

## HPS SENTINEL® 600 VOLT CLASS ENERGY EFFICIENT GENERAL PURPOSE DISTRIBUTION TRANSFORMERS

ALUMINUM & COPPER, SINGLE PHASE STANDARD SPECIFICATIONS

15 to 37.5 kVA

50 to 167 kVA



	15 to 37.5 kVA	50 to 167 kVA
<b>Efficiency</b>	Meets DOE 10 CFR Part 431 & C802.2 efficiencies at 35% of rated load. Efficiencies are calculated under a linear load profile.	
<b>UL Listed</b>	File: E112313	File: E112313
<b>CSA Certified</b>	File: LR3902	File: LR3902
<b>Frequency</b>	60 Hz	60 Hz
<b>Insulation System</b>	220°C (150°C rise) (optional 115°C and 80°C rise available)	220°C (150°C rise) (optional 115°C and 80°C rise available)
<b>Enclosure Type</b>	Heavy Duty Ventilated Type 3R Optional Type 4, 4X (stainless steel) and 12.	Heavy Duty Ventilated Type 3R Optional Type 4, 4X (stainless steel) and 12.
<b>Enclosure Finish</b>	ANSI 61 Grey, UL50	ANSI 61 Grey, UL50
<b>Standard Primary Taps</b>	Refer to wiring diagrams for details.	Refer to wiring diagrams for details.
<b>Termination</b>	Front accessible separate high and low voltage terminals; connectors suitable for aluminum and copper are provided for easy cable installation.	Front accessible separate high and low voltage terminals; connectors suitable for aluminum and copper are provided for easy cable installation.
<b>Conduit Knock-Outs</b>	Standard on all units.	Standard on 50 kVA, 75 kVA & 100 kVA units.
<b>Impedance</b>	Typically 2.5% to 6.5%	Typically 2.5% to 6.5%
<b>Mounting</b>	Floor or wall/ceiling mounting available. Refer to selection tables for details.	Floor or wall/ceiling mounting available. Refer to selection tables for details.
<b>Seismic</b>	Seismically certified in accordance with 2009 IBC for $S_{DS} \leq 2.00g$ , $z/h = 1.0$ and $I_p = 1.5$	Seismically certified in accordance with 2009 IBC for $S_{DS} \leq 2.00g$ , $z/h = 1.0$ and $I_p = 1.5$
<b>Sound level</b>	Meets NEMA ST-20 standards. (Optional low noise units available)	Meets NEMA ST-20 standards. (Optional low noise units available)

*Other voltages and kVA sizes not listed in this section are available upon request for both aluminum and copper wound units. Standard features as listed above may differ. Please contact customer service for details, price and availability.*

SECTION 7





## ALUMINUM WOUND, SINGLE PHASE

208 Primary Volts

120/240 Secondary Volts

60 Hz

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015BE	NH5	19.40	20.20	21.50	170	F or W *	SCD 32
25	NMF025BE	NH6	23.90	25.00	28.75	220	F or W *	SCD 31
37.5	NMF037BE	NH6	23.90	25.00	28.75	260	F or W *	SCD 31
50	NMF050BE	NH3	26.00	25.00	38.00	375	F or W *	SCD 2
75	NMF075BE	NH3	26.00	25.00	38.00	500	F or W *	SCD 39
100	NMF100BE	NH4	32.00	29.50	41.00	650	F	SCD 39
150	NMF150BE	NJ4	32.00	32.50	50.00	850	F	SCD 39
167	NMF167BE	NJ4	32.00	32.50	50.00	950	F	SCD 39

For shielded units, please add the suffix "S" to the above part numbers.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED.  
REFER TO PAGES 271 TO 273 FOR DETAILS.

240 X 480 Primary Volts

120/240 Secondary Volts

60 Hz

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015LE	NH5	19.40	20.20	21.50	170	F or W *	SCD 34
25	NMF025LE	NH6	23.90	25.00	28.75	220	F or W *	SCD 17
37.5	NMF037LE	NH6	23.90	25.00	28.75	260	F or W *	SCD 17
50	NMF050LE	NH3	26.00	25.00	38.00	370	F or W *	SCD 17
75	NMF075LE	NH3	26.00	25.00	38.00	500	F or W *	SCD 17
100	NMF100LE	NH4	32.00	29.50	41.00	650	F	SCD 17
150	NMF150LE	NJ4	32.00	32.50	50.00	850	F	SCD 17
167	NMF167LE	NJ4	32.00	32.50	50.00	900	F	SCD 17

For shielded units, please add the suffix "S" to the above part numbers.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED.  
REFER TO PAGES 271 TO 273 FOR DETAILS.

