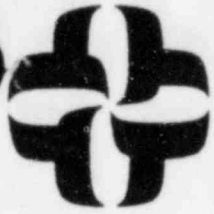


CALCULATION/PROBLEM COVER SHEET



Calculation/Problem No: 1040-001-020
 Title: Containment Air Cooling System 2.17
 Client: Toledo Edison Company Project: Davis-Besse Unit 1
 Job No: 1040-001-671 I & E Bulletin 79-01B
 Equipment Qualification

Design Input/References:

Design Inputs are outlined in the Cover Report.

Assumptions:

Assumptions are outlined in the Cover Report.

Method:

Methods are outlined in the Cover Report.

Remarks:

EDS Nuclear Report No. 02-1040-1076.

| REV. NO. | REVISION | APPROVED | DATE |
|----------|--------------------------|--------------------|---------|
| 0 | original | Jeffrey S. Hawerly | 10-2-81 |
| 2 | GENERAL MANUAL REVISIONS | NK Woodward | 11/2/83 |
| | | | |
| | | | |
| | | | |
| | | | |

Facility: Davis-Besse Unit 1
Docket: 50-346

MASTER LIST
HARSH ENVIRONMENT
CONTAINMENT AIR COOLING SYSTEM

Index No: 217M-001
Rev.: 2

Prepared by:

N. Lewis

Date:

11/1/82

Checked by:

ESM

Date:

11/2/82

| Worksheet Index No. | Rev. | Plant ID Number | Generic Name | LOCATION | | REMARKS |
|------------------------|------|--------------------|---------------------------|----------------------------------|-----------------------------------|----------|
| | | | | Inside Primary Containment | Outside Primary Containment | |
| 217H-004 | 2 | MC0011 | Cooler Fan Motor | Rm. 317 | | |
| 217H-005 | 2 | MC0012 | Cooler Fan Motor | Rm. 317 | | |
| 217H-006 | 2 | MC0013 | Cooler Fan Motor | Rm. 317 | | |
| 217H-007 | 2 | MV13660 | Valve Motor Operator | | Rm. 314 | |
| 217H-008 | 2 | MV13670 | Valve Motor Operator | | Rm. 314 | |
| 217H-009 | 2 | MV13680 | Valve Motor Operator | | Rm. 314 | |
| 217H-010 | 2 | SV1356A | Solenoid Valve | | Rm. 314 | |
| 217H-011 | 2 | SV1356B | Solenoid Valve | | Rm. 314 | |
| 217H-012 | 2 | SV1357A | Solenoid Valve | | Rm. 314 | |
| 217H-013 | 2 | SV1357B | Solenoid Valve | | Rm. 314 | |
| 217H-014 | 2 | SV1358A | Solenoid Valve | | Rm. 314 | |
| 217H-015 | 2 | SV1358B | Solenoid Valve | | Rm. 314 | |
| | 2 | BEL1C | Motor Control Center | | Rm. 304 | See 2.21 |
| | 2 | CDEL1C | Disconnect Switch Cabinet | | Rm. 304 | See 2.21 |
| | 2 | EV13660 | Terminal Block Box | | Rm. 314 | See 2.21 |
| | 2 | EV13670 | Terminal Block Box | | Rm. 314 | See 2.21 |
| | 2 | NV1356 | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV1357 | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV1358 | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV13660 | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV13670 | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV13680A | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | NV13680B | Push Button Switch | | Rm. 314 | See 2.21 |
| | 2 | RC3701 | Relay Cabinet | | Rm. 314 | See 2.21 |
| | 2 | RC3702 | Relay Cabinet | | Rm. 314 | See 2.21 |

Facility: Davis-Besse Unit 1
Docket: 50-346

MASTER LIST
NON-HARSH ENVIRONMENT
CONTAINMENT AIR COOLING SYSTEM

Index No. 217M-002
Rev.: 2

Prepared by:

F. Lewis

Date:

9/30/83

Checked by:

[Signature]

Date:

