, 125A, 30 circuit, surface, room 1D07

First Floor 277/480Y Panelboards:

Panel LB, Square D NEHB , 100A, 30 circuit, recessed
Panel LEB, Square D NEHB, 100A, 30 circuit, recessed
Panel LF, Square D NH1B , 100A, 30 circuit, recessed, court hall area
Panel LEF, Square D NH1B, 100A, 30 circuit, recessed , court hall area
Panel LC, Square D NH1B , 100A, 30 circuit, recessed, control room hall area
Panel LEC, Square D NH1B, 100A, 30 circuit, recessed , control room hall area
Panel LD, Square D NEHB , 100A, 30 circuit, recessed
Panel LED, Square D NEHB, 100A, 30 circuit, recessed

Second Floor 120/208Y Panelboards:

Panel GEJ, Square D NQOB , 225A, 42 circuit, surface
Panel GEH, Square D NQOB, 225A, 42 circuit, surface
Panel GEG Square D NQOB, 225A, 42 circuit, surface

LEC D Wing Second Floor 120/208Y Panelboards:

Panel 2/UPS, GE A Series II, 125A, 30 circuit, surface, room 2E04
Panel 2/ELA, GE A Series II, 125A, 30 circuit, surface, room 2E04
Panel 2/J
Panel 2/K
Laundry Panel, 100A
Panel 2/LA, GE A Series II, 125A, 30 circuit, surface, room 2E04
Panel 2/LB, GE A Series II, 225A, 84 circuit (double tub), surface, room 2E04
Panel 2/XLA, GE A Series II, 125A, 30 circuit, surface, room 2E04

COURTHOUSE AND LEC THERMAL IR SCANNING

Second Floor 277/480Y Panelboards:

Panel LEJ, Square D NEHB , 100A, 30 circuit, surface
Panel LEH, Square D NEHB, 100A, 30 circuit, surface
Panel LEG, Square D NEHB , 100A, 30 circuit, surface

Third Floor 120/208Y Panelboards:

Panel GEP, Square D NQOB , 225A, 42 circuit, surface
Panel GEN, Square D NQOB, 225A, 42 circuit, surface
Panel GEL, Square D NQOB, 100A, 30 circuit, surface
Panel G, Square D NQOB, 225A, 30 circuit, surface, Room MC338

LEC D Wing Third Floor 120/208Y Panelboards:

Panel 3/UPS, GE A Series II, 125A, 30 circuit, surface, room 3E04
Panel 3/LA, GE A Series II, 225A, 30 circuit, surface, room 3E04
Panel 3/LB, GE A Series II, 225A, 84 circuit (double tub), surface, room 3E04
Panel 3/ELA, GE A Series II, 225A, 30 circuit, surface, room 3E04
Panel 3/M, GE A Series II, mechanical room
Panel 3/N, GE A Series II, mechanical room

Third Floor 277/480Y Panelboards:

Panel LP, Square D NEHB , 100A, 30 circuit, surface
Panel LEP, Square D NEHB, 100A, 18 circuit, surface
Panel LN, Square D NEHB , 100A, 30 circuit, surface
Panel LEN, Square D NEHB, 100A, 18 circuit, surface
Panel LL, Square D NEHB , 100A, 30 circuit, surface
Panel LEL, Square D NEHB, 100A, 18 circuit, surface

LEC D Wing Third Floor 277/480Y Panelboards:

Panel MP/3XHA, GE Series A, 225A, 42 circuit, surface, electrical room 3E36

Fourth Floor 120/208Y Panelboards:

Panel GES, Square D NQOB, 100A, 30 circuit, surface
Panel GER Square D NQOB, 100A, 30 circuit, surface
Panel 4/P, GE A Series II, mechanical room
Panel 4/Q, GE A Series II, mechanical room

Fourth Floor 277/480Y Panelboards:

Panel LES, Square D NEHB, 100A, 18 circuit, surface
Panel LER, Square D NEHB, 100A, 18 circuit, surface
Panel DP/4A, 400A

COURTHOUSE AND LEC THERMAL IR SCANNING

LEC Generator and AST:

600/3 Generator Circuit Breaker

70/3 Generator Circuit Breaker

AST/1 Switchboard PME

AST/2 Fire Pump

ATS EHA, 200A, LE07

ATS XHA, 600A, LE07

ATS XHB

Schedule IR scan of generator circuit breakers during generator test.

Schedule IR scan of automatic transfer switches during normal and emergency power conditions.

Elevator Disconnects and Controllers:

Five Elevator Fused Disconnects (not shown), basement elevator equipment rooms

Five Elevator Controllers (not shown), basement elevator equipment rooms

Kitchen Freight Elevator Fused Disconnect (not shown), basement elevator equipment room

Kitchen Freight Elevator Controller (not shown), basement elevator equipment room

Two Elevator Fused Disconnects (not shown), penthouse elevator equipment room

Two Elevator Controllers (not shown), penthouse elevator equipment room

COURTHOUSE AND LEC THERMAL IR SCANNING



Figure 22: LEC Chiller Platform for Chiller CH-1, CH-2 and CH-3

Chiller #1 Control Panel and internal main power disconnect

Chiller #2 Control Panel and internal main power disconnect

Chiller #3 Control Panel and internal main power disconnect

COURTHOUSE AND LEC THERMAL IR SCANNING



Figure 23: LEC Liebert Unit on Chiller Platform

Liebert Unit Control Panel and main power internal disconnect