277 Primary Volts

120/240 Secondary Volts

60 Hz

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015FE	NH5	19.40	20.20	21.50	170	F or W *	SCD 32
25	NMF025FE	NH6	23.90	25.00	28.75	260	F or W *	SCD 31
37.5	NMF037FE	NH6	23.90	25.00	28.75	400	F or W *	SCD 31
50	NMF050FE	NH3	26.00	25.00	38.00	450	F or W *	SCD 31
75	NMF075FE	NH3	26.00	25.00	38.00	650	F or W *	SCD 31
100	NMF100FE	NH4	32.00	29.50	41.00	700	F	SCD 39
150	NMF150FE	NJ4	32.00	32.50	50.00	830	F	SCD 39
167	NMF167FE	NJ4	32.00	32.50	50.00	880	F	SCD 39

For shielded units, please add the suffix "S" to the above part numbers.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED.  
REFER TO PAGES 271 TO 273 FOR DETAILS.

Note: For units smaller than 15kVA, please refer to the single phase encapsulated units in Section 8.

Products listed on this page are available as 'CE Mark' products. Please consult our sales office.

FOR TERMINATION DETAILS SEE PAGE 275.

FOR ACCESSORIES SEE PAGES 271 TO 274.

Data subject to change without notice.





## ALUMINUM WOUND, SINGLE PHASE

416 Primary Volts

120/240 Secondary Volts

60 Hz

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015HE	NH5	19.40	20.20	21.50	220	F or W *	SCD 32
25	NMF025HE	NH6	23.90	25.00	28.75	220	F or W *	SCD 31
37.5	NMF037HE	NH6	23.90	25.00	28.75	260	F or W *	SCD 31
50	NMF050HE	NH3	26.00	25.00	38.00	400	F or W *	SCD 31
75	NMF075HE	NH3	26.00	25.00	38.00	480	F or W *	SCD 31
100	NMF100HE	NH4	32.00	29.50	41.00	650	F	SCD 39
150	NMF150HE	NJ4	32.00	32.50	50.00	850	F	SCD 39
167	NMF167HE	NJ4	32.00	32.50	50.00	900	F	SCD 39

For shielded units, please add the suffix "S" to the above part numbers.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

600 Primary Volts

120/240 Secondary Volts

60 Hz

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015PE	NH5	19.40	20.20	21.50	220	F or W *	SCD 32
25	NMF025PE	NH6	23.90	25.00	28.75	220	F or W *	SCD 31
37.5	NMF037PE	NH6	23.90	25.00	28.75	260	F or W *	SCD 31
50	NMF050PE	NH3	26.00	25.00	38.00	400	F or W *	SCD 31
75	NMF075PE	NH3	26.00	25.00	38.00	480	F or W *	SCD 31
100	NMF100PE	NH4	32.00	29.50	41.00	650	F	SCD 39
150	NMF150PE	NJ4	32.00	32.50	50.00	850	F	SCD 39
167	NMF167PE	NJ4	32.00	32.50	50.00	900	F	SCD 39

For shielded units, please add the suffix "S" to the above part numbers.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

## SINGLE PHASE, EXPORT MODEL

190/200/208/220 X 380/400/416/440 Primary Volts

120/240 Secondary Volts

50/60 Hz\*\*

kVA	Catalog Number	Case Style (Pages 260 - 267)	Approx. Dimensions (Inches)			Approx. Weight (Lbs.)	Mtg Type W - Wall F - Floor	Wiring Diagram (Pages 276 - 288)
			Width	Depth	Height			
15	NMF015XE	NH6	23.90	25.00	28.75	190	F or W *	SCD 30
25	NMF025XE	NH6	23.90	25.00	28.75	240	F or W *	SCD 30
37.5	NMF037XE	NH6	23.90	25.00	28.75	300	F or W *	SCD 30
50	NMF050XE	NH3	26.00	25.00	38.00	390	F or W *	SCD 30
75	NMF075XE	NH3	26.00	25.00	38.00	540	F or W *	SCD 30
100	NMF100XE	NH4	32.00	29.50	41.00	700	F	SCD 30
150	NMF150XE	CONSULT FACTORY					F	SCD 30
167	NMF167XE	CONSULT FACTORY					F	SCD 30

For shielded units, please add the suffix "S" to the above part numbers.

\*\*Note: Meets DOE 10 CFR Part 431 and C802.2 at 60 Hz.

\*WALL MOUNTING KIT AND/OR DRIP PLATE KIT REQUIRED. REFER TO PAGES 271 TO 273 FOR DETAILS.

Note: For units smaller than 15kVA, please refer to the single phase encapsulated units in Section 8.

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FOR TERMINATION DETAILS SEE PAGE 275.

FOR ACCESSORIES SEE PAGES 271 TO 274.

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SECTION 7