NOTIFIER® by Honeywell

System Current Draw - NFS2-640

Total Current	
C1	1.069 A
C2	1.451 A
C3	1.220 A
C4	23.391 A

Primary Non-Alarm - C1

1.069

0.00 0.88 1.76 2.64 3.52 4.40

Power Used (Amps)

Primary Alarm - C2

0.00 1.48 2.96 4.44 5.92

Power Used (Amps)

RESURGAM, CITY OF PORTLAND, MAINE

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secon			
Device	Qty		Draw	Total	Qty		Draw	Total	Qty		Draw	Total
CPU2-640	1	x	0.25000	0.25000	1	x	0.25000	0.25000	1	x	0.25000	0.25000
CPS-24	1	x	0.00000	0.00000	1	x	0.00000	0.00000	1	x	0.04000	0.04000
KDM-R2 (Backlight On)	1	x	0.10000	0.10000	1	x	0.10000	0.10000	1	x	0.10000	0.10000
NCM-W, NCM-F	2	x	0.11000	0.22000	2	x	0.11000	0.22000	2	x	0.11000	0.22000
AA-100, AA-120	3	x	0.00000	0.00000	3	x	0.00000	0.00000	3	x	0.05000	0.15000
DVC-KD	1	x	0.06000	0.06000	1	x	0.06000	0.06000	1	x	0.06000	0.06000
DVC-AO	1	x	0.17500	0.17500	1	x	0.17500	0.17500	1	x	0.17500	0.17500
RM-1 (with DVC-EM)	1	x	0.07500	0.07500	1	x	0.07500	0.07500	1	x	0.07500	0.07500
RM-1	1	x	0.02000	0.02000	1	x	0.02000	0.02000	1	x	0.02000	0.02000
FDU-80	1	x	0.06400	0.06400	1	x	0.06400	0.06400	1	x	0.02500	0.02500
UDACT-2 Communicator	1	x	0.05200	0.05200	1	x	0.08700	0.08700	1	x	0.05200	0.05200
NBG-12LX	20	x	0.00038	0.00750					20	x	0.00038	0.00750
FSP-851	26	x	0.00030	0.00780					26	x	0.00030	0.00780
FST-851	4	x	0.00030	0.00120					4	x	0.00030	0.00120
FST-851R	43	x	0.00030	0.01290					43	x	0.00030	0.01290
FSP-851R	12	x	0.00030	0.00360					12	x	0.00030	0.00360
RTS151	18	x	0.00000	0.00000					18	x	0.00000	0.00000
FRM-1	27	x	0.00026	0.00689					27	x	0.00026	0.00689
FMM-101	4	x	0.00035	0.00140					4	x	0.00035	0.00140
FSB-200S	6	x	0.00200	0.01200					6	x	0.00200	0.01200
SLC Loop Device Activation Current					1	x	0.40000	0.40000				
			Total Non-Alarm Load:	1.069			Total Alarm Load:	1.451			Total Standby Load:	1.220

C4 - Maximum Secondary Fire Alarm Current Draw

Only include those additional power supplies that are backed up by the control panels batteries.

Device	Qty		Draw	Total
Total Primary Alarm Load - C2	1		1.451	1.451
CPS-24	1	x	0.040	0.040
NCA2 - Backlight Off with loss of AC	0	x	-0.200	
APS-6R Power Supplies	0		0.000	
APS2-6R Power Supplies	0		0.000	
ACPS-610 Power Supplies	0		0.000	
FCPS-24S6 Power Supplies	0		0.000	
FCPS-24S8 Power Supplies	0		0.000	
HPFF8 Power Supplies	0		0.000	
HPFF12 Power Supplies	0		0.000	
DAA2 Series	0		0.000	
DAX Series	0		0.000	
DAA Series	0		0.000	
DS-DB	0		0.000	
FireVoice Panels	0		0.000	
FireVoice Distributed Audio Panels	0		0.000	
XPIQ	0		0.000	
AA-30	0	x	3.000	
AA-120	3	x	7.300	21.900
Other Power Supply	0	x	0.000	
Other Power Supply	0	x	0.000	
			Total Standby Alarm Load:	23.391

NOTIFIER by Honeywell

System Power Requirements

Notifier NFS2-640 Fire Alarm Control Panel

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
CITY OF PORTLAND, MAINE
RESURGAM

Date: 09/06/13

Protected Premises: C.C.C.C FACP Date: 3/7/2013
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc. Phone:
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements

5.00 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load

1.07 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load

1.45 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements

37.50 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 1.220 A	x	Required Standby Time **24 hours**	29.29
Secondary Alarm Load 23.391 A	x	Required Alarm Time **0.084 hours**	1.96
		Total Secondary Load	31.25
		Derating factor	**x 1.2**
		Secondary Load Requirements (Amp Hours)	**37.50** AH

Battery Selection

55 Amp Hours

Select batteries from the list below.

55 AH BAT-12550 Battery (12 volt)

◉ Two ○ Four (two 12VDC sets in parallel)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Comments

1. Battery size exceeds FACP capacity. BB-55 or other external battery box
2. Selected battery size meets secondary load requirements.
3. The selected batteries (55AH) are within the charger range of this power supply (18-200AH).

