

PROJECT			
<i>Secondary Doc Ref</i>		<i>PO</i>	
<i>Document Item</i>			

Dry transformer
0.69-0,420 kV – 400kVA
Data Sheet + identification
plate

B	26 Sep 13	Issued for Construction		
A	29 Aug 13	Issued for Review		
Rev	Date	Description	Written By	Approved By
Document Revisions				

DISTRIBUTION TRANSFORMERS

Rev	DRY LV/LV (0,690/0,420kV) TRANSFORMER			
1	ITEM:	QUANTITY		1
2	Job specification:	9806J 0440 JSS 1641 002		Standards, codes: IEC
3	Manufacturer:			
4	ENVIRONMENTAL CONDITIONS			
5	Installation (indoor/outdoor) / Ambient Type	Indoor , in safe area		Industrial, dusty & corrosive atmosphere.
6	Ambient Design Temperature	Max: 30 °C		Min: 10°C
7	Altitude/Relative Humidity	a.s.l.: <1000m		
8	GENERAL REQUIREMENTS (VENDOR TO COMPLY WITH)			
9	Type	Dry type: <input checked="" type="checkbox"/>	Impregnated <input type="checkbox"/>	Cast resin <input checked="" type="checkbox"/>
10	Kind of transformer	With separate windings <input checked="" type="checkbox"/>	Autotransformer <input type="checkbox"/>	
11	No Load Voltage Ratio / Highest voltage Um	0,690 / 0,420-0,240 KV / KV		Refer to IEC 60076-3 kV / kV
12	Secondary voltage at rated power & P.F. of 0.8	0,400 - 0,230 kV		
13	Mode of operation (individual / parallel)	individual operation		
14	Frequency/Phases	50 Hz	2+/- %	No: 3 phase
15	Maximum primary system short circuit rating	50 kA rms		
16	Maximum short circuit duration	2 sec According to IEC 60076-5		
17	Off Circuit Tap Changer	± 2,5 % per step	N° steps: 5	Total range: ± 5 %
18	Windings	Copper		
19	Winding Connection and Vector Group	Dyn 11		
20	Insulation class	Class F minimum		
21	Ambient / climate / fire resistance	Certified E2/C2/F1 according to standard CEI 60076-11		
22	Transformer mounting	Skid <input checked="" type="checkbox"/>	Rollers <input type="checkbox"/>	Bidirectionnal roller <input type="checkbox"/>
23	Metallic enclosure	protection : IP 31		
24	Accessories			
25	Lifting rings	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
26	2 grounding clamps	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
27	Lugs and hooks	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
28	Monitoring box for temperature sensors	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
29		<input type="checkbox"/>	<input type="checkbox"/>	
30	TRANSFORMER SPECIFIC'S DATA (VENDOR TO COMPLY WITH)			
31				
32	Transformer tag:	See line 1		Quantity: See line 1
4	33	Nominal Rating Natural Cooling (AN)		400 kVA
	34	Cooling type		AN
	35	Impedance Voltage		4%
4	36	Primary Connections : See line 38	Bus Duct <input type="checkbox"/>	Cable <input checked="" type="checkbox"/> line 38 mm ²
4	37	Secondary Connector : See line 39	Bus Duct <input type="checkbox"/>	Cable <input checked="" type="checkbox"/> line 39 mm ²
4	38	Cable Type & n° per phase Primary: 2 cables 4G120 mm² / CU-XLPE-GSTA-PVC		
4	39	Cable Type & n° per phase Secondary: 2cables 5G240 mm² / CU-XLPE-GSTA-PVC		
	40	Primary terminals		
	41	Secondary terminals		
	42	Secondary: neutral brought out: YES	Suppliers to specify transformers facilities for the cables connection on all terminals, primary, secondary and neutral. (to be included in scope and supply)	
	43	Neutral connection: cable type / section	line39 mm ²	
	44	CT on neutral (ratio / class)	NA	
	45	System earthing Primary : IT Secondary: TNS		
4	46	Sound press. Level at 1 m / Sound power level	< 85 LPA (dB)	LWA (dB)

DISTRIBUTION TRANSFORMERS

47	TRANSFORMER MANUFACTURER'S DATA (PART TO BE FILLED IN BY VENDOR)				
48	Manufacturer / Model	type	Schneider	Tricast	
49	No Load Losses / No Load Current (primary)	1700 W		%	
50	Load Losses	4/4 Load: 4700 W	3/4 Load: 2640 W	2/4 Load: 1180 W	
51	Full Load Voltage Drop at 0.8 Power Factor	3.26			%
52	Efficiency at 0,8 Power Factor	4/4 Load: 98.04%	3/4 Load: 98.22%	2/4 Load: 98.23%	
53	Efficiency at 1 Power Factor	4/4 Load: 98.43%	3/4 Load: 98.57%	2/4 Load: 98.58%	
54	Impedance voltage (%) / with tolerance of %	Ucc: 4%	Tolerance: 10%		
55	Magnetizing / Inrush current	A		A	
56	Primary Bushing Quantity / Type	N°: 3	copper termi l plate		
57	Secondary Bushing Quantity / Type	N°: 4	copper ter mil plate		
58	Total Weight	2030			kg
59	Overall Dimensions (Length/Width/Height)	L 2025	W 2148	H 1800	
60	When applicable, dimensions between rollers				mm
61	Painting (Mfr standard,... / color)	Specification: acc. N21240023 / color 7032			
62	Tropicalization	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>		
63	Sound press. Level at 1 m / Sound power level	48	LPA (dB)	62 LWA (dB)	
64	current density				A/ mm2
65	Core material and grade				

