75kVA HIGH EFFICIENCY HARMONIC TREATMENT COPPER WOUND TRANSFORMER, DRY TYPE

PARAMETER		DATA	UNITS
Electrical Rating	Power	75	kVA
	Frequency	60	Hz
	Primary	480 (Nominal)	Volts
	Primary Taps	2 x 2.5 % FCAN, 4 x 2.5 % FCBN (6 Taps)	%
	Secondary	480/277 (no load)	Volts
	Phase Shift	0 (Primary/Secondary)	Degrees
	Load Compatibility	K13	K-Factor
Construction	Connection	Primary: 3 Ph 3-Wire, Secondary: 3 Ph. 4 -Wire	
	Neutral Bus Rating	200% of Line Current	
	Coils	Copper, Braised Internal Connections	
	Core	3-Leg, Very Low Loss Grain Oriented Steel	
	Insulation Class	220 (UL Listed-E221932))	
	Insulation	Nomex with Epoxy Co-Polymer impregnant	
	Impregnation / Properties	Epoxy Copolymer: Build > 2 mils @ 3.2 kV/mil (dielectric); H_2O absorption < 0.05%; Curing VOC < 1.65 lbs/gal.	
Losses	Linear Loading	no load / 15%: / 25%: / 35%: / 50%: / 75%: / 100%:	%
	Watt Loss	159 / 195 / 258 / 360 / 586 / 1,219 / 2,306	Watts
	Heat	543 / 665 / 880 / 1,228 / 1,999 / 4,159 / 7,868	BTU/hr
Efficiency	Per NEMA TP-2 (35% Load)	98.6 (NEMA TP-1/CSA C802.3-01; requirement 98.0%) (DOE 10 CFR Part 430 CSL 3 requirement 98.6%)	%
	Linear Loading	1/6: 98.2 / ¼: 98.6 / ½: 98.4 / ¾: 97.8 / 1/1: 97.0	
	Non-linear (I THD ~ 80%)	1/6: 98.1 / ¼: 98.4 / ½: 98.0 / ¾: 97.0 / 1/1: 95.7	
Operation	Temperature Rise	< 115 (full linear load at nominal conditions)	^{O}C
	Excitation	0.746	Amps
	Audible Noise	50 (per NEMA ST-20)	dBA
	Ambient	40 ^{O}C (per ANSI C57.96-01.100)	^{O}C
	B.I.L.	10	kV
Harmonic Treatment	Transformer secondary System (common coupling)	Triplens: 3rd, 9th, 15th; 5th, 7th, 17th and 19th with complimentary 30 degree transformer	
Abnormal	Short Circuit Primary	1,768 (symmetrical output short circuit)	Amps
	Short Circuit Secondary	2,476 (asymmetrical L-N/G short circuit)	
	Inrush	367 (typical 3 cycle recovery)	
Impedance	Z: (+/- Sequence)	Z: 5.2 / X: 4.6 / R: 2.4	%
	Zo: (IEEE C57.12.91-1995/9.5.1)	Z_0: 1.0 / X_0: 0.2 / R_0: 1.0	
Mechanical	Enclosure Type	Type 1 (2/3R opt.): Vermin resistant with < ½" wide openings	
	Finish	Green Epoxy Powder Coating	
	Drawing	C Case / 300-000068-403 (attached)	
	Weight	750	lbs
Certification /Approvals	ISO Certifications	ISO 9001-2000: Quality Management System ISO 14001-2004: Environmental Management System	
	UL/CSA / Specifications	UL 1561 Listed, CSA C22.2 No. 47-M90 Certified, NEMA ST-20	
Options: (Supplied only when marked with 'X')	X Electrostatic Shield	> 60 (CM Attenuation @ 10kHz)	dB
	LK	Lug Kit	
	TVSS	Surge Protection	
	SB	Seismic Bracing	