Spare Battery Capacity	17.50	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	35.14	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	2.36	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER® by Honeywell

System Current Draw - FCPS-24s8

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Total Current	
C1	0.091 A
C2	5.127 A
C3	0.065 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
SPSR110	5	x	0.00000	0.00000	5	x	0.20200	1.01000	5	x	0.00000	0.00000
SPSCR110	1	x	0.00000	0.00000	1	x	0.20200	0.20200	1	x	0.00000	0.00000
SPSCR75	2	x	0.00000	0.00000	2	x	0.15800	0.31600	2	x	0.00000	0.00000
SPSR75	5	x	0.00000	0.00000	5	x	0.15800	0.79000	5	x	0.00000	0.00000
SPSCR30	4	x	0.00000	0.00000	4	x	0.09400	0.37600	4	x	0.00000	0.00000
SPSCR15	9	x	0.00000	0.00000	9	x	0.06600	0.59400	9	x	0.00000	0.00000
SPSR15	7	x	0.00000	0.00000	7	x	0.06600	0.46200	7	x	0.00000	0.00000
SR15	5	x	0.00000	0.00000	5	x	0.06600	0.33000	5	x	0.00000	0.00000
SPSR30	3	x	0.00000	0.00000	3	x	0.09400	0.28200	3	x	0.00000	0.00000
SRK15	6	x	0.00000	0.00000	6	x	0.06600	0.39600	6	x	0.00000	0.00000
SPSRK75	1	x	0.00000	0.00000	1	x	0.15800	0.15800	1	x	0.00000	0.00000
SPSRK15	1	x	0.00000	0.00000	1	x	0.06600	0.06600	1	x	0.00000	0.00000
			Total Non-Alarm Load:	0.091	Total Alarm Load:			5.127	Total Standby Load:			0.065

NOTIFIER by Honeywell

System Power Requirements

FCPS-24s8 Power Supply

Reviewed for Code Compliance
Inspections Division
Approved with Conditions
CITY OF PORTLAND, MAINE
RESURGAM

Date: 09/06/13

Protected Premises: C.C.C.C. FCPS 1 Date: 3/7/2013
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc. Phone:
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements

3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load

0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load

5.13 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements

3.41 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time **24 hours**	1.56
Secondary Alarm Load 5.127 A	x	Required Alarm Time (hours) **0.250 hours**	1.28
		Total Secondary Load	2.84
		Derating factor	x 1.2
		Secondary Load Requirements	**3.41**

Battery Selection

7 Amp Hours

Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

◉ Two ○ Four (two 12VDC sets in parallel)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	3.59	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	1.54	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER by Honeywell

System Current Draw - FCPS-24s8

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Total Current	
C1	0.091 A
C2	5.289 A
C3	0.065 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
SPSR110	5	x	0.00000	0.00000	5	x	0.20200	1.01000	5	x	0.00000	0.00000
SPSCR110	4	x	0.00000	0.00000	4	x	0.20200	0.80800	4	x	0.00000	0.00000
SPSCR75	4	x	0.00000	0.00000	4	x	0.15800	0.63200	4	x	0.00000	0.00000
SPSR75	4	x	0.00000	0.00000	4	x	0.15800	0.63200	4	x	0.00000	0.00000
SPSCR30	6	x	0.00000	0.00000	6	x	0.09400	0.56400	6	x	0.00000	0.00000
SPSCR15	4	x	0.00000	0.00000	4	x	0.06600	0.26400	4	x	0.00000	0.00000
SPSR15	4	x	0.00000	0.00000	4	x	0.06600	0.26400	4	x	0.00000	0.00000
SR15	8	x	0.00000	0.00000	8	x	0.06600	0.52800	8	x	0.00000	0.00000
SPSR30	4	x	0.00000	0.00000	4	x	0.09400	0.37600	4	x	0.00000	0.00000
SRK15	1	x	0.00000	0.00000	1	x	0.06600	0.06600	1	x	0.00000	0.00000
			Total Non-Alarm Load:	0.091	Total Alarm Load:			5.289	Total Standby Load:			0.065

NOTIFIER by Honeywell

System Power Requirements

FCPS-24s8 Power Supply

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Protected Premises: C.C.C.C. FCPS 2 Date: 3/7/2013
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc. Phone:
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements

3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load

0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load

5.29 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements

3.46 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time **24 hours**	1.56
Secondary Alarm Load 5.289 A	x	Required Alarm Time (hours) **0.250 hours**	1.32
		Total Secondary Load	2.88
		Derating factor	**x 1.2**
		Secondary Load Requirements	**3.46**

Battery Selection

7 Amp Hours

Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

◉ Two ○ Four (two 12VDC sets in parallel)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	3.54	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	1.59	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER by Honeywell