10/1/83

| Worksheet Index No. | Rev. | Plant ID Number | Generic Name | LOCATION | | REMARKS |
|------------------------|------|--------------------|----------------------------------|----------------------------------|-----------------------------------|---------|
| | | | | Inside Primary Containment | Outside Primary Containment | |
| | 0 | BE12A | Motor Control Center | | Rm. 429 | |
| | 0 | BE14 | Motor Control Center | | Rm. 429 | |
| | 0 | BE15 | Motor Control Center | | Rm. 429 | |
| | 0 | BEF12 | Motor Control Center | | Rm. 429 | |
| | 0 | BEF15 | Motor Control Center | | Rm. 429A | |
| | 0 | BF12A | Motor Control Center | | Rm. 428 | |
| | 0 | BF14 | Motor Control Center | | Rm. 428 | |
| | 0 | BF15 | Motor Control Center | | Rm. 428 | |
| | 0 | C5716 | Engineering Safety Feature Panel | | Rm. 505 | |
| | 0 | CDE12A-1 | Disconnect Switch Cabinet | | Rm. 429 | |
| | 0 | CDF12A-1 | Disconnect Switch Cabinet | | Rm. 428 | |
| | 0 | D1P | Distribution Panel | | Rm. 429 | |
| | 0 | D2P | Distribution Panel | | Rm. 428 | |

Facility: Davis-Besse Unit 1
Docket: 50-346

MASTERS LIST

Index No. 17M-003
Rev.: 2

CONTAINMENT AIR COOLING SYSTEM

Prepared by:

3 Lewis

Date:

9/30/83

Checked by:

20/10/1914

Date:

100

| Worksheet Index No. | Rev. | Plant ID Number | Generic Name | LOCATION | | REMARKS |
|------------------------|------|--------------------|--------------|----------------------------------|-----------------------------------|---------|
| | | | | Inside Primary Containment | Outside Primary Containment | |
| | | | | | | |

Facility: Davis-Besse Unit 1
 Socket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Prepared by: N Lewis
 Checked by: Smalant

Date: 11/1/83
 Date: 11/2/83

Index No.: 217H-004
 Rev.: 2

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|---|-----------------------|----------------------------------|----------------------------------|--------------------|---|--------------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| | | | | | | | |
| System: Containment Air Cooling Plant ID No. MC011 Component: Cooler Fan (Motor) Manufacturer: Joy (Reliance) Model Number: 600276-17 Serial Number: GF-16182 Function: Containment Air Cooling Accuracy: Spec: N/A Demon: N/A Service: Containment Air Cooler Fan 1 Location: Containment Flood Level Elev: 572'-2" Above Flood Level: Yes Needed for: Hot Shutdown <input checked="" type="checkbox"/> Cold Shutdown <input checked="" type="checkbox"/> | Operating Time | 1 Year | 1 Year 57 Days | F | M-2 ROC-22D V-22B | Simultaneous Test | None |
| | Temperature (°F) | 283.0 | 330.0 | H, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| | Pressure (PSIA) | 52.0 | 92.7 | G, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| | Relative Humidity (%) | 100.0 | 100.0 | A | M-2 ROC-22D V-22B | Simultaneous Test | None |
| | Chemical Spray | Boric Acid 1800 ppm pH 5.0 | Boric Acid 1800 ppm pH 5.0 | A | M-2 ROC-22D V-22B CAL-40 Note 1 | Simultaneous Test, Analysis | None |
| | Radiation | 1.7×10^7 RADS | 1.0×10^9 RADS | CAL-44 | M-2 ROC-22D V-22B | Sequential Test | None |
| | Aging | 40 Years | 40 Years | I | M-2 ROC-22D V-22B | Sequential Test | None |
| | Submergence | 572'-2" | 585' | B | M-11 | N/A | None |

Facility: Davis-Besse Unit 1
Socket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-004A
Rev.: 2