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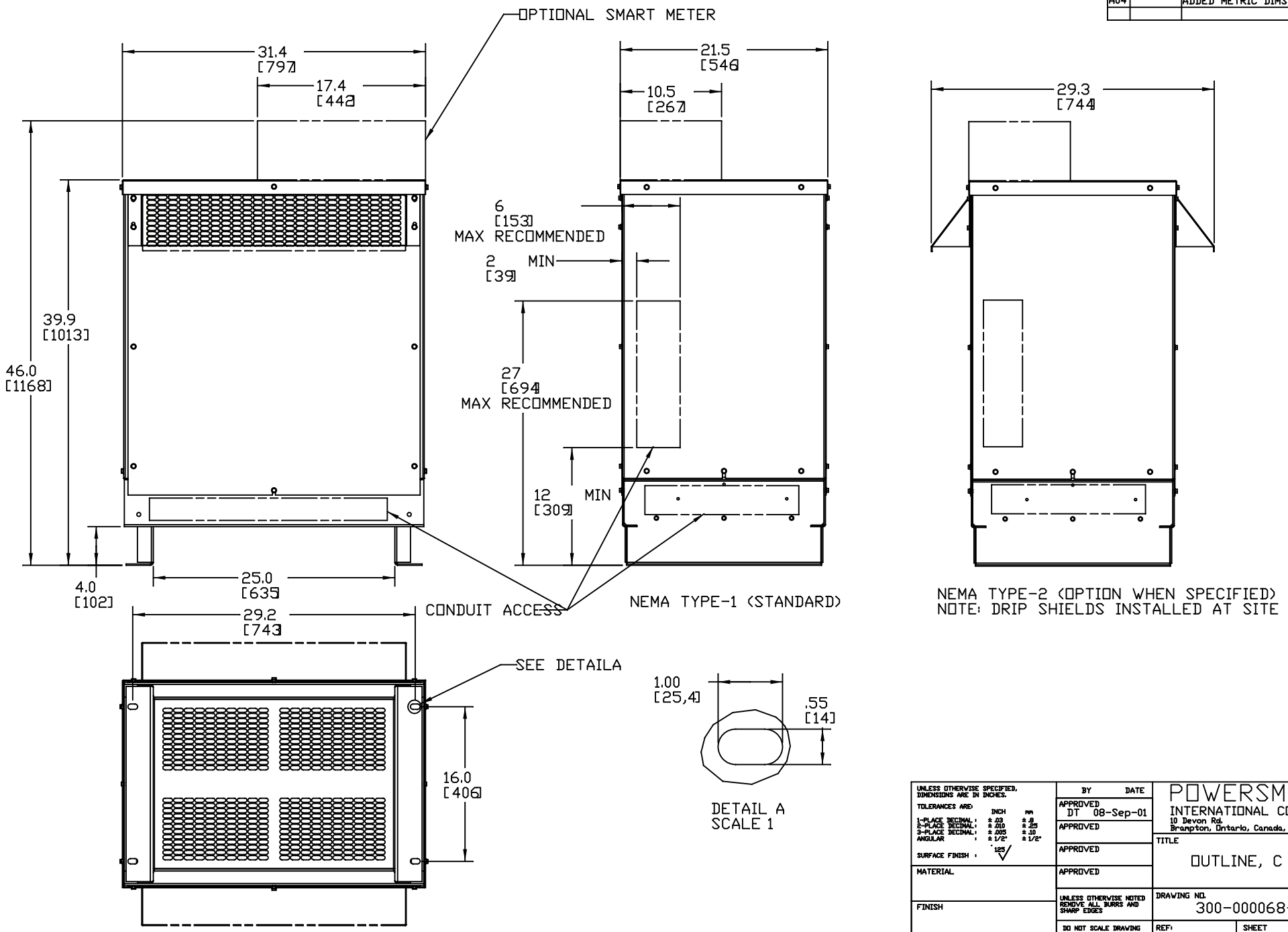
DATA SHEET	MODEL:	HC-ISO-C3-75-0-480-480		
Prepared: N.Xie	Date: May 17, 11	Part No: **200-003163-100**		
Revised:	Date:	Doc. No: **200-003163-800**	**Rev:**	**A00**

REV	ECO No.	DESCRIPTION
A00		RELEASED
A01		ADDED -3R SIDE VIEW
A02		ADDED SUGGESTED DIMENSIONS FOR SIDE PANEL ACCESS
A03		ADDED DIMESNIONS
A04		ADDED METRIC DIMS, SMART OUTLINE



UNLESS OTHERVISE SPECIFIED, DIMENSIONS ARE IN INCHES.

TOLERANCES ARE:

	INCH	mm
1-PLACE DECIMAL	± .03	± .8
2-PLACE DECIMAL	± .010	± .25
3-PLACE DECIMAL	± .005	± .10
ANGULAR	± 1/2°	± 1/2°

SURFACE FINISH: 125

MATERIAL

FINISH

BY	DATE
APPROVED DT	08-Sep-01
APPROVED	
APPROVED	
APPROVED	

UNLESS OTHERVISE NOTED REMOVE ALL BURRS AND SHARP EDGES

DO NOT SCALE DRAWING

POWERSMITHS
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Brampton, Ontario, Canada, L6T 5B5

TITLE
OUTLINE, C CASE

DRAWING NO. 300-000068-403 REV. A04

REF: SHEET 1 of 1