System Current Draw - FCPS-24s8

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Total Current	
C1	0.091 A
C2	5.073 A
C3	0.065 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
SPSR110	4	x	0.00000	0.00000	4	x	0.20200	0.80800	4	x	0.00000	0.00000
SPSCR110	5	x	0.00000	0.00000	5	x	0.20200	1.01000	5	x	0.00000	0.00000
SPSCR75	8	x	0.00000	0.00000	8	x	0.15800	1.26400	8	x	0.00000	0.00000
SPSCR30	7	x	0.00000	0.00000	7	x	0.09400	0.65800	7	x	0.00000	0.00000
SPSCR15	12	x	0.00000	0.00000	12	x	0.06600	0.79200	12	x	0.00000	0.00000
SPSR15	3	x	0.00000	0.00000	3	x	0.06600	0.19800	3	x	0.00000	0.00000
SR15	3	x	0.00000	0.00000	3	x	0.06600	0.19800	3	x	0.00000	0.00000
			Total Non-Alarm Load:	0.091	Total Alarm Load:			5.073	Total Standby Load:			0.065

NOTIFIER by Honeywell

System Power Requirements

FCPS-24s8 Power Supply

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Protected Premises: C.C.C.C. FCPS 3 Date: 3/7/2013
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc. Phone:
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements 3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load 0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load 5.07 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements 3.39 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time **24 hours**	1.56
Secondary Alarm Load 5.073 A	x	Required Alarm Time (hours) **0.250 hours**	1.27
		Total Secondary Load	2.83
		Derating factor	x 1.2
		Secondary Load Requirements	**3.39**

Battery Selection 7 Amp Hours

Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

◉ Two ○ Four (two 12VDC sets in parallel)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	3.61	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	1.52	Secondary Alarm Load (AH) * Derating Factor

NOTIFIER® by Honeywell

System Current Draw - FCPS-24s8

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Total Current	
C1	0.091 A
C2	3.656 A
C3	0.065 A

Select devices using the "Qty" column.
Use yellow cells to enter quantities and current values.
To show only selected devices, select "Show Selected Devices".
To clear selected devices, select "Clear Selections".

	C1 - Primary Non-Alarm				C2 - Primary Alarm				C3 - Secondary Non-Alarm			
Device	Qty		Draw	Non-Alarm	Qty		Draw	Alarm	Qty		Draw	Non-Alarm
FCPS-24S8 Main Circuit Board	1	x	0.09100	0.09100	1	x	0.14500	0.14500	1	x	0.06500	0.06500
SPSCR30	4	x	0.00000	0.00000	4	x	0.09400	0.37600	4	x	0.00000	0.00000
SPSCR15	5	x	0.00000	0.00000	5	x	0.06600	0.33000	5	x	0.00000	0.00000
SPSR15	3	x	0.00000	0.00000	3	x	0.06600	0.19800	3	x	0.00000	0.00000
SR15	4	x	0.00000	0.00000	4	x	0.06600	0.26400	4	x	0.00000	0.00000
SPSCRH177	7	x	0.00000	0.00000	7	x	0.28100	1.96700	7	x	0.00000	0.00000
SPSR30	4	x	0.00000	0.00000	4	x	0.09400	0.37600	4	x	0.00000	0.00000
			Total Non-Alarm Load:	0.091	Total Alarm Load:			3.656	Total Standby Load:			0.065

NOTIFIER by Honeywell

System Power Requirements

FCPS-24s8 Power Supply

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Protected Premises: C.C.C.C. FCPS 4 Date: 3/7/2013
Address:
City: Portland State: Maine Zip:

Prepared By: Norris Inc. Phone:
Address: 2257 West Broadway Email:
City: South Portland State: Maine Zip: 04106

AC Branch Current Requirements 3.20 AMPS @ 120 VAC

Current required by source to power the fire alarm system.

Primary Standby Load 0.09 Amps

Current load on the primary power supply during **non-alarm** conditions.

Primary Alarm Load 3.66 Amps

Current load on the primary power supply during **alarm** conditions.

Secondary Load Requirements 2.97 Amp Hours

Total Secondary Load from the calculation table below.

Current Draw		Time (hours)	Total (AH)
Secondary Standby Load 0.065 A	x	Required Standby Time **24 hours**	1.56
Secondary Alarm Load 3.656 A	x	Required Alarm Time (hours) **0.250 hours**	0.91
		Total Secondary Load	2.47
		Derating factor	x 1.2
		Secondary Load Requirements	**2.97**

Battery Selection 7 Amp Hours

Select batteries from the list below.

7 AH BAT-1270 Battery (12 volt)

◉ Two ○ Four (two 12VDC sets in parallel)

Reviewed for Code Compliance
Inspections Division
Approved with Conditions

Date: 09/06/13

Battery Distribution Chart

Shows amp-hour distribution of your selections.

Comments

1. Batteries will fit in the FACP cabinet.
2. Selected battery size meets secondary load requirements.
3. The selected batteries (7AH) are within the charger range of this power supply (7-18AH).

Spare Battery Capacity	4.03	Battery Selection (AH) - Secondary Load Requirements (AH)
Secondary Standby Load	1.87	Secondary Standby Load (AH) * Derating Factor
Secondary Alarm Load	1.10	Secondary Alarm Load (AH) * Derating Factor