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Schneider Electric

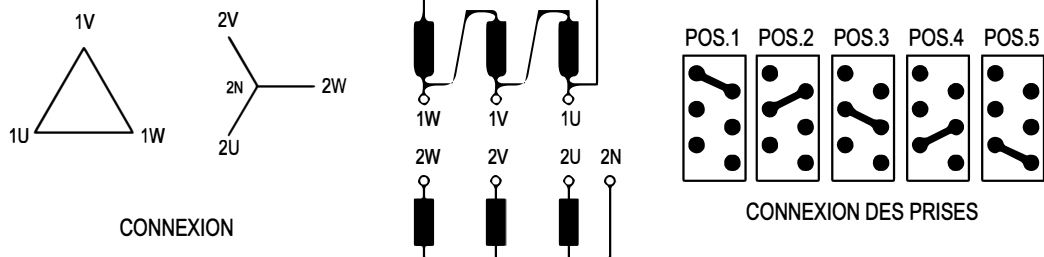
Schneider Enerji End. San. ve Tic. AS 41420 Kocaeli - Turkey

3-PHASES-TRANSFORMATEUR SEC AVEC ENVELOPPE
POUR INSTALLATION INTERIEURE

TYPE	: Tricast	NR.	:	NORME	: IEC 60076-11
PUISSANCE NOMINALE	: 400 kVA			ANNEE	:
	POS.1 : 727 V			FREQUENCE	: 50 Hz
	POS.2 : 704 V			COUPLAGE	: Dyn11
TENS. NOMINALE	POS.3 : 693 V	420 V		REFROIDISSEMENT	: AN
	POS.4 : 670 V			PROTECTION	: IP31
	POS.5 : 658 V			POIDS	: 2030 kg
COURANT NOMINALE	: 333.25 A	549.9 A			
Um	: 1.1 kV			NIVEAUX D'ISOLEMENT: LI: AC: 3 / LI: AC: 3	kV
TENSION DE COURT-CIRCUIT	: %			DUREE MAX. DU COURANT DE COURT-CIRCUIT	: 2 s
COURANT DE COURT CIRCUIT	: kA			CLASSE DE TEMPERATURE HT/BT	: H / H
TEMPERATURE AMBIANTE MAXI	: 30 °C			NATURE DES ENROULEMENTS HT/BT	: CU / CU

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E5821578

DIAGRAMME DE CONNEXION

PLATE D 148 x180 CR-NI

Les cellules vides seront remplies après les essais

				Dimensions sans tolérance suivant ISO 2768-m	Approuvé par	Definition :	Code No:	
				Date	18.09.2013	Description: PLAQUE SIGNALÉTIQUE	Echelle : 1/1	
				Group	ADH-E1			
				Etabli par				
				Contrôle par				
						No du plan	Node Pg	Pg.
						1	1	CAD
Pos	Revision	Date	Nom	Remplace par	Annule par			

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1 2 3 4

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3-PHASE DRY TYPE TRANSFORMER WITH ENCLOSURE
FOR INDOOR INSTALLATION

TYPE : Tri cast	NO.:	STANDARD : IEC 60076-11
RATED POWER : 400 kVA		YEAR :
POS. 1 : 727 V		FREQUENCY : 50 Hz
POS. 2 : 704 V		VECTOR GROUP : Dyn11
RATED VOLTAGE POS. 3 : 693 V	420 V	TYPE OF COOLING : AN
POS. 4 : 670 V		PROTECTION : IP 31
POS. 5 : 658 V		WEIGHT : 2030 kg
RATED CURRENT : 333.25 A	549.9 A	
Um : 1.1 kV	INSULATION LEVEL : LI: AC: 3 / LI: AC: 3 kV	
RATED IMPED. VOLTAGE : %	DURATION OF SHORT-CIRCUIT MAX. : 2 s	
SHORT-CIRCUIT CURRENT : kA	THERMAL CLASS HV/LV : H / H	
MAX. AMBIENT TEMPERATURE : 30 °C	COILS MATERIAL HV/LV : CU / CU	

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5853105

PLATE D 148x180 CR-NI

FOR APPROVAL

Blank fields will be filled out after the test.

EN

				Dimensions without tol.acc.to ISO 2768-m	Approved by	Definition :	Class code
				Date	22.08.2013	Description: Rating Plate	Scale
				Group	ADH-E1		1 : 1
						Drawing No:	Sh.No: Sheet
						1	1
02		18.09.13				Replaces by Drawing no: Canceled by Drawing no:	CAD AutoCAD
Pos	Revision	Date	Name				

1 2 3 4

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