NOTES

Prepared by: M. Lewis Date: 11/1/83
Checked by: Barbara Date: 11/1/83

1. CAL-40 qualifies components tested in a high pH boric acid spray to a pH value of 5.

Facility: D-1-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-005
Rev.: 2

Prepared by: N Lewis Date: 11/1/83
Checked by: [Signature] Date: 11/2/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|----------------------------------|----------------------------------|--------------------|---|--------------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling Plant ID No. MC012 | Operating Time | 1 Year | 1 Year 57 Days | F | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Component: Cooler Fan (Motor) | Temperature (°F) | 283.0 | 330.0 | H, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Manufacturer: Joy (Reliance) | Pressure (PSIA) | 52.0 | 92.7 | G, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Model Number: 600276-17 Serial Number: GF-16183 | Relative Humidity (%) | 100.0 | 100.0 | A | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Function: Containment Air Cooling | Chemical Spray | Boric Acid 1800 ppm pH 5.0 | Boric Acid 1800 ppm pH 5.0 | A | M-2 ROC-22D V-22B CAL-40 Note 1 | Simultaneous Test, Analysis | None |
| Accuracy: Spec: N/A Demon: N/A | Radiation | 1.7×10^7 RADS | 1.0×10^6 RADS | CAL-44 | M-2 ROC-22D V-22B | Sequential Test | None |
| Service: Containment Air Cooler Fan 2 | Aging | 40 Years | 40 Years | I | M-2 ROC-22D V-22B | Sequential Test | None |
| Location: Containment Flood Level Elev: 572'-2" Above Flood Level: Yes | Submergence | 572'-2" | 585' | B | M-11 | N/A | None |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> Cold Shutdown <input checked="" type="checkbox"/> | | | | | | | |

Facility: Davis-Besse Unit 1
Socket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-005A
Rev.: 2

NOTES

Prepared by: M. Lewis Date: 12/1/83
Checked by: James Smith Date: 12/2/83

1. CAL-40 qualifies components tested in a high pH boric acid spray to a pH value of 5.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Prepared by: N Lewis Date: 11/1/83
Checked by: [Signature] Date: 11/2/83

Index No.: 217H-006
Rev.: 2

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|----------------------------------|----------------------------------|--------------------|---|--------------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling Plant ID No. MC013 | Operating Time | 1 Year | 1 Year 57 Days | F | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Component: Cooler Fan (Motor) | Temperature (°F) | 283.0 | 330.0 | H, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Manufacturer: Joy (Reliance) | Pressure (PSIA) | 52.0 | 92.7 | G, X | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Model Number: 600276-17 Serial Number: GF-16184 | Relative Humidity (%) | 100.0 | 100.0 | A | M-2 ROC-22D V-22B | Simultaneous Test | None |
| Function: Containment Air Cooling | Chemical Spray | Boric Acid 1800 ppm pH 5.0 | Boric Acid 1800 ppm pH 5.0 | A | M-2 ROC-22D V-22B CAL-40 Note 1 | Simultaneous Test, Analysis | None |
| Accuracy: Spec: N/A Demon: N/A | Radiation | 1.7×10^7 RADS | 1.0×10^9 RADS | CAL-44 | M-2 ROC-22D V-22B | Sequential Test | None |
| Service: Containment Air Cooler Fan 3 | Aging | 40 Years | 40 Years | I | M-2 ROC-22D V-22B | Sequential Test | None |
| Location: Containment | Submergence | 572'-2" | 585' | B | M-11 | N/A | None |

Flood Level Elev: 572'-2"
Above Flood Level: Yes

Needed for:
Hot Shutdown ☒
Cold Shutdown ☒

Facility: Davis-Besse Unit 1
Ticket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-006A
Rev.: 2

NOTES

Prepared by: N. Lewis Date: 11/1/83
Checked by: Robert Smith Date: 11/1/83

1. CAL-40 qualifies components tested in a high pH boric acid spray to a pH value of 5.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-007
Rev.: 2

Prepared by: N Lewis
Checked by: [Signature]

