

Table 8.3-13—Division 1 Class 1E Uninterruptible Power Supply Nominal Loads

Load Description	Load Requirement (kW)			
	Momentary ⁽¹⁾		Random ⁽²⁾	Continuous
	0-1 Min	119-120 Min	0-1 Min Duration	0-120 Min
Inverter Load (MCC 31BRA)				
• Motor Operated Valves	175.2	0	138.8	2.8 ⁽⁵⁾
• Solenoid Valves	0.1	0.1	0	3.3
• Dampers	0	0	44.8	0
• AC/DC Converters	0	0	0	31.3
• I&C Systems	0	0	0	10.5
• 31BRA Control Power	2	0	2	0.3
Total Inverter Loads	177.3	0.1	185.6	48.2
250 Vdc Loads (switchgear 31BUC)				
• Control Power	18.5	0	0	1.2
• DC/DC Converters ⁽³⁾	0	0	0	0
• Inverter Load ⁽⁴⁾	203.8	0.1	213.3	55.4
• EDG Auxiliaries	14.3	3.3	0	0.8
Total Division 1 EUPS Nominal Loads	236.6	3.4	213.3	57.4

Notes:

1. Maximum load occurring during the one minute momentary load duration is assumed for the entire one minute duration as described in IEEE Std 485-1997.
2. Random load assumed to occur at the most critical time of the duty cycle. Maximum load occurring during the one minute random load duration is assumed for the entire one minute duration.
3. AC/DC and DC/DC converters operate in parallel. Total load contribution from converters is shown as inverter load to include efficiency factor.
4. EUPS Battery load includes inverter efficiency factor of 87 percent.
5. Load contribution from modulating valves in continuous use.

Table 8.3-14—Division 2 Class 1E Uninterruptible Power Supply Nominal Loads

Load Description	Load Requirement (kW)			
	Momentary ⁽¹⁾		Random ⁽²⁾	Continuous
	0-1 Min	119-120 Min	0-1 Min Duration	0-120 Min
Inverter Load (MCC 32BRA)				
• Motor Operated Valves	85.6	0	120.9	2.8 ⁽⁵⁾
• Solenoid Valves	0.1	0.1	0	2.7
• Dampers	0	0	22.4	0
• Special Emergency Lighting	0	0	0	4
• AC/DC Converters	0	0	0	27.5
• I&C Systems	0	0	0	7.6
• 32BRA Control Power	0.6	0	1.3	0.2
Total Inverter Loads	86.3	0.1	144.6	44.8
250 Vdc Loads (switchgear 32BUC)				
• Control Power	12.6	0	0	1
• DC/DC Converters ⁽³⁾	0	0	0	0
• Inverter Load ⁽⁴⁾	99.2	0.1	166.2	51.5
• EDG Auxiliaries	14.3	3.3	0	0.8
Total Division 2 EUPS Nominal Loads	126.1	3.4	166.2	53.3

Notes:

1. Maximum load occurring during the one minute momentary load duration is assumed for the entire one minute duration as described in IEEE Std 485-1997.
2. Random load assumed to occur at the most critical time of the duty cycle. Maximum load occurring during the one minute random load duration is assumed for the entire one minute duration.
3. AC/DC and DC/DC converters operate in parallel. Total load contribution from converters is shown as inverter load to include efficiency factor.
4. EUPS Battery load includes inverter efficiency factor of 87 percent.
5. Load contribution from modulating valves in continuous use.

Table 8.3-15—Division 3 Class 1E Uninterruptible Power Supply Nominal Loads

Load Description	Load Requirement (kW)			
	Momentary ⁽¹⁾		Random ⁽²⁾	Continuous
	0-1 Min	119-120 Min	0-1 Min Duration	0-120 Min
Inverter Load (MCC 33BRA)				
• Motor Operated Valves	85.6	0	120.9	2.8 ⁽⁵⁾
• Solenoid Valves	0.1	0.1	0	2.7
• Dampers	0	0	22.4	0
• Special Emergency Lighting	0	0	0	4
• AC/DC Converters	0	0	0	27.5
• I&C Systems	0	0	0	7.6
• 33BRA Control Power	0.6	0	1.3	0.2
Total Inverter Loads	86.3	0.1	144.6	44.8
250 Vdc Loads (switchgear 33BUC)				
• Control Power	12.6	0	0	1
• DC/DC Converters ⁽³⁾	0	0	0	0
• Inverter Load ⁽⁴⁾	99.2	0.1	166.2	51.5
• EDG Auxiliaries	14.3	3.3	0	0.8
Total Division 3 EUPS Nominal Loads	126.1	3.4	166.2	53.3

Notes:

1. Maximum load occurring during the one minute momentary load duration is assumed for the entire one minute duration as described in IEEE Std 485-1997.
2. Random load assumed to occur at the most critical time of the duty cycle. Maximum load occurring during the one minute random load duration is assumed for the entire one minute duration.
3. AC/DC and DC/DC converters operate in parallel. Total load contribution from converters is shown as inverter load to include efficiency factor.
4. EUPS Battery load includes inverter efficiency factor of 87 percent.
5. Load contribution from modulating valves in continuous use.

Table 8.3-16—Division 4 Class 1E Uninterruptible Power Supply Nominal Loads

Load Description	Load Requirement (kW)			
	Momentary ⁽¹⁾		Random ⁽²⁾	Continuous
	0-1 Min	119-120 Min	0-1 Min Duration	0-120 Min
Inverter Load (MCC 34BRA)				
• Motor Operated Valves	175.2	0	138.8	2.8 ⁽⁵⁾
• Solenoid Valves	0.1	0.1	0	3.3
• Dampers	0	0	44.8	0
• AC/DC Converters	0	0	0	31.3
• I&C Systems	0	0	0	10.5
• 34BRA Control Power	2	0	2	0.3
Total Inverter Loads	177.3	0.1	185.6	48.2
250 Vdc Loads (switchgear 34BUC)				
• Control Power	18.5	0	0	1.2
• DC/DC Converters ⁽³⁾	0	0	0	0
• Inverter Load ⁽⁴⁾	203.8	0.1	213.3	55.4
• EDG Auxiliaries	14.3	3.3	0	0.8
Total Division 4 EUPS Nominal Loads	236.6	3.4	213.3	57.4

Notes:

1. Maximum load occurring during the one minute momentary load duration is assumed for the entire one minute duration as described in IEEE Std 485-1997.
2. Random load assumed to occur at the most critical time of the duty cycle. Maximum load occurring during the one minute random load duration is assumed for the entire one minute duration.
3. AC/DC and DC/DC converters operate in parallel. Total load contribution from converters is shown as inverter load to include efficiency factor.
4. EUPS Battery load includes inverter efficiency factor of 87 percent.
5. Load contribution from modulating valves in continuous use.

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