Date: 11/1/83
Date: 11/2/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|-------------------------|--------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling Plant ID No. MV13660 | Operating Time | 1 Year | 1.1 Years | F | M-28 V-24G Note 1 | Simultaneous Test | None |
| Component: Valve Motor Operator Manufacturer: Limitorque | Temperature (°F) | 221.0 | 250.0 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Model Number: SMB-000-5 O/N: 373781A S/N: 183066 | Pressure (PSIA) | 19.76 | 39.7 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Function: Containment Air Cooler No. 1 Service Water Inlet Isolation Valve | Relative Humidity (%) | 100.0 | 100.0 | A | M-28 V-24G | Simultaneous Test | None |
| Accuracy: Spec: N/A Demon: N/A | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Service: Containment Air Cooler No. 1 Service Water Inlet Valve Location: Auxiliary Bldg. Rm. 314 | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | M-28 V-24G | Sequential Test | None |
| Flood Level Elev: N/A Above Flood Level: N/A | Aging | 40 Years | 40 Years | I | CAL-93 | Sequential Test Analysis | None |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> Cold Shutdown <input checked="" type="checkbox"/> | Submergence | N/A | N/A | N/A | N/A | N/A | None |

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Prepared by: H. Lewis
Checked by: W. H. Lewis

Date: 11/1/83
Date: 11/2/83

NOTES

Index No.: 217H-007A
Rev.: 2

1. The test subjected the valve motor operator to a transient of 250°F and 39.7 psia for 30 minutes, followed by a cooldown to 120°F in 1.5 hours. The valve motor operator was then exposed to a second transient of 250°F and 39.7 psia for 22 hours, then a cooldown to 200°F and 24.7 psia which was maintained for 15 days. The temperature in Room 314 peaks at 221°F in 1.55 seconds. The pressure in Room 314 peaks at 19.76 psia in .086 seconds. The temperature and pressure in Room 314 return to ambient conditions after 8 minutes.

Based on this information, it can be concluded that the laboratory test subjected the valve motor operator to an overall more severe environment than that which would result from the postulated HELB. Since the valve motor operator remained operable throughout the test, it can be concluded that the valve motor operator will remain functional during and after exposure to the accident environment which would result from the postulated HELB. (Reference C-314)

Facility: Davis-Besse Unit 1
 Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-008
 Rev.: 2

Prepared by: N Lewis Date: 11/1/83
 Checked by: Michael Date: 11/2/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|-------------------------|--------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 1 Year | 1.1 Years | F | M-28 V-24G Note 1 | Simultaneous Test | None |
| Plant ID No. MV13670 | Temperature (°F) | 221.0 | 250.0 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Component: Valve Motor Operator | Pressure (PSIA) | 19.76 | 39.7 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Manufacturer: Limitorque | Relative Humidity (%) | 100.0 | 100.0 | A | M-28 V-24G | Simultaneous Test | None |
| Model Number: SMB-000-5 | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| O/N: 373781A | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | M-28 V-24G | Sequential Test | None |
| S/N: 183064 | Aging | 40 Years | 40 Years | I | CAL-93 | Sequential Test Analysis | None |
| Function: Containment Air Cooler No. 2 Service Water Inlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Accuracy: Spec: N/A Demon: N/A | | | | | | | |
| Service: Containment Air Cooler No. 2 Service Water Inlet Valve | | | | | | | |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input checked="" type="checkbox"/> | | | | | | | |

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-008A

Rev.: 2

NOTES

Prepared by: N. Lewis
Checked by: [Signature]

Date: 11/1/83
Date: 11/2/83

1. The test subjected the valve motor operator to a transient of 250°F and 39.7 psia for 30 minutes, followed by a cooldown to 120°F in 1.5 hours. The valve motor operator was then exposed to a second transient of 250°F and 39.7 psia for 22 hours, then a cooldown to 200°F and 24.7 psia which was maintained for 15 days. The temperature in Room 314 peaks at 221°F in 1.55 seconds. The pressure in Room 314 peaks at 19.76 psia in .086 seconds. The temperature and pressure in Room 314 return to ambient conditions after 8 minutes.

Based on this information, it can be concluded that the laboratory test subjected the valve motor operator to an overall more severe environment than that which would result from the postulated HELB. Since the valve motor operator remained operable throughout the test, it can be concluded that the valve motor operator will remain functional during and after exposure to the accident environment which would result from the postulated HELB. (Reference C-314)

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index no.: 217H-009
Rev.: 2

Prepared by: N Lewis Date: 11/1/93
Checked by: ATM Date: 11/2/93

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|-------------------------|--------------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 1 Year | 1.1 Years | F | M-28 V-24G Note 1 | Simultaneous Test | None |
| Plant ID No. MV13680 | Temperature (°F) | 221.0 | 250.0 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Component: Valve Motor Operator | Pressure (PSIA) | 19.76 | 39.7 | C-314 | M-28 V-24G | Simultaneous Test | None |
| Manufacturer: Limitorque | Relative Humidity (%) | 100.0 | 100.0 | A | M-28 V-24G | Simultaneous Test | None |
| Model Number: SMB-000-5 | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| O/N: 373781A | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | M-28 V-24G | Sequential Test | None |
| S/N: 183065 | Aging | 40 Years | 40 Years | I | CAL-93 | Sequential Test Analysis | None |
| Function: Containment Air Cooler No. 3 Service Water Inlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Accuracy: Spec: N/A Demon: N/A | | | | | | | |
| Service: Containment Air Cooler No. 3 Service Water Inlet Valve | | | | | | | |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: | | | | | | | |
| Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input checked="" type="checkbox"/> | | | | | | | |

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-009A
Rev.: 2

Prepared by N. Lewis
Checked by: Emuband

Date: 11/1/83
Date: 11/1/83

NOTES

1. The test subjected the valve motor operator to a transient of 250°F and 39.7 psia for 30 minutes, followed by a cooldown to 120°F in 1.5 hours. The valve motor operator was then exposed to a second transient of 250°F and 39.7 psia for 22 hours, then a cooldown to 200°F and 24.7 psia which was maintained for 15 days. The temperature in Room 314 peaks at 221°F in 1.55 seconds. The pressure in Room 314 peaks at 19.76 psia in .086 seconds. The temperature and pressure in Room 314 return to ambient conditions after 8 minutes.

Based on this information, it can be concluded that the laboratory test subjected the valve motor operator to an overall more severe environment than that which would result from the postulated HELB. Since the valve motor operator remained operable throughout the test, it can be concluded that the valve motor operator will remain functional during and after exposure to the accident environment which would result from the postulated HELB. (Reference C-314)

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-010
Rev.: 2

Prepared by: [Signature] Date: 11/1/83
Checked by: [Signature] Date: 11/2/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|---|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| Plant ID No. SV1356A | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| Component: Solenoid Valve | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| Manufacturer: ASCO | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| Model Number: 206-381-7U | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Function: Valve Control | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | CAL-80 J-18 J-41 | Sequential Test | None |
| Accuracy: Spec: N/A Demon: N/A | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| Service: Containment Air Cooler 1 Service Water Outlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input type="checkbox"/> | | | | | | | |

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-010A
Rev.: 2

Prepared by: N Lewis
Checked by: [Signature]

Date: 11/1/83
Date: 11/2/83

NOTES

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1
Docket: 50-346

COMPONENT MATERIALS EVALUATION SHEET

Index NO.: 217H-010B
Rev.: 2

Prepared by: [Signature] Date: 11/1/83
Checked by: [Signature] Date: 11/2/83

Plant I.D. No.: SV1356A
Manufacturer: ASCO

Component: Solenoid Valve
Model No.: 206-381-7U

| | | THERMAL AGING | | RADIATION | |
|------------------------|------------------------|------------------|-----------|----------------------------|-----------|
| Parts List | Materials List | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | 40 Years @ 122°F | CAL-80 | 5.0 x 10 ⁷ RADS | CAL-80 |
| Class H Coil: * | | 40 Years @ 140°F | CAL-80 | 2.0 x 10 ⁷ RADS | CAL-80 |
| Enclosure | Steel | | | | |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass | | | | |
| | Braid | | | | |
| Magnet Wire Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-011
Rev.: 2

Prepared by:

Date:

Checked by:

Date:

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| Plant ID No. SV1356B | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| Component: Solenoid Valve | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| Manufacturer: ASCO | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| Model Number: 206-381-7U | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Function: Valve Control | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | CAL-80 J-18 J-41 | Sequential Test | None |
| Accuracy: Spec: N/A Demon: N/A | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| Service: Containment Air Cooler 1 Service Water Outlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input type="checkbox"/> | | | | | | | |

Facility: B-1s-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-011A
Rev.: 2

Prepared by: N Lewis
Checked by: [Signature]

Date: 11/1/83
Date: 11/2/83

NOTES

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1
Docket: 50-346

COMPONENT MATERIAL EVALUATION SHEET

Index: 217H-011B
Rev.: 2

Prepared by:

Date:

Checked by:

Date:

Plant I.D. No.: SV1356B

Component: Solenoid Valve

Manufacturer: ASCO

Model No.: 206-381-7U

| | | THERMAL AGING | | RADIATION | |
|------------------------|------------------------|------------------|-----------|------------------------|-----------|
| Parts List | Materials List | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | 40 Years @ 122°F | CAL-80 | 5.0×10^7 RADS | CAL-80 |
| Class H Coil: * | | 40 Years @ 140°F | CAL-80 | 2.0×10^7 RADS | CAL-80 |
| Enclosure | Steel | | | | |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass | | | | |
| | Braid | | | | |
| Magnet Wire Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index NO.: 217H-012
Rev.: 2

Prepared by: [Signature] Date: 11/1/92
Checked by: [Signature] Date: 11/2/93

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|---|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling Plant ID No. SV1357A Component: Solenoid Valve Manufacturer: ASCO Model Number: 206-381-7U Function: Valve Control Accuracy: Spec: N/A Demon: N/A Service: Containment Air Cooler 2 Service Water Outlet Isolation Valve Location: Auxiliary Bldg. Rm. 314 Flood Level Elev: N/A Above Flood Level: N/A Needed for: Hot Shutdown <input checked="" type="checkbox"/> Cold Shutdown <input type="checkbox"/> | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | CAL-80 J-18 J-41 | Sequential Test | None |
| | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| | Submergence | N/A | N/A | N/A | N/A | N/A | None |

Facility: Davis-Besse Unit 1

Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-012A

Rev.: 2

Prepared by: N Lewis

Date: 11/1/83

Checked by: [Signature]

Date: 11/2/83

NOTES

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1
Docket: 50-346

COMPONENT MATERIALS EVALUATION SHEET

Index no.: 217H-012B
Rev.: 2

Prepared by: [Signature] Date: 11/1/03
Checked by: [Signature] Date: 4/2/03

Plant I.D. No.: SV1357A
Manufacturer: ASCO

Component: Solenoid Valve
Model No.: 206-381-7U

| Parts List | Materials List | THERMAL AGING | | RADIATION | |
|------------------------|------------------------|------------------|-----------|----------------------------|-----------|
| | | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | Not Sensitive | | | |
| Class H Coil: * | | 40 Years @ 122°F | CAL-80 | 5.0 x 10 ⁷ RADS | CAL-80 |
| Enclosure | Steel | 40 Years @ 140°F | CAL-80 | 2.0 x 10 ⁷ RADS | CAL-80 |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass | | | | |
| Magnet Wire Insulation | Braid | | | | |
| Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| Insulation | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| Insulation | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-013
Rev.: 2

Prepared by: D. L. [Signature] Date: 11/1/83
Checked by: J. MacDonald Date: 11/2/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| Plant ID No. SV1357B | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| Component: Solenoid Valve | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| Manufacturer: ASCO | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| Model Number: 206-381-7U | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Function: Valve Control | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | CAL-90 J-18 J-41 | Sequential Test | None |
| Accuracy: Spec: N/A Demon: N/A | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| Service: Containment Air Cooler 2 Service Water Outlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input type="checkbox"/> | | | | | | | |

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Prepared by: N Lewis
Checked by: [Signature]

Date: 11/1/83
Date: 11/2/83

NOTES

Index No.: 217H-013A
Rev.: 2

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1

Docket: 50-346

COMPONENT MATERIALS EVALUATION SHEET

Index NO.: 217H-013B

Rev.: 2

Prepared by: D. L. ...Date: 11/1/83Checked by: W. H. ...Date: 11/2/83

Plant I.D. No.: SV1357B

Component: Solenoid Valve

Manufacturer: ASCO

Model No.: 206-381-7U

| | | THERMAL AGING | | RADIATION | |
|------------------------|------------------------|------------------|-----------|----------------------------|-----------|
| Parts List | Materials List | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | 40 Years @ 122°F | CAL-80 | 5.0 x 10 ⁷ RADS | CAL-80 |
| Class H Coil: * | | 40 Years @ 140°F | CAL-80 | 2.0 x 10 ⁷ RADS | CAL-80 |
| Enclosure | Steel | | | | |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass | | | | |
| | Braid | | | | |
| Magnet Wire Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-014
Rev.: 2

Prepared by: [Signature] Date: 11/18
Checked by: [Signature] Date: 11/21/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|--|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| Plant ID No. SV1358A | | | | | | | |
| Component: Solenoid Valve | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| Manufacturer: ASCO | | | | | | | |
| Model Number: 206-381-7U | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| Function: Valve Control | | | | | | | |
| Accuracy: Spec: N/A Demon: N/A | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| Service: Containment Air Cooler 3 Service Water Outlet Isolation Valve | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | Radiation | 1.0×10^6 RADS | 2.0×10^7 RADS | T | CAL-80 J-18 J-41 | Sequential Test | None |
| Above Flood Level: N/A | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input type="checkbox"/> | Submergence | N/A | N/A | N/A | N/A | N/A | None |

Facility: Is-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index 217H-014A
Rev.: 2

NOTES

Prepared by: N Lewis Date: 11/1/82
Checked by: Gale Pratt Date: 11/2/83

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1
Docket: 50-346

COMPONENT MATERIALS EVALUATION SHEET

Index No.: 217H-014B
Rev.: 2

Prepared by: [Signature] Date: 1/4/83
Checked by: [Signature] Date: 1/2/83

Plant I.D. No.: SV1358A

Component: Solenoid Valve

Manufacturer: ASCO

Model No.: 206-381-7U

| | | THERMAL AGING | | RADIATION | |
|------------------------|------------------------------|------------------|-----------|----------------------------|-----------|
| Parts List | Materials List | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | 40 Years @ 122°F | CAL-80 | 5.0 x 10 ⁷ RADS | CAL-80 |
| Class H Coil: * | | 40 Years @ 140°F | CAL-80 | 2.0 x 10 ⁷ RADS | CAL-80 |
| Enclosure | Steel | | | | |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass Braid | | | | |
| Magnet Wire Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| Insulation | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.

Facility: Davis-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No.: 217H-015
Rev.: 2

Prepared by: H. Lewis Date: 11/1/83
Checked by: [Signature] Date: 11/4/83

| EQUIPMENT DESCRIPTION | ENVIRONMENT | | | DOCUMENTATION REF. | | Qualification Method | Outstanding Items |
|---|-----------------------|------------------------|------------------------|--------------------|--------------------------|----------------------|-------------------|
| | Parameter | Specification | Qualification | Specification | Qualification | | |
| System: Containment Air Cooling | Operating Time | 45 Seconds | 30 Days | K | J-18 | Simultaneous Test | None |
| Plant ID No. SV1358B | Temperature (°F) | 221.0 | 346.0 | C-314 | J-18 | Simultaneous Test | None |
| Component: Solenoid Valve | Pressure (PSIA) | 19.76 | 124.7 | C-314 | J-18 | Simultaneous Test | None |
| Manufacturer: ASCO | Relative Humidity (%) | 100.0 | 100.0 | A | J-18 | Simultaneous Test | None |
| Model Number: 206-381-7U | Chemical Spray | N/A | N/A | N/A | N/A | N/A | None |
| Function: Valve Control | Radiation | 1.0×10^6 RADs | 2.0×10^7 RADs | T | CAL-80 J-18 J-41 | Sequential Test | None |
| Accuracy: Spec: N/A Demon: N/A | Aging | 40 Years | 40 Years | I | CAL-80 Note 1 J-41 | Analysis | None |
| Service: Containment Air Cooler 3 Service Water Outlet Isolation Valve | Submergence | N/A | N/A | N/A | N/A | N/A | None |
| Location: Auxiliary Bldg. Rm. 314 | | | | | | | |
| Flood Level Elev: N/A | | | | | | | |
| Above Flood Level: N/A | | | | | | | |
| Needed for: Hot Shutdown <input checked="" type="checkbox"/> | | | | | | | |
| Cold Shutdown <input type="checkbox"/> | | | | | | | |

Facility: D-1s-Besse Unit 1
Docket: 50-346

SYSTEM COMPONENT EVALUATION WORKSHEET

Index No. 217H-015A
Rev.: 2

NOTES

Prepared by: N Lewis Date: 11/1/83
Checked by: [Signature] Date: 11/2/83

-
1. Materials evaluation conducted. Materials sensitive to radiation and/or thermal aging summarized on attached evaluation.

Facility: Davis-Besse Unit 1
Docket: 50-346

COMPONENT MATERIALS EVALUATION SHEET

Index No.: 217H-015a
Rev.: 2

Prepared by: H. Lewis Date: 11/1/83
Checked by: W. Marshall Date: 11/2/83

Plant I.D. No.: SV1358B

Component: Solenoid Valve

Manufacturer: ASCO

Model No.: 206-381-7U

| | | THERMAL AGING | | RADIATION | |
|------------------------|------------------------|------------------|-----------|----------------------------|-----------|
| Parts List | Materials List | Qualification | Reference | Qualification | Reference |
| Body & End Caps | Brass | Not Sensitive | | | |
| Discs | Stainless Steel | Not Sensitive | | | |
| Core & Plugnut | Stainless Steel | Not Sensitive | | | |
| Core Tube | Stainless Steel | Not Sensitive | | | |
| Springs | Stainless Steel | Not Sensitive | | | |
| Screw, Brg. | Stainless Steel | Not Sensitive | | | |
| Shading Coil | Copper | Not Sensitive | | | |
| Lever | Stainless Steel | Not Sensitive | | | |
| Disc Guide Cap | Brass | Not Sensitive | | | |
| Strainer | Stainless Steel | Not Sensitive | | | |
| Seats | Stainless Steel | Not Sensitive | | | |
| Gaskets | Ethylene Propylene | 40 Years @ 122°F | CAL-80 | 5.0 x 10 ⁷ RADS | CAL-80 |
| Class H Coil: * | | 40 Years @ 140°F | CAL-80 | 2.0 x 10 ⁷ RADS | CAL-80 |
| Enclosure | Steel | | | | |
| Outerwrap | Fiberglass | | | | |
| Varnish | Silicone | | | | |
| Lead Wire Insulation | Silicone Rubber, Glass | | | | |
| | Braid | | | | |
| Magnet Wire Insulation | Enamel | | | | |
| Insulation | Nomex | | | | |
| Insulation | Iso-Mica | | | | |
| | Epoxy | | | | |
| Insulation | Silicone Resin | | | | |
| | Mica | | | | |

Material & Parts List Reference: V-3A, V-3F, CAT-3B, ROC-3B, ROC-3D

* Coil is scheduled for replacement in accordance with manufacturer's